INTERNATIONAL CONFERENCE
“SUSTAINABLE DEVELOPMENT AND ETHNIC MINORITY POVERTY REDUCTION IN MOUNTAINOUS REGIONS”

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PREFACE

This international conference on “Sustainable Development and Ethnic Minority Poverty Reduction in the Mountainous Regions” was co-hosted by the World Bank and Thai Nguyen University and was held at the Learning Resource Center, Thai Nguyen University, Vietnam on June 11-13, 2014. It was conducted for a dialogue among government, country stakeholders (including civil society), and development partners on both the experience in the Northern Mountains of Vietnam and that in other countries in order to determine how the development approach on sustainable development and ethnic minority poverty reduction could be improved.

Specifically, the objectives of this conference were: to introduce the international experience of poverty reduction targeting ethnic minorities in mountainous and remote area, especially in the region having similar economic and geographical conditions; to review and discuss (i) current programs/projects targeting ethnic minorities in the Northern Mountains region; and (ii) alternative options for Northern Mountain region in order to achieve more effective interventions; and to formulate a list of policy and project options about potential poverty reduction initiatives that could be replicated in the region and presented to the local authorities for further consideration.

The conference was a multi-sectoral forum that featured plenary papers by experts and leaders with focal points on policies in Vietnam from government and donor perspectives, and parallel sessions and workshops presented by academics/researchers and development practitioners who have exceptional exposure in the field of livelihood and market linkages, natural resource management, cultural diversity, educational and health care, climate change and environment, and poverty analysis and evaluation. Poster and video presentations were also showcased in the event.

A final count of more than 200 participants from the northern, central and southern Vietnam and from more than 15 countries and international organizations attended the conference. With the discussions and active participation of each of the delegates over the past three days, the conference was well on the way to achieving its the prime objectives.

All essential information about sustainable development and poverty reduction issues among ethnic minorities were adequately discussed. Clear illustrations were provided for clarification purposes through poster and video presentations.

Hence, the international conference proceedings were prepared as future reference on issues related to sustainable development and ethnic minority poverty reduction in the mountainous regions.
ACKNOWLEDGEMENT

The international conference on “Sustainable Development and Ethnic Minority Poverty Reduction in the Mountainous Regions” which was held at the Learning Resource Center - Thai Nguyen University, Vietnam on June 11-13, 2014 was successfully realized due to the effort of a number of wonderful people who have always given their valuable support. In regard to this, we sincerely appreciate the inspiration and assistance of all those people who have been instrumental in making this conference a success.

At this juncture, the organizing committee feel deeply honored in expressing our sincere thanks to the World Bank in Vietnam as TNU’s co-host in conducting this conference and most especially to Ms. Victoria Kwakwa, the World Bank Country Director, in providing valuable insights leading to the successful completion of the conference;

Sincere thanks to Mr. Son Phuoc Hoan -Vice Chairman of the Committee for Ethnic Minorities Affairs, Mr. Dang Viet Thuan - Vice Chairman of the Thai Nguyen People’s Committee for taking time off from their busy schedule to participate in this event;

Heartfelt gratitude is extended to the Ministry of Labor and Invalids and Social Services, the Ministry of Planning and Investment, and the Ministry of Agricultural Research and Development, for sharing their abundance of knowledge on development policies, review and guiding principle in poverty reduction for minorities in the coming years, livelihood development for poverty reduction and made it clear that the business of sustainable development is one we must do and do well for the advantage of the ethnic minorities and our future generations who are disproportionally affected by poverty;

Our deep sense of gratitude to all paper and poster presenters, both international and local, for the excellent and scholarly contributions in this event. They have addressed a range of sustainable development and ethnic minority poverty reduction issues and challenges, focused on the impact of market linkages, natural resource management, climate change, health and education, cultural diversity, and poverty analysis and evaluation; and

Correspondingly, we would like to give equal credit to the World Bank Senior Staff and the Thai Nguyen University Conference Program Committee for the full support and assistance in organizing the conference agenda and logistics, their contribution is highly valued, without which the international conference would not have been possible.

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Ministry of Labour - Invalids and Social Affairs (MOLISA) is a permanent agency of poverty reduction program and a state management agency in the fields of vocational training, labor and employment. The Ministry has advised the Government to promulgate policies and poverty reduction programs in ethnic minority regions, and has guided the localities to implement the programs. The specific results of 2005-2012 period are as follows:

1. Responsibilities of permanent agency for Poverty Reduction Program

1.1 Proposing policies for particular poverty reduction in mountainous and ethnic minority regions

a) Proposing the Government to issue Resolution No. 30a/2008/NQ-CP dated on December 27, 2008 of the Government on rapid and sustainable poverty reduction programs in 61 poor districts (currently 64 districts).

Stemming from the actual situation, the Ministry of Labour - Invalids and Social Affairs initially proposed to the government to issue policies to support the poor districts with poverty rates of more than 50% (data in 2006). On that basis, the Government issued Decree 30a/2008/NQ-CP dated on December 27, 2008 on rapid and sustainable poverty reduction programs in 61 poor districts (currently 64 districts).

Coordinating with the related ministries and branches to build, submit and promulgate documents in guiding the implementation of the Resolution; constructing master plan framework and mechanisms to integrate programs and projects; building disbursement mechanism, framework for monitoring and evaluating the implementation of the Resolution. Every year, unifying with the Ministry of Finance, Ministry of Planning and Investment, and the Committee for Ethnic Minority Affairs to allocate funds to localities; planning and organizing inter-ministerial group to examine the results of implementation of Resolution 30a on poor districts, thereby detecting the existence, shortcoming to have suggestions, proposals to the Government for supplement or modification of mechanisms and policies.

During the implementation of Resolution 30A, derived from practical needs and suggestions of the localities, MOLISA in collaboration with the ministries and branches requested the Prime Minister to issue Decision 615/QD-TTg dated on April 25, 2011 on targeted support from the central budget for 07 districts, Decision 293/QD-TTg dated on February 05, 2013 on targeted support from the central budget for 23 districts with high poverty rates, in accordance with the provision in Resolution 30A and Decision 1791/QD-TTg dated on October 01, 2013 on supplementing Nam Nhung District, Lai Chau province and Nam Po district, Dien Bien province (the old district was separated) to the list of poor districts which were supported by the Resolution No. 30a. Thus far, 64 districts were the beneficiaries of Resolution 30A and 30 districts were entitled mechanisms and policies.
supported from the central budget for investment in infrastructure as Resolution 30a.

Along with other resources, support and resources from the central budget, from business through the implementation of Resolution 30a, the poverty rate in poor districts averagely reduced 6%/ year (from 43% in 2009 to to 37% in 2010 - according to the old standard); from 58.33% in 2010 to 50.97% in 2011, 43.89% in 2012 and 38.20% in 2013 (according to the new poverty standard).

b) Coordinating with the relevant Ministries and Branches to construct scheme, advise the Government to issue Resolution 80/NQ-CP dated on May 19, 2011 on sustainable poverty reduction on the 2011-2020 period, which prioritizes resource investment for poor, disadvantaged districts and communes; form 02 groups of policies: general poverty policies applied across the country; and specific policies applied to poor households and ethnic minorities in poor, disadvantaged districts and poor communes.

c) To coordinate with the ministries in requesting the Prime Minister to issue the national target program on sustainable poverty reduction on the 2012-2015 period, in which it prioritizes investment resources for the poor, disadvantaged districts, communes, islands, border communes, safety zone, villages in ethnic minority and mountainous areas. It can be said that at this stage, the policies and programs of national poverty reduction mainly focuses on ethnic minority and mountainous areas. Currently, ethnic minorities are benefited by tens of State support policies in most areas of life, such as production, education, health, housing, domestic land, productive land, clean water and sanitation, information access and legal aid.

From 2011 to now, the investment of resources to poor districts, communes and ethnic minorities is accounted for over 90% of the total capital of the program in the country.

1.2. Identification of poor ethnic minority households

a) Developing and promulgating standards for the poor and marginal poor households in each phase.

MOLISA in collaboration with relevant Ministry and Branches requested the Prime Minister to issue Decision No. 170/2005/QD-TTg dated on July 08, 2005 on promulgating the poverty line applied for the 2006-2010 period and No.09/2011/QD-TTg dated on January 30th, 2011 on promulgating standards for the poor and marginal poor households as a basis for implementing policies to reduce poverty and social welfare in the 2011-2015 period.

To determine the annual poor and marginal poor households, the Ministry issued Circular 04/2007/T-T-BLDBTXH dated on February 28, 2007 and Circular No. 21/2012/T-T-BLDBTXH dated September 05, 2012 on guidelines for the investigation, review, identification and classification of annual poverty and marginal poor, including poor households of ethnic minorities, as a basis for implementation particularly on poverty reduction policies (such as support policies on education, health, housing, productive land, domestic water, etc.).

b) Results of poverty reduction in ethnic minority regions

The 2005-2010 period

The poverty rate declined from 22% (2005) to 18.1% (2006); 14.75% (2007); 12.1% (2008); 11.3% (in 2009) and 9.45% (in 2010), completed 01 year prior to the goals of Program and Resolution of the 10th Central Party Summit. The poverty rate in the 62 poor districts dropped to 37%, completed target of Resolution No. 30a/2008/NQ-CP (up to 2010, the poverty rate fell to less than 40%).

The poverty rate in disadvantaged communes, villages declined from 47% in 2006 to 28.8% in 2010 (the program targeted decrease the poverty rate to below 30% by 2010).

The 2010-2012 period

The poor household rate declined from 14.2% in 2010 (3,055,565 households) to 11.76% in 2011 (2,580,885 households) and 9.6% in
2012 (2,149,110 households), and 7.8% in 2013 (1,797,889 households).

The poor household rate in 2011 decreased 2.24% compared to 2010; poverty rate in 2012 decreased 2.16% compared to 2011 and in 2013 the poverty rate decreased 1.8% compared with 2012. The average poverty rate fell by 2% / year, reaching the target goals under Resolution No. 80/NQ-CP dated May 19, 2011 on orienting sustainable poverty reduction in the 2011-2020 period and Decision No. 1489/QD-TTg dated on October 08, 2012 on approving contents of the National Program on sustainable poverty reduction in the 2012-2015 period.

In 2012, the poverty rate in the North Western mountainous areas was 2.97 times higher than the average poverty rate of the country; in Northern Eastern mountainous areas was 1.81 times, in North Central and Central Highlands was 1.56 times, and in the Central Coast was 1.27 times.

The rate of poverty in 62 poor districts under Resolution No. 30a/2008/NQ-CP (now 64 poor districts) decreased from 58.33% (2010) to 50.97% (2011) and 43.89% (2012), at the end of 2013 was 38.20%, the poverty rate in the poor district averagely decreased 5-7% / year.

The poor household rate in 07 poor districts (according to Decision No. 615/QD-TTg) fell from 43.56% (2011) to 30.13% in 2012 and 26.01% in 2013; The poor household rate in 23 poor districts (according to Decision dated 05.02.2013 293/QD-TTg) decreased from 43.14% in 2012 to 38.66% in 2013.

2. Responsibilities of state management in the fields of Labor - Employment and Vocational Training

2.1. Requesting the Prime Minister to issue policies on rural laborer training (according to Decision No. 1956/QD-TTg), including priority policy for the poor ethnic minority laborers, in particular as follows: Rural workers who are eligible for preferential policies and who have contributed to the Revolution, are in poor and ethnic minority households, the disabled people and people who cultivated land acquisition and who were supported short-time apprenticeship (primary level education and vocational training that is less than 3 months) with maximum of 03 million/ person/ course (the level of support depends on each specific professional and duration); meals at 15,000 VND / learning day/ person; transport fare that shall not exceed 200,000 VND/ person / course for trainees that are more than 15 km away from the learning place. Rural workers from ethnic minorities who are entitled to preferential policies, are people who contributed to revolution and who belonged to poverty household and households with maximum income of up to 150% of the income of poor households, including those who received policies for vocational training for ethnic minority boarding students.

Results of the implementation of vocational training policy under Decision No. 1956: During the period of 3 years (2010-2012), the localities organized vocational training for 223,792 people of ethnic minorities (primary education and vocational training under 3 months), accounted for 20.6% of the total trainees (that were supported) of the country.

The Northern Midland and Mountainous region had the highest percentages of ethnic minority trainees (59%) of the total number of trainees who were supported in the region, followed by the Central Highlands (50%), North Central region and Central Coast (15%) and South West (13%).

The localities that had high percentage of local ethnic minorities that were supported the vocational training: Northern Midland and Mountainous Regions: Lai Chau (100%), Son La (96%), Lang Son (88%), Ha Giang (85%), Yen Bai (77%), Bac Kan (75%), Hoa Binh (71%), Cao Bang (63%), Lao Cai (58%), Dien Bien (57%). North Central and Central Coast areas: Ninh Thuan (44%), Thanh Hoa (30%), Binh Thuan (19%). Central Highlands: Gia Lai (85%), Dak Lak (75%), Kon Tum (66%), Dak Nong (54%). South Western areas: Soc Trang (48%), Kien Giang (25%), Tra Vinh (16%). Binh Phuoc
province (South Eastern): 40% of learners were ethnic minorities.

About professions attended by ethnic minorities: Agriculture: nearly 60%, in which: The Northern Highlands: 71%, North Central Coast and Central Coastal areas: 61%, Central Highlands: 58.3% and Mekong delta: 51.5%.

In addition, the locally organized vocational training at college and vocational college degrees, with 26 training centres for 8,555 workers from ethnic minorities, poor and disadvantaged households, in which ethnic minority people were accounted for 22% of total training.

Results of vocational training following other policies:

Vocational training was implemented through earmarked policies in 04/63 provinces, municipalities (Lang Son, Binh Phuoc, An Giang and Soc Trang), enrolled 936 students graduated from boarding secondary, high schools and boarding vocational schools (local people feeds students), in which 911 students graduated from high school and 25 students graduated from secondary school. According to the level of training, there were 11 college students and 925 vocational college students.

Vocational programs in accordance with Decision No. 81/2005/QD-TTg in the 2006-2009 period organized vocational training for about 84,000 people (about 6% of the total rural labors that was supported in apprenticeship). Reports by the localities and practical survey showed that after participating in training courses, knowledge and professional skills of the employees raised; some vocational learners have the capacity to approach and control new, modern machine and equipment; labor discipline and industrial style made great progress, so that about 60% of graduate students found employment or self-employment.

Along with the implementation of vocational training for rural ethnic minority laborers in accordance with Decision No. 1956, Soc Trang and Tra Vinh implemented Demand-oriented training project to support poverty reduction in Mekong Delta, funded by the Asian Development Bank (ADB) and the Government of Japan. Through the project, 3,450 people from poor households and ethnic minority were trained (Soc Trang: 2,100, Tra Vinh 1,350) and got gainful job that contributed to poverty reduction.

2.2. Requesting the Prime Minister to issue Decision No. 71/2009/QD-TTg dated on April 29, 2009 on approving the Scheme for poor district assistance to boost labor export, contributed to sustainable poverty reduction in the 2009-2020 period with the goal of: improving the quality of labor, increasing the number of poor districts’ employees participating in labor export, creating jobs, raising income and implementation of sustainable poverty reduction. Employees on poor districts are entitled to those following policies on labor export: Supporting on raising intellectual levels, vocational training, foreign languages, fostering necessary knowledge under the provisions of the Law on Vietnam Workers working overseas; supporting health care costs; facilitating passport, visa and judicial records to participate in labor export (employees from poor households and ethnic minorities receive more preference on policies); supporting risks involved in exporting labor; allowing preferential credit loans to work abroad, etc.

From 2009 to date, more than 20,000 workers in poor districts enrolled in the Scheme for labor export, in which over 10,000 laborers were sent to work in markets like Malaysia, UAE, South Korea, Japan, Saudi Arabia, Taiwan, etc. Labor from poor households and ethnic minorities accounted for 95%.

In general, workers in poor districts have gained steady job and income abroad, with an average of 6.5 to 7.5 million VND / month in the Libyan market, UAE, Saudi Arabia and Macao; 5-7 million / month in Malaysian market; and 15-20 million/ month in Korean and Japanese market.

2.3. Policies on job contributed to implement poverty reduction in mountainous and ethnic minority regions, as follows
a) Results of general job creation

In recent years, in parallel with promoting employment for workers in general, the work of creating jobs for ethnic minority workers is also boosted. According to local reports, in the 2011–2013 period, hundred thousands of ethnic minority workers were given jobs throughout the country, some active localities were Ha Giang: 41,270 employees (accounting for 88.31% of the newly created workforce of the province); Tuyen Quang: 26,000 employees (48%); Dak Lak: 23,724 employees (30.85%); Dak Nong: 15,557 employees (29.99%), Binh Phuoc: 17,582 employees (20%), Ninh Thuan: 8,536 people (18.14%), Tra Vinh: 27,653 employees (39%), etc.

b) Job creation support through the National Employment Fund

Along with the promotion of economic development and creation of jobs for workers, the policy of preferential credit support from the National Employment Fund (NEF) also contributes to bring employment to ethnic minority people throughout the country. In the 2005–2013 period, the National Target Programme on Employment added 2,130.5 billion VND to the national fund for employment (2013: 45.993 billion VND), raised the total funds of the National Employment to 4,332 billion VND (allocated to 63 provinces, minicipacities and mass organizations), coordinated with local capital funds for employment (45 provinces and municipalities have established that fund with total capital of 1.457 billion VND) to support job creation for more than 150,000 workers each year.

In the 2005–2013 period, the NEF supported jobs for 1.93 million people, of which 90% of workers were in rural areas. Particularly, in 3 years (2011-2013), more than ten thousand new workers are ethnic minorities, many localities implemented effectively as Ha Giang: 4,467 employees, Tuyen Quang: 3,200 employees Dak Lak: 2,130 employees, Dak Nong: 797 employees, etc. Thanks for the financial support from the program, many ethnic minority workers and households were self-employed thus helping stabilize and enhance their quality of life, many efficient self-employment models were generated as handicraft production (weaving model of Khmer, sewing patterns of ethnic costumes Khmer in An Giang, string the beads model, conical hat in Hau Giang, etc.), farm economy (economic farm model combined livestock, poultry, aquaculture and forest regeneration; fish farming in Dien Bien; planting of crops, fruit trees, livestock and poultry in Dak Lak, etc.), rehabilitation and development of traditional craft, etc.

3. Limitations and shortcomings in ethnic minority affairs and their causes

3.1. Limitations and shortcomings

The poverty reduction results were not steady, wealth disparities among regions, populations did not shrink, especially in the northern mountainous region and the Central Highlands. Although the poverty rate has declined rapidly in the poor and difficult districts, communes and ethnic minority areas, the poverty rate in many places are still over 50%, few places are 60-70%; The proportion of poor ethnic minorities accounted for nearly 50% of poor households in the country, the average income of ethnic minority households is only 1/6 of the average income of the country. The percentage of households decline into poverty each year was still high, mainly due to natural disasters, floods and household separation demand.

The system of specific mechanisms and policies to mountainous and ethnic minorities regions generally promoted efficiency, contributed to improving people's lives, however, the lack of coordination between Ministries and Branches led to the policy coincidence (as policies to support investment in infrastructure, vocational training, etc.), fragmented and lacked of uniformity.

Some policies were not consistent with the characteristics and conditions of each ethnic minority, so the impact on efficiency was not high as average housing support policy, personnel investment policy for ethnic minorities,
earmarked student policy (were not associated with use after training), boarding student support policy, etc.

The organization of policy implementation in some places was not timely, slow and incomplete, especially in paying the beneficiaries, so the effectiveness of policies was not promoted.

Lack of cohesion between support for life and production development with transfer of science and technology, technical progress, environmental protection and investment attraction.

Resources for implementation of the policy were widely spread and were not strong enough (as reviewed, there were more than 100 existing documents, but the resources were allocated unevenly, so proposed objectives were not achieved); the policies associated with the project in phases, but did not orient towards the beneficiaries, therefore at the end of the project, its objectives were not fully implemented (as policies associated with program 134, 135, etc.).

There are many policies that supported directly the poor households, but few policies for community support, creating envy among the people and did not encourage poor people to positively escape from poverty; did not create a significant impact to change lives and perceptions of ethnic minorities; lack of coordination between stakeholders in the implementation of policies of ethnic minorities.

### 3.2. Causes of shortcomings and limitations

**Objective causes**

The mountainous areas had low starting point socio-economic conditions, limited knowledge standard, complex and dissected terrain, severe weather, often affected by natural disasters, floods, required great investment, etc.; the principal infrastructure system was not guaranteed; production level of people still relied on a backward and simple platform, mainly were extensive farming, self-support and self-sufficient production that relied on nature.

Ability to receive support policy of ethnic minorities was limited, especially with difficulties with language, level of communication; The ethnic minorities did not want to leave their residence, so the effectiveness of vocational training and labor export for ethnic minorities was not high; The receipt of the application of science and technology in the production was limited, resulting to low production efficiency.

**Subjective causes**

The dissemination of the Party and State’s policies for the poor and ethnic minorities was limited, because of the geographical areas; language barriers, etc.

The percentage of annual capital investment was mainly invested in infrastructure, capital for support to the development of production and employment income for the poor and ethnic minorities was accounted for low proportion of total funds; on the other hand, the ratio of capital investment for local communities was not prescribed to contribute in creating direct income for poor minority people.

There was no mechanism for integrating capital investment for the same object and same geographical area, in order to concentrate resources for ensuring effective implementation of poverty reduction policies.

### 4. Orientation of poverty reduction for ethnic minority people after 2015

#### 4.1. General orientation

To review, amend, or supplement policies on ethnic minority and mountainous areas oriented on formation of overall, multi-purpose, long-term policies including preferential policies for minority ethnic groups.

To make policies that focus on supporting the development of household production, employment increase, ensuring sufficient support to truly transform the lives of ethnic minorities, specific needs by household choices.

To conduct research to issue mechanism of decentralization and community empowerment, directly implement poverty reduction policies.
that linked to the actual needs of the people, to preserve and promote the national cultural identity.

To conduct research and supplement production support policies for marginal-poor and middle income households, especially in mountainous and ethnic minority areas.

To strengthen coordination and cooperation between the ministries, branches and localities in developing, promulgating and implementing, monitoring and evaluating poverty reduction policies for ethnic minority and mountainous areas.

4.2. Specific contents of policy and mechanism modification for poverty reduction after 2015

 Preferential credit policies for the poor: To pilot the loan under credit limit for households in the prosperous localities, the credit policies were considered as the basis for amendments of Decree No. 78 / 2002/ND-CP towards further promotion of effective credit policies, integrate current loan program for poor and marginal-poor households into incentive credit policies that take households as centre object, regulate purposes and contents of loans for households to choose the priority needs for loans.

For education and training support policy for poor students: To integrate the existing poverty reduction policies in systematic way based on the minimum needs that the poor need to access to education and training services; immediately integrate policies of granting scholarships and rice for boarding and ethnic minority students; to expand policies in “Education Development Scheme for ethnic minorities groups” in the 2010-2015 period and eligible for ethnic minorities according to the current regulations; to conduct research and develop policy regulating particular employment positions for boarding schools, including position of logistic staff based on norm of 01 person for 30 boarding students.

For policies to support the production of the poor: formulate production support policy for poor and marginal poor households after 2015, including priority levels of support for the poor and ethnic minorities on poor districts and communes.

For policies on legal aid for the poor: to integrate general legal aid policy to the poor and ethnic minorities households, including preferential policies for the poor in the area of poor districts and communes; to expand the beneficiaries to people in poor households and households that have escaped from poverty.

For specific policies for ethnic minorities: to integrate specific policies to ethnic minorities, in which priority groups are ethnic minorities with the least people.

For vocational training, job creation, labor export policies: to integrate common policy on vocational training, job creation, labor export, including priorities for poor ethnic minority households living in poor districts with unified support criteria as follows:

For the job creation policies: to construct guiding documents on the implementation of Employment Law, including the provisions of policies to support career change to create jobs for rural labor, incentive credit policy from the National Employment Fund, etc. and especially policy to create jobs in order to provide temporary employment to workers through the implementation of projects or activities with the small scale of investment in communes, wards and towns, mainly concentrated in rural and disadvantaged areas;

For vocational training policy: to amend and supplement vocational training policies for rural workers according to Decision No. 1956/QD-TTg to be compatible with fluctuations in market prices, including policies on supporting meals and transportation for the poor and marginal poor in rural areas; programs, projects and policies related to the vocational training should comply with Decision 1956;

For policy to support labor export: to research and submit to the Prime Minister to increase the level of support for workers going
abroad and expand distribution and the content as support for laborers in poor districts;

For policy of science and technology transfer support: to integrate the said policy for the poor, marginal-poor households, and households that has escaped from poverty, with priority to poor ethnic minority households.

To research and propose policy proposals to support staff working in applied research and science and technology transfer to promote the development of production in poor districts towards the goods production of goods; to allocate funds to support 2 times higher than the average of other districts; to support 100% of new varieties and materials for building application of advanced technique model; to sponsor participants completely in training, training materials, meals, travelling fee.

To research and propose to promulgate policies to encourage and create favorable conditions and incentives for organizations and scientists in research, application and transfer of science and technology in localities, especially selection and transfer of productive plant varieties and animal breeds that suitable to specific conditions (climate, soil, cultivation practices,...) of each locality. To focus on the development of specialties plants and animals with high value and productivity. At the same time, to selectively develop indigenous knowledge to create powerful shifts in production.

To support applied research tasks for disadvantaged, ethnic minorities, remote areas and islands. To strengthen support of application and transfer of research results into production.

For land support policies for poor ethnic minorities: to integrate policies to support productive land for poor ethnic minorities, to complete draft of Decree on guiding the revised Land Law, which avoid precedent of providing land for any poor ethnic minorities; for areas where land fund is not available, other forms of assistance should be made such as job transition, labor export, forest planting and protection contract, etc.

For electricity fee support policy: to reform policy in support electricity fee for all poor households according to national standards (transform mode of support); propose repeal of kerosene support policy for ethnic minorities in places without electricity.

For poverty reduction policies associated with national security: to conduct research and develop mechanisms to integrate involvement of military forces in the implementation of programs, station projects, agricultural, forestry, fishery extension, and replication of poverty reduction model, etc.

For policies on housing support for the poor: to conduct research, propose policies on supporting housing for poor households, households in areas affected by natural disasters in the 2011-2015 period.

For distribution of apparatus and collaborators on poverty reduction: to build plans for the establishment of provincial offices poverty reduction on the basis of current organizational structure, and propose regime for commune’s poverty reduction coordinators.

For management mechanisms: To conduct research, develop mechanisms for investment management, mechanisms for establishment and delivery of medium term to strengthen decentralization and empowerment for the localities, community; integrate programs and projects to limit the duplication of investment in building essential infrastructure of commune and sub-commune.

For mechanism of settlement of funds allocated to the community investor: to conduct research guiding management mechanism, fund settlement of the New Rural Program for the National Target Program on Poverty Reduction.

Vo Van Bay, Committee for Ethnic Minority Affairs

1. Essential characteristics of socio-economic conditions in ethnic and mountainous areas

Ethnic minority and mountainous areas account for nearly three quarters of the natural area of Vietnam. These areas are inhabited by 54 ethnic groups, of which there are 53 ethnic minority groups with over 13 million people, accounted for 14.28% of the country’s population. Ethnic minority and mountainous areas where centralized resources, mineral resources and great potential for hydroelectric power, are the sources of many rivers, streams, freshwater supply, maintaining ecological balance, climatic conditions and more sub-region to facilitate the development of agriculture, forestry and animal husbandry. In addition, ethnic minority and mountainous areas are very rich in tourism potential, particularly in the expansion of exchanges between Vietnam and other countries in the region and the world.

However, the ethnic minority and mountainous areas face many difficulties and challenges in terms of geography, nature, and difficult terrain. These challenges are complex, dangerous, and often influenced by the impact of large natural disasters such as flooding which results to great limitation in opening wide exchanges, especially the highlands, remote, border areas. In fact, there are many areas with steep slopes, eroded land, infertile, barren (especially in the Northwest, Northeast and Central regions). The socio-economic development in the ethnic minority and mountainous areas are still underdeveloped due to various objective and subjective economic – society. The infrastructures in some high areas, remote areas and revolutionary bases are still low. The customs of some places remain backward with much superstitious phenomenon. The status of nomadic, free migration, deforestation, land claim disputes, illegal religious activity, trafficking, transporting, drug trafficking remain unlawful ordinances. The ecological environment is seriously degraded. The impact of climate change leads to disasters mode, causing flash floods annual heavy losses of life and property in ethnic and mountainous areas. The poverty rate remains poor which is higher than the average in Vietnam.

2. Some major ethnic policies to reduce poverty and socio-economic development in mountainous regions in the 2005-2013 period

CEMA is an ministerial-level agency of the Government, performing the function of state management of ethnic affairs in the country. In solving the problems related to mechanisms and policies to achieve the objective of poverty reduction, the Minister, who acts as Chairman of the National Committee to the Prime Minister was assigned as the Deputy Head of the Government Steering Committee to implement the Poverty Reduction Program from 2006 to 2010 and as Deputy Chief of the Central Committee to manage the sustainable poverty reduction period from 2011 to 2020.

During the period 2005-2013, CEMA collaborated with the government. The Prime Minister issued a number of ethnic minority policies in the areas to build infrastructure system, support production development, improve livelihoods, and education system of ethnic minority people in mountainous areas. Specially, CEMA has advised the Prime Minister to issue the criteria for classification of ethnic and mountainous areas by level at each stage of development. Eventually, the Prime Minister issued a list of communes and villages particularly the disadvantaged mountainous and ethnic minority areas, with a total of 1,871 communes in sector 1, sector 2 with a total of 1,031 communes, 2,068 communes in Sector 3
and 18,280 villages in extremely difficult areas. This served as the basis for the identification of geographical implementation of policies.

The results of the implementation of a number of key policies are as follows:

2.1. Socio-Economic Development Program – extremely difficult villages in ethnic minority and mountainous areas P135 (Decision dated on 10/01/2006 of the Prime Minister 07/2006/QD-TTg and Decision 551/QD-TTg dated on 04/4/2013 of the Prime Minister)

In 2006-2010, the allocated total central budget was 14,025.25 billion, of which the investment component of the project was increased every year, such as: in 2006 and 2007 there was an increase from 860 million VND/commune/year to 1,064 million/commune/year, in 2010 it increased to 1,364 million/commune/year. At the same time, the program has mobilized 7 donors including the World Bank, Ireland, Australia, Finland, UK Ministry of Development (DFID), the European Union, Switzerland with a support amounting to approximately 367 million dollars, or 6,240 billion in the form of budget support to increase funding. In addition, the donors UNDP, Finland, Ireland also gave technical support through projects with a total funding of 10 million Euros. In this phase, the local implemented construction investment with 12,646 essential infrastructure projects and with capital investment of 8,496 billion, accounting for 98.2% of the plan allocation, organized 4,112 training classes for more than 160 cadres of communes, villages, and 231,000 people in the content of project management knowledge, science and technology, increase awareness and use to develop household economy, support vocational training for ethnic minorities.

In 2011, the capital budget allocation for the localities continued to follow the decision of the Prime Minister 101/2009/QD-TTg with a total budget of 3,214 billion VND. In 2012-2013, the program was implemented in the form of Project 2 national target program on sustainable poverty reduction. The funds allocated in 2012 were 2,300 billion, of the total budget 2279.2 billion allocated to localities. In 2013 programs, the budget allocation was 2,494 billion for investment in infrastructure construction, maintenance, maintenance work after investment.

On 04/4/2013, the Prime Minister approved the Decision No. 551/QD-TTg in the amount of P135 to support infrastructure investment, support for the development of production especially in difficult communes, communal borders, social security zones, particularly for the poor villages covering the period 2012 – 2015 and the period 2016 – 2020. Immediately after the program was approved, CEMA coordinated with the relevant ministries to deploy targeting investment, building guidelines to ensure that there is no mistake when deploying program in 2014.

In the period 2011-2015, the mobilization of aid and international organizations to invest P135 continued to get attention. In 2011-2012, funding for the program increased by 135 from Irish Government aid to 13 million euros. In 2013, the Irish Government was committed to supporting 13.29 million Euro budgets funding for 135 programs in the 2013-2015 period. In addition, Ireland donors and UNDP technical assistance for program.

2.2. Direct support policies for ethnic minority in difficult areas (Decision No 102/2009/QD-TTg date 07/8/2009 of the Prime Minister)

On 07/8/2009, The Prime Minister issued the Decision No. 102/2009/QD-TTg about direct support policies for ethnic minority in difficult areas instead of subsidized freight and price. Beneficiaries of the policy are the poor disadvantaged areas prescribed by Decision 30/2007/QD-TTg. The support was 80,000d/person for Region II; 100,000d/person for Region III.

From 2010 to 2012, funding for the implementation of the policy was 1762.889 billion in direct support to 17,956,048 poor people in disadvantaged areas in 57 provinces and localities. The local implementation was
1599.764 billion, accounting for 90.7% of the plan, including direct support in cash (987.283 billion), accounting for 61.7% and funding support in the form of in-kind grant in the amount of 612.481 billion, accounting for 38.3% of total funding for implementation.

2.3. Immigration policy implementation on sedentary support (33/2007/QD-TTg Decision and Decision 1342/QD-TTg)

Policies to support migration and settled agriculture for ethnic minority people in order to facilitate minority households and shifting migration who did not benefit from policies in established areas. Conditions to develop production, improve spiritual life, hunger eradication and poverty reduction; forest protection, environment protection, and maintenance of ecological security - political, social order and safety were included to meet the requirements of the local people. Under the approved plan, there were 29,718 and 140,313 households who needed to be given training arrangements for cultivation, settled in 297 projects with a total capital demand of 2,717 billion VND. From 2008-2012, the central budget allocation was 1,253 billion VND, or 46% of capital plan.

After 5 years (2008-2012) of implementation, the 6/44 Resettlement Project was completed which was interspersed with 14/253 focused on sedentary project; Performed 36 unfinished projects which were interspersed to sedentary projects and 162 projects focused on sedentary, and stable sedentary projects for 9,827 households with 46,187 persons.

By the end of 2012, there were 19,891 households with 94,126 persons who needed support for settled agriculture. Therefore, on June 4, 2013, the Prime Minister signed Decision No 33/2013/QD-TTg about migration support policies until the end of 2015.

2.4. Policies supporting tin production lands, residential land, housing and clean water for ethnic minorities(Decision No 134/2004/QD-TTg and Decision No 1592/QD-TTg)

Perfomed decision no 134/2004/QD-TTg, National Center balanced and granted 4,482 billions, met 100% requirement of the plan. Some balanced about 20% counterpart funding from local budgets in order to implement policies.

Housing supports: After 4 years (2004-2008), the government supported to build 373,400 houses, met 111% required support with the total value of 1,920 billion. In general, new houses’ quality met the 3 standards: Hard base, hard wall and hard roof. On the average support of 7 - 10 million, some families borrowed from their relatives, more investment… build good and stable houses with a budget of 20 – 30 million. In addition, some local people asked for more funding from company, and enterprises to build houses.

Land support: supported 1,552 ha for 71,713 households, met 82% requirements.

Farmland: deployed in 43 provinces, total supported areas were 27,763 ha for 85,563 households. Southeast region had the highest completion rate than planned (98% of households, 88% of the area), followed by the North Central region (61% of households, 54% of area), and the lowest in the Northeast (only 34% of households, 38% of the area).

Clean water: supported clean water for 198,702 households, reaching 71% of the plan. Southeast region achieved the highest completion rate (101%), the lowest completion rate was Central Highlands (40%). With regard to clean water infrastructures: built 4,663 projects, achieving 77% of the plan. In general, the clean water infrastructures have been effectively promoted, and contributed to improved living conditions for hundreds of thousands of households in disadvantaged areas.

Perfomed Decision No. 1592/QD-TTg, the total capital requirements in performing policy (in approved projects) was 7,906 billion, including: support for clean water which was 4,235 billion; support for farmland was 3,657.085 billion; fund for management: 13,792 billion. However, in 2009-2010 funds for investment had not been allocated due to difficulties, obstacles
about review, identification of area and balanced resources. In 2011-2012, the funds from National government was only 1,050 billions intended for localities to support clean water for 15,764 households (in 10 province), built 910 central infrastructure for clean water (in 33 provinces) and support for 2,738 ha farmland (in 04 provinces). After years of implementation policies in support of land, productive land, so far, there are still 326,909 ethnic minority households and landless poor who lack production land. The number of households that need support for productive land were 293,934 households, number of households in the need of residential lands were 32,975. In regard to clean water supply, to date there are 29,230 households that still need support for drinking water, in which: 134,150 households need support for clean water; and 160,080 households/2,462 projects need clean water for residential purposes. Because of the many households that need support, on May 20, 2013, the Prime Minister issued Decision No 755/QĐ-TTg to approve residential land policy, productive land, clean water for ethnic minority people in communes, up to year 2015.

2.5. Policy support for residential land, productive land and employment for ethnic minority in the Mekong River delta period 2008-2010 (Decision No 74/2008/QĐ-TTg)

The total of households that need support were 43,395, including 9,808 households that have no residential land; 33,587 had no productive land or in need of productive land (over 90% of them were Khmer minority); 41,518 people that need vocational training; employees wishing to switch jobs, purchase of machinery and equipment for production.

The total capital required amount was 1,978.83 billion, including: National budget amounting to 802.02 billion; loan from Social Policy Bank was 1,128.11 billion; and the budget from local was 48.70 billion.

By the end of 2011, the Central Government had allocated the amount of 1,087.91 billion for local, reaching 54.96% of performed plan intended to support the residential land for 5,584 households, support farmland for 4,553/33,587 households, vocational training for 22,542/41,518 labors, support to switch jobs for 38,513/74,605 labors.

Decision No. 74/2008/QĐ-TTg expired in 2010, accordingly, in May 20, 2013 the Prime Minister issued Decision 29/2013/QĐ-TTg to replace Decision 74/2008/QĐ-TTg because of the needs to support residential land, production and employment of ethnic minorities in the Mekong River delta were huge in number.

2.6. Lending policies for ethnic minority households to develop production (32/2007/QĐ-TTg Decision and Decision 126/2008/QĐ-TTg)

From 2007 to 2011, the central budget which was passed to the Social Policy Bank policy implementation was 532 billion, or 38.6% compared to the policy needs; 118,530 households have been support to develop production, business and services, including: 33,969 households to develop production loans, 80,218 households to expand livestock, and 4,343 households to expand into other service industries.

In 2012, the central budget had allocated 110 billion for the implementation of Decision 126/2008/QĐ-TTg and 32/2007/QĐ-TTg, but the decision was expired as a result the Bank for Social Policies stopped the disbursement. However, there were still many households who are in dire need of support, some households that have loan demands were 156,802 households (equivalent to 61.4%). Hence, CEMA submitted to the Prime Minister the proposal and the Prime Minister issued Decision No. 54/2012/QĐ-TTg of loan policy for production development for ethnic minorities in the period 2012 - 2015.

2.7. Implementation policies to issue several publications, newspapers, magazines for ethnic minority in mountainous areas with special difficulties (2472/QĐ-TTg Decision dated 28/12/2011 of the Prime Minister).

Performed the Decision No 2472/QĐ-TTg, dated on 28/12/2011 of the Prime Minister to
issue 19 publications, newspapers for moutainous ethnic minority people covering the period 2012 – 2015. On 13/12/2012, CEMA collaborated with other Ministries: the Ministry of Information and Communications, Culture - Sports and Tourism issued Circular no 02/2012/TTLT-UBDT-BTTTT-BVHTTDL to guide locals, magazines, on how to implement Decision No. 2472/QĐ-TTg of the Prime Minister.

In 2012, newspapers, magazines were publized with total budgets of 162 billion.

2.8. Performed 6 projects to support social,economic development for 5 minorities Sì La, Pu Péo, Ơ Đu, Brâu, Rơ Măm from 2006 to 2010 (with population less than 1,000 people)

The total budget of the project was 76,835 billion which was completed toward the end of 2010. Thanks to the investment of the government on infrastructures of communes, towns that have changed significantly, including production and living conditions gradually increased, no more hunger, more children get educated and improved the quality of education for the people, thus contributing to preserving the traditional culture of ethnic groups.

3. Evaluation of the results of ethnic policies to reduce poverty, social -economic development in mountainous regions covering the period 2005-2013, its limitations, problems and causes

3.1. The results and impact of ethnic policies to reduce poverty, social -economic development in the mountainous regions

During the period 2005-2013, with the support of Party, the Government Policies, along with the efforts to strive for the improvement of ethnic people, the results had changed the physical feature of rural ethnic minority in mountainous areas. If in 2006, the average poverty rates in communes, towns were over 47%; some extremely poor living condition were over 80%; especially some communes, the poverty rate was 100% then up 2010, the poverty rates in these areas reduced to 28.8%. Living conditions improved, poverty rates were reduced from 3 - 5%/year. With the investment policy of socio-economic development, poverty reduction has created a noticeable change in infrastructure. As of 2012, wide cemented roads to the town center were constructed for 97.42% of communes; more than 80% communes in extremely poor conditions has road network connected to remote areas, nearly 70% households have electricity, 100% communes have primary schools, secondary schools, 100% communes have health clinics.

Agricultural and forestry productions in mountainous regions have positive changes. Exchange of goods is significantly growing. The people in the area of protection forests and special-use forests are gradually tied to benefit from reforestation and protection... Gradually, the economic restructuring, labor structure, living condition have been improved, contributing to poverty reduction and stable life of people.

The education and training have made progresses, forming various types of training, such as, boarding-schools, semi boarding schools, training and professional training at all levels. The results of the work of education has contributed significantly to the improvement of the people's mind and human resource development.

Health network developed at all levels, ensuring that ethnic minorities have access to basic health care services. Health insurance policy is in compliance with regulations. The disease in ethnic minority and mountainous areas such as malaria, goiter are basically controlled; significantly reduced the proportion of malnourished children, and helped improve the quality of the population in the region.

The national cultural values of the people are preserved and promoted as: restoration of the traditional festival, organized cultural festival - art, sports events. Infrastructure broadcasting, radio was broadened to 90%, communes with post-culture was 98.7% which show a gradual improvement of the quality of spritual and cultural life of the people.
Propaganda on popular legal educations shows positive changes, legal aid services become accessible to people. The work of public relations, advocacy masses, promoting the role of reputation in the community have been given attention. Gender equality work helps people to rise up awareness and promote the role of the family and society.

The political system is regularly built, consolidating and growing, especially in the basis political system. Systems work gradually has been strengthened with 3 central, provincial and district levels. Political situation - social stability and security - defense were promoted.

The policy has gradually changed in opinion, thought, from mechanism of imposing heavy switch to decentralized mechanisms for localities on the basis of openness and transparency in the work of building and planning, from direct support to households gradually shifted to support for community groups, since the model is not transferred to the lender. The policy also get attention, coordination between ministries. Local people's role is to promote, create consensus from central to local stages in the construction, implementation and test evaluation policy.

3.2. Limitations and obstacles

Besides the fundamental achievements in the construction and implementation of policies for poverty reduction and social-economic development There are still many limitations and problems that need to be further addressed, these are:

The formulation of policies often had big goals but the time taken was inadequate, and short period. Policies operating management mechanisms was asynchronous, the division managers had overlapping objects and areas, duplication of content between ministries, and local... Some policies issued by ministries lack coordination or omission of the role of the systems with working peoples, which lead to difficulties in implementation; Aside from the basic positives, there are still some restrictions concerning some policies in giving away cavans of rice, clothings, kerosene lighting, electric supply, among others; no clear policy to encourage households to escape from poverty itself, stability to improve life and policies for pro-poor households.

The implementation of the policy and balanced resources are not appropriate, does not stick with the status and needs of socio-economic development of local, does not ensure the attainment of objectives and plans. Most policies are supportive, low investment norms lead to fragmentation; have delayed capital allocation policy, to extend the implementation period leading to inappropriate norms. There are policy inconsistencies funding (capital investment, business capital, loans...) difficulties in implementation; there is not enough capital policy level, the local layout spread plan of the project remained unfinished, affecting the effectiveness of the policy. Resource allocation mechanism is not reasonable, fraught average, not based on population size, geographic location, growing conditions and the level of local poverty.

The implementation of laws and policies on residential land, productive land and clean water for ethnic minorities has not been definitely solved; The planning, compensation, resettlement in a number of socio-economic projects, such as hydroelectric projects, mining, project land acquisition and allocation of land for agriculture and forestry are not satisfactory, which is not in accordance with the customs, practices, culture of each ethnic group, which is fitted in the locality where farming, so the people could not adapt to new life, risk free migration and high poverty.

Issuance of documents/guideline to perform some policies were very slow, some policies are very difficult to implement, no longer suitable but slow to change and replace.

The poverty rate in ethnic areas and mountainous regions was also very high; the gap in development is getting bigger. In 2013 the poverty rate and poor mountainous areas of Northwestern was 38.78%, mountainous northeast was 24.54%, North Central was 24.28%, and these areas are about 2 to 3 times
higher than the poor and near-poor with 14.12% of the country. Although ethnic minorities make up about 14% of the population but account for nearly 50% of the national, poverty gap in income disparity is getting wide, the average income of households of ethnic minorities was only 1/6 of the average income of the country.

3.4. The cause of the limitations and problems

Objective reasons

Ethnic minority and mountainous areas are vast, rugged terrain, bisected complex, severe weather, frequently affected by natural disasters and floods. Residents living in areas are dispersed, difficulties in walking, people have fewer contact services opportunities, as well as social welfare and economic information market opportunities.

The socio-economic conditions in some provinces have a low starting point, especially for systems of essential infrastructure; production level of people still rely on a simple platform mainly backward extensively self-supporting, self-sufficient, based on nature; general standard knowledge is limited.

The global situation becomes complicated in terms of changing political institutions, religious conflicts, ethnic, climate change, the overall impact of the economic downturn in the country. The world has a significant impact on socio-economic development in Vietnam in general and the ethnic minority and mountainous areas in particular.

Subjective reasons

Aware of the role and position of ethnic affairs, the importance of ethnic policy in social-economic development, defense and security officials in several ministries, central agencies, local, have been raised but not commensurate with the requirements; not really considering ethnic work being the task of the political system.

Organizing and directing the implementation of guidelines and policies of the Party and State policies on socio-economic development of ethnic and mountainous areas are limited. Propaganda and campaigns to raise awareness of the social responsibility, inspection, monitoring and evaluation of policy implementation are not focused in regular, timely and are not on a par with the requirements of assigned tasks.

State management, and direct implementation of policies on productive land in ethnic minority in mountainous areas also revealed many shortcomings and weaknesses. The direction and guidelines in planning and adjustment of land use is limited. Goals in recovering land from agriculture, forestry, and land solutions to create and assign them to the poor ethnic minority households that need land and for landless production were deployed for a long time, but the results showed that it did not achieve its objectives.

Sometimes state management of ethnic work place was not given due attention. System organizations from central to local are incomplete, asynchronous, and slow consolidation interest.

4. Some lessons learned in the development and implementation of policies aimed at reducing poverty and socio-economic development of ethnic mountainous during the period 2005-2013

First, the determination and unity of all political system from the central to the grassroots, especially the active participation of the social and political organization focused on poverty reduction.

On the perspective view, ethnic affairs and its policy implementation are the tasks of the nation at all levels and sectors of the entire political system, with social-economic development as its priority in the ethnic and mountainous areas, particularly difficult area, so the levels and branches from the central to local leaders must drastically, regularly and thoroughly address its focus. The Government has issued policy decisions to strengthen leadership, in this context the steering committee, the provincial government, district, considered the key political task in its action program. Experience over the years showed the same policy and management mechanism, but each locality has a direct
solutions and implementation strategy on various organizations which gave very different results. Therefore, we have further stated the responsibility of leaders at all levels to work for poverty reduction, socio-economic development for the society, particularly difficult villages in ethnic minority areas and mountain regions.

Second, to determine the true state of poverty and to verify the basic objectives to be tackled, considering that the right priority areas are the ‘core poor’, the poorest, the most difficult villages focused on resources investing, but not spreading. At the same time, there is a need to mobilize resources, including the state budget, credit, contributions of the people and the support and assistance of the international organizations, business enterprises for poverty eradication, poverty reduction in the area of the town and villages.

Third, parallel hierarchies, empowerment, creating an active basis, the central and provincial levels, the district should strengthen the supervision and monitoring to support, determine defect, and timely help the society to overcome all difficulties in the implementation of policies aimed at reducing poverty and ethnic socio-economic development in the ethnic and mountainous areas.

Based on the fact that there is decentralization, empowering strong base, where the implementation of programs and policies to reduce poverty and achieve high efficiency, work quality, project quality assurance schedule in accordance to the needs of the people. Along with decentralization, empowerment need attention, guidance and assistance to the establishment, not “blanche” for facility management, implementation, especially for the commune. In addition to regular care, there is a need for training development and improvement of the quality of resources in ethnic minorities.

Fourth, the construction of ethnic policies, programs and projects aimed at poverty reduction and social-economic development of the ethnic mountain to compact, consistent with the actual requirements and capacity, management degree of the facility, and the implementation must ensure the principle of democracy, openness and transparency.

Lessons from ethnic policies aimed at poverty reduction and socio-economic development of ethnic and mountainous areas suggest that a mechanism must operate ventilation, suitable for simple management level, easy to implement prerequisite to ensure feasibility. The public, democracy must be done regularly and continuously and complete information and promptly to the beneficiaries. This is in addition to the assignment of clear responsibilities between central and local, between the various levels and branches and central assistance under the balancing capacity of enacted budgets and local mechanisms for implementation. The local initiative must stick to practical adaptation mechanisms in operation and strengthen inspection, monitoring and communication.

5. Tasks and solutions in the development and implementation of policies aimed at reducing poverty and ethnic social-economic development in mountainous area in 2020

5.1. The task of formulating and implementing policies to reduce poverty and ethnic socio-economic development in the mountainous area in 2020

Development of education and training, improving the quality of human resources.

Innovation policies at all levels of education, extended learning and teaching of ethnic minority languages in schools; innovation and improving the efficiency of selection policies for children of ethnic minorities to study at universities, colleges and professional schools; improving the quality and efficiency of secondary boarding schools; expansion of pre-university faculty in universities for ethnic minorities; developing policies which are appropriate support for students from ethnic minorities according to each grade level and priority areas with special difficulties.

To diversify, the fastest growing type of training, retraining and vocational training in
To implement the program, training models, fostering skills, organize new generations of farmers, and application of advanced scientific-technical, adaptation mechanisms in ethnic markets and mountainous regions.

Perform work rotation, incentive policies to attract scientists, good managers to participate in socio-economic development in highland and border areas with special difficulties.

Doing good planning, training and retraining, use, treatment cadres of ethnic minority officers working people. Forming a team of leaders from qualified, and intellectual ethnic leaders to meet mission requirements in the new.

Production development, accelerate poverty reduction in ethnic minority and mountainous areas.

Economic restructuring in the direction of reducing the proportion of the agricultural sector, increasing the proportion of industry and services; job change policies to create jobs, to improve the stability and life of ethnic minorities

Implementing effective training programs and labor export in ethnic minority.

Promoting comparative advantage, forming specialized areas produce goods, such as coffee, cashew, pepper, rubber, tea and wooden furniture exporters ethnic minority and mountainous areas in the Central Highlands. Development of corn-growing regions provide goods for forage production in the country, developing flowers, high technology vegetables, economic development farms for breeding cattle, pigs in a concentrated population areas of minority and mountainous northern mountains; developing policies to attract investment in processing industries to add value to major products.

Development of rice production, the formation of specialized large-scale intensive farming, fruit development, forming the focus of commodity production, exports and tourism ecological garden in ethnic and mountainous in the South West; Disease management, improve productivity and quality and efficiency of agricultural products; Develop policies to support investment in the development of processing industries and consumption of ethnic products.

Creating equal opportunities for people to access resources development and enjoyment of services, social benefits; creating a favorable environment to attract resources in agricultural development, particularly in rural investment by small and medium enterprises, attracting more ethnic minority workers; resolving basic disputes and shortages of productive land, residential land for ethnic minority and mountainous areas, especially in the Northwest, West Central, West South.

Focusing on resources to properly implement assistance programs in ethnic minority and mountainous areas such as housing, planning for poor population, households living in stormy and easily flooded areas, and hazardous rivers and stream towards stability and sustainable development.

Development of social-economic infrastructure in mountainous regions

Focusing on resources invested in infrastructure development - economic social and geographical mountainous nation, the first to consider is to complete the construction of roads connected with the production of goods, the center communes and villages; ensure electrical lighting, water works, schools, clinics, markets; associated with restructuring, residential stability which is conducive to development and restricted freedom of migration.

Infrastructure Development sync signal transmission, ensure services delivery of radio broadcasting, television, telecommunications and information technology to meet production demands and activities of the people in the area.
Comprehensive social development in the field of culture and ethnicity in mountainous regions.

Capacity and quality of health care and make the healthcare services of CHCs, district hospitals, provincial hospitals, ensuring fair and effective access to ethnic minority and mountainous areas. Establish good health insurance policy health care for ethnic minorities and population policy and family planning, especially for the very few ethnic minority people.

Implementation of gender equality policy, the advancement of women; care and protection of children from ethnic minorities; providing guarantee to freedom of belief and religion of citizens according to law; improving the quality of the entire population movements unity to build cultural life.

Developing policies that protect and promote the cultural identity, language, writing, practice, fine creed tradition of ethnic minorities; increasing the quantity and improving the quality of radio programs, television on ethnic minority languages; building a system of cultural institutions and ethnic basis mountainous regions associated with historic sites in each region or locality; continuing innovation management mechanism to promote the socialization of the culture sector, information; improve the quality of advocacy, campaigning against the manifest superstition, superstition, moral degradation and lifestyle.

Improving the quality of the political system, strengthening security of rural ethnic minority and mountainous areas.

Developing and promoting effective operation of party organizations and unions in each of the villages and hamlets. Continuing to consolidate and improve the quality of facility staff, interested resource discovery, planning and training cadres of ethnic minorities, especially in the Northwest, West Central and Southwest ministries and central coast.

In the coming years, to strengthen workforce capacity, good quality of work in areas of ethnic and mountainous areas, especially in the vital areas of national defense and security; implementing good policies to encourage elders and chiefs, whose prestige involved in inspection and monitoring of the implementation of policies, programs and projects in ethnic minority and mountainous areas under the motto "people know, people discuss, people do and people check".

Continue to build strong defense status, people, security people to maintain order and safety in the area of social in ethnic mountainous regions.

Focused on investment in developing special areas difficult ethnic minority.

Mobilization and integration of resources to properly implement specific policies and programs of socio-economic development in the poorest districts, communes and villages. To revise, supplement, modify the criteria for classifying areas with ethnic minority and mountainous areas under development level layout policy to invest resources accordingly.

Developing policies for preferential credit loans to invest in build up the production of goods and services; conversion policy lines, solve water shortages and production activities of ethnic minorities in the province particularly difficult highland rocks border. For areas where poor ethnic minorities are not productive, the State should have policies to support staple food and necessities needed to keep reassuring people resources and border security protection.

There is a need to continue a thorough implementation of the socio-economic development policies of ethnic minorities according to the resolutions of the Politburo for the Northwest, Central Highlands and the South West.

Ensure water and sanitation in ethnic minority areas.

Evaluate policies for investment in water supply in ethnic minority areas; identify needs
and propose policies to settle a water shortage, ensuring sufficient water for agricultural production as planned. There is a priority policy in terms of tax to mobilize all economic sectors to invest and organize themselves to be able to access water for ethnic minorities.

5.2. Solutions in the formulation and implementation of policies aimed at reducing poverty and socio-economic development for ethnic and mountainous areas toward 2020

Prioritize the allocation of sufficient funds of the government to implement approved programs and policies. To ensure proactive in developing and implementing policies necessary to regulate ethnic ratio of annual state budget. In addition to funding from the state budget, the mobilization of ODA and other sources are required.

Summarization, systematic review of current policy to eliminate the duplication policy overlaps; to supplement, amend the policy is no longer suitable for the actual situation. Reducing the national target programs, transportation policies for ministries management functions. Merging ethnic policies of each ministry, sector management into a common text. Researching and developing new policies in accordance with requirements and tasks. Building the model of socio-economic development characteristics which is consistent with each region.

Based on the results of the review, the policy research and multi-purpose long-term are consistent with the strategy of socio-economic development of the Congress Party, the characteristics of each region. There is a clear definition of policies to support the development and social protection policies for each object. Application of the difficult areas of priority for the allocation of resources in the implementation of policies; strengthen decentralization for local, and concentrating investments in infrastructure for socio-economic development of ethnic mountainous; continue to solve essential needs of the people such as residential land, productive land, housing, water, vocational training and employment to improve their income and credit; human resource development; increase access to services for the health of people, education, culture and environment. Restricting freedom of migration status and adverse effects due to climate change in ethnic minority and mountainous areas. There are policies to encourage sustainable poverty reduction.

Institutional perspectives for ethnic minorities policy priorities in the mountainous areas into specific standards, as the basis for determining the priority of each policy, especially the order by ministries management.

Research coordination mechanisms and monitoring the coordination between the ministries of planning, construction, budgeting and implementation of ethnic policies and guidelines.

Strengthen advocacy and mobilization of the knowledge of people, understand and actively participate in developing, implementing and monitoring policies. Advanced self-conscious sustainable escape from poverty of the people. /.
Overview of DPs’ Engagement in Poverty Reduction for EMs

1. Vietnam’s significant achievements in poverty reduction, places Vietnam as one of the global world top performers in terms of promoting economic growth and poverty reduction. However, poverty among ethnic minorities (EMs) remains very high and the pace of poverty reduction for EMs has declined since 2006. Representing nearly 14.6 percent of the total population, EMs constitute nearly a half of the total poor in 2010 (see below). Worryingly, the gap in living standards (measured by income and other different dimensions of deprivation) between the majority and EMs is tending to widen steadily over time. Hence, supporting ethnic minority development has been a focus of attention for almost all development partners (DPs) in Vietnam. It would be interesting to analyze the engagement of DPs in EM development four stages as demonstrated below.
Evolving Donor Engagement in Poverty Reduction for Ems

2. Stage 1 (around 1990-1998) started with 86 percent of EMs as considered poor while the national poverty headcount was nearly 58 percent (in 1993). This was also the early period of the Doi moi, a period when many DPs either commenced or resumed their ODA relationship with Vietnam. As (i) the focus was to support Vietnam’s transition to a market economy; and (ii) the national poverty headcount was very high with EMs accounting for roughly 18 percent of the total poor there was no particular focus on EMs in poverty reduction initiatives. The main ODA modality, was stand-alone projects. UN agencies provided the most important interventions. Many INGOs started their operations during this period.

3. Stage 2 (around 1999-2005) saw a number of significant development initiatives. These included the launch of Program 135, Phase I, a National Targeted programme which aimed to accelerate poverty reduction in remote mountainous areas; the approval in 2002 of Vietnam’s Country’s Comprehensive Poverty Reduction and Growth Strategy (CPRGS) which served as a platform for the GoV and DPs to cooperate in poverty reduction programmes; Budget support was introduced through the Vietnam Poverty Reduction Support Credit (PRSC) led by the World Bank with participation of an increasing number of donors.

However, traditional ODA modalities still dominated, especially stand-alone projects (such as WB’s Community Based Rural Infrastructure Project (CBRIP) and the Northern Mountains Poverty Reduction Project (NMPRP-1); ADB’s rural infrastructure in the Central Vietnam; IFAD’s and other UN agencies’ initiatives). Some new implementation arrangements in poverty reduction initiatives were piloted, such as the Swedish supported Chia Se Project is one example, which stemmed from earlier initiatives by other DPs to promote participatory planning and ‘investment ownership’ at local level. There was a large number of donors with different stand-alone interventions, leading to a degree of fragmentation. This period ended with formulation of the Hanoi Core Statement (HCS), which tied GoV and donors to strengthening the alignment between donors’ interventions and country led strategies.

4. Stage 3 (around 2006-2010) was the period of highest levels of collaboration between DPs and GoV in the area of EM poverty reduction, reflecting the principles of the Hanoi Core Statement. Targeted budget support, program-based approaches, and sector wide approaches were adopted as major platforms for the engagement of DPs. One of the major programmes which attracted DPs and GoV co-operation was P135-II, which received the support from a consortium of seven donors. The P-135 partnership became an important platform for policy dialogue between the GoV and DPs.

Within this Partnership, participatory planning, commune investment ownership, and Operation & Maintenance funding mechanisms were strongly advocated and implemented. Outside the P-135-II, most of DPs encouraged decentralization. For instance, participatory planning was practiced in almost all DP-led poverty reduction initiatives. The Commune Development Fund (CDF) model was advocated by Switzerland’s (SDC and Helvetas) PS ARD Project in Hoa Binh and Cao Bang; and the World Bank’s NMPRP-2. Block grants, village/commune investment ownership were experimented by Australia’s ISP in Quang Ngai and Irish Aid’s VOICE project in Bac Kan. In addition, promoting local governance, civil society organization, linking the poor to
markets, and capacity building for the villagers and community became the new ‘facets’ in programmes supporting the poor. INGOs such as Oxfam, SNV, Helvetas, Plan, Care, Save the Children etc. were very active in these ‘niches’. This period also experienced a marked increase in the number of policies and programs by the GoV to support EMs. Nevertheless, the pace of EM poverty reduction slowed down. By the end of 2010, more than a half of EMs were poor and they accounted for about a half of the total poor.

5. Stage 4 (2011-present) was marked with the end (or at least hiatus) of Program 135-II, and most importantly Vietnam’s entry into lower Middle Income Country (MIC) status. Vietnam’s MIC status would see a rebalancing between donor and GoV’s resources into poverty reduction programmes addressing EM poverty. It is anticipated that GoV will take more ownership while DPs will focus more on policy dialogue, and capacity development. This period has also been a period of transition for a number of longstanding DPs in Vietnam as their ODA programmes were being phased out or soon to be. Despite this new context, a number of DPs (especially EU, Irish Aid, SDC, UNDP), encouraged by the results of the P135-II’s Partnership, prepared to continue support in poverty reduction for EMs. Close consultations between donors and the GoV, especially MOLISA and CEMA, were made in the development of the new phases for P135 and the new National Targeted Programme for Poverty Reduction (NTP-PR). There were expectations that lessons drawn from P135-II and other donors’ interventions would be reflected in the new programmes. Unfortunately, the context in the first few years of this period was complicated. It was not until October 2012, that the new NTP SPR 2012-2015 was finalised. Six months later, the Prime Minister approved the new phase of P135 (2013-2015) and (2016-2020) as a component part of the NTP SPR. During the hiatus in establishing a new Programme, many DPs made decisions to support other programmes (e.g. the EU Delegation the Health Sector Policy Support Programme; Swiss Development Cooperation (SDC) and Helvetas’s PC ARD). Irish Aid continued its relationship with CEMA in an interim arrangement in 2011 and 2012 whereby Irish Aid in collaboration with CEMA provided discrete funds to a number of small-scale infrastructure projects which were to be based on participatory planning and communal level oversight. In addition, Irish Aid along with UNDP launched the Poverty Reduction Programs and Policies (PRPP), which is predominantly a capacity building programme with a strong policy dialogue element. There was also a perception among DPs that many of the innovations piloted by DPs supported programmes and projects in previous years were not given high priority in the final program documents of NTP SPR and the new P135.

Engagement of DPs in EM poverty reduction in the context of low MIC

6. The above shift in the engagement of DPs in EM poverty reduction came in a context in which the 14.6 percent of the population, EMs, now account for around 48 percent of the total poor population. It is also noted that the pace of poverty reduction for EMs had slowed down considerably since 2004. Using the data from VHLSSs, there are significant gaps between the majority and EMs in almost all aspects of living standards. These include access to electricity, watsan facilities, permanent housing, literacy levels, and stunting rates of children under five. His raises two important questions:- why many DPs withdrew from the P-135 budget support modality despite what appeared a seemingly successful partnership with GoV; and do the changes in DPs’ development focus away from EM poverty reduction programmes reflect the emerging situation?

7. Regarding the first question, this discussion paper argues that DPs withdrew their budget support for at least three reasons below.

8. It was widely perceived that it is difficult for DPs to align their support to the current plethora of GoV-led strategies or programs, either nation-wide or sector-wide, aimed at supporting the socio-economic development for EMs. A
review by MOLISA at the end of 2013 suggests that there were around seventy—eight (78) GoV policies and programs on poverty reduction aimed at EMs as the priority target group. This has resulted in overlap and fragmentation of the GoV-led efforts for poverty reduction among EMs while effective coordination mechanisms across different ‘owning’ agencies of these policies are lacking. Such overlap and fragmentation is translated into a burden for implementation at the local level. More importantly, there has been growing evidence that having too many policies and programs have implicitly discouraged incentives for escaping poverty among EMs themselves. This situation was well signaled by donors, but limited signs of reforms or consolidation were evident.

9. The current policies and programs have exhibited some shortcomings in intervention approaches. It is estimated that infrastructure development programmes account for nearly 90 percent of current EM development and poverty reduction investment projects and programmes. It is thus concluded that provision of production support, capacity building (e.g. vocational training), and raising the voice of the poor of EMs are less important than infrastructure development. Though infrastructure bottlenecks still remain an obstacle for EM poverty reduction, a greater balance is required in EM poverty reduction programmes. The current GoV-led policies and programs are also subject to criticism that they are a ‘one-size-fit-all’ due to the lack of responsiveness and differentiation between ethnic minority groups. The current P135 and NTP SPR reflect these conclusions - these programs continue to place a heavy focus on infrastructure (e.g. as much as 85 percent), which is no longer the most important priority of the DPs in their support for EMs.

10. Many good practices experimented with by the engagement of DPs over the past two decades have yet to be institutionalized. There are lessons learnt including participatory planning, village/commune investment ownership, block grants, pro-poor value chains, micro finance schemes... Despite a number of unsuccessful experiments, it has been widely accepted that these cited initiatives can positively contribute to poverty reduction efforts. However, most remain as successful experiments and examples that have yet to be been institutionalized in the national policy arena. The absence of the successful policies in the key GoV-led programs such as the NTP on SPR 2012-2015 (and the new Program 135 as one component project of NTP SPR) comes as a disappointment to most DPs.

11. With respect to the second question of whether such changes in engagement of DPs on EM poverty reduction match the actual situation of EM poverty, the answer is probably inconclusive.

12. As discussed above, many DPs have diverted their resources to either sector-wide support or stand-alone projects. Sector-wide approaches can be effective as long as the DPs’ interventions are aligned to the GoV’s own strategies and policies in the sector of intervention. This however is not the case for stand-alone projects. Embarking on stand-alone projects might be an option to fill in some gaps that cannot be resolved effectively by aligning to the GoV-led strategies and programs. Undoubtedly, these will create many positive impacts on EM poverty reduction but their contribution to policy change s doubtful. In addition, while such stand-alone projects can produce many innovative implementation arrangements, scaling-up to national level is at least as equally challenging as it was for many good practices advocated under P135-II’s Partnership.

13. Continuing partnership with the GoV on policy dialogue and supporting the execution of innovative implementation arrangements represents another option for DPs. This option has been adopted by Irish Aid and UNDP. The merits of this option and its impacts are subject to further evaluation which is beyond the scope of this paper. By observing the current partnership between Irish Aid/UNDP under the PRPP, it could be argued that this project is contributing...
significantly to national-level debate on policies for EM poverty. In addition, the PRPP also provides discrete resources to facilitate the adaptation of a block grant modality, participatory planning and many other innovations in implementing the NTP SPR. This modality might better match the current situation and challenges, and hence could be considered as a good example of future engagement by DPs in the context of low MIC status.

**Rationale for Continued Support and Areas of Support**

14. **Rationale for continued support.** Despite many problems with the current institutional setting for poverty reduction, many DPs remain interested in EM development. The main arguments for continued support are probably the following: (i) to consolidate the significant achievements over the past two decades or so; (ii) to address the unfinished low income country agenda in Vietnam (i.e. to continue the support for the poorest and the most vulnerable); (iii) to support EMs in climate change adaptation and disaster management; (iv) to prevent EMs from further lagging behind, especially in the context of the middle income trap; and (v) to ensure that the transition from ‘aid to trade’ does not exclude EMs. Though the rationale for further support exists, it was widely perceived by many DPs that continuing the support of DPs for EM poverty reduction would depend on whether radical reforms were implemented in both the institutional setting and in approaches to poverty reduction.

15. **Areas of support.** Below are the potential areas where support from development partners are probably most needed.

16. **To support the GoV in the process of correcting the overlap and fragmentation of policies and programs.** The current number of around 78 policies and programs needs to be considerably reduced. In order to pursue such restructuring, CEMA might focus on its mandate as a guardian of EM issues. CEMA should be empowered to over-ride policies from other line ministries and provinces if such policies are not considered appropriate or effective for EMs. Each area of support (e.g. infrastructure, sustainable livelihood…) should be under the direct management of the line ministries that are most relevant. Resource allocation for these limited number of consolidated programs should have a medium term perspective as opposed to annual. It is necessary that the levels of resources available are transparent to all stakeholders in order to overcome the current ‘wish list’ approach. This process will require TA support from DPs, especially in terms of how to rationalize the current plethora of policies and programs and strengthening the capacity of CEMA.

17. **To support the institutionalization of the lessons** that were successfully piloted. These include participatory planning, commune ownership, and block grants – which are important instruments in improving effectiveness of future poverty reduction initiatives. Experiences from piloting these mechanisms suggest that building capacity for the community must be a prerequisite. In addition, improvements in local governance and the role of civil society organizations will be a determinant to ensure that the central Government can have confidence in (and thus decentralize in the real meaning of the word to) grassroots capacity to implement local level programmes. DPs have a comparative advantage in providing these capacity development needs.

18. **There are new innovations and requirements for ethnic minority development where DPs can contribute.** These include vocational training, conditional cash transfers systems, anthropology-based approaches, multidimensional poverty approach (for both monitoring and targeting), climate change adaptation and risk management. These innovations have been in discussion in shaping new policies and initiatives to address poverty reduction among EMs in Vietnam. There is ample opportunity for DPs to contribute.

**Conclusions**

19. Vietnam has achieved globally impressive results in economic growth and
poverty reduction. However, EMs still remain the poorest and most disadvantaged groups in Vietnam. Figures on various aspects of EM living standards suggest that the ‘job is not finished’. Nevertheless, DPs withdrew their prolonged commitment to P135, arguably the most important GoV-led national programme for EM poverty reduction. This was the result of the conclusion of a number of ODA programmes; a shift to sector-wide support; or to the more traditional ODA stand-alone projects.

20. Despite the changes in context, many DPs maintain an interest in EM development. The rationale for further support exists. It is widely perceived that continuing support from DPs for ethnic minority development would depend on whether the strong commitments from the GoV to address the overlap and fragmentation of policies and programs on poverty reduction were to materialise. The successful implementation of those initiatives of the past two decades need to be reflected in the GoV-led policies and programs which are aiming to address EM poverty reduction.

Notes

It is important to note that the name of DPs and their supported initiatives mentioned in this discussion paper does not necessarily mean that these DPs and their initiatives represent the other DPs and their interventions. Instead, these names were mentioned to provide examples or evidence to support the argument. Listing out all DPs and key poverty reduction initiatives is not an objective of the current paper.

The different outcomes among the majority and EMs observed at the national average level using the V(H)LSSs are also observed in the extremely difficult communes, where around 90 percent of the EMs residing. Data available from the baseline and endline surveys of the Programme 135-II (on a sample of around 6,000 households in the 400 communes) suggests that even in these poorest areas of the country, the Kinh-headed households are considerably better-off compared to the EM-headed households.

Document 486/BC-CP dated 20/11/2013 of the Government to the National Assembly, it was reported that there is around 78 programmes and policies on poverty reduction. CEMA-UNICEF-IRC (2014) suggested a number of around 63 policies and programmes.

Consultation with the authorities of many Programme 30a districts and P135-II communes revealed a ‘policy fatigue’. It is not difficult to find a poor commune that benefit from more than ten policies and programmes. Understanding how these policies and programmes work is already a big challenge.

Alternative expressions for such resultant discouragement of incentives and determination for escaping poverty are ‘being passive and over-reliant on support’, ‘deliberately want to stay poor in the official list in order to retain the support made available for the poor’. At present, these expressions were mentioned and discussed openly by policy makers. For instance, this issue was raised by many NA members on Friday, 6th June of the 7th Congress of the National Assembly XIII.

World Bank’s Country Director on behalf of the DPs that supported P135-II sent a letter dated 22 Sept 2009 to the Deputy Prime Minister Nguyen Sinh Hung to express the concern of DPs on overlap and fragmentation of policies and programmes for poverty reduction as well as expressed the willingness of DPs to discuss and support the GoV to overcome these problems.

The percentages of resources spent for infrastructure vary from one policy/programme to the other. Under P135, for instance, the first phase 1999-2005 was mainly infrastructure support; while the second phase 2006-2010 was carried out with infrastructure accounted for around 76 percent. Programme 30a is another example with infrastructure accounting up to 90 percent or even higher.

It should be noted that making any national-level policies and programmes responsive to needs of individual ethnic groups is very challenging. However, programmes like Programme 135 the phase 2013-2015 could be
more ethnically and locally responsive if further decentralization is endorsed.

Under the NTP SPR 2012-2015, the expected budget for infrastructure was around 85 percent.

There are examples where some successful experiments are ‘institutionalized’ at the provincial level, such as the participatory planning mechanism in Hoa Binh – which has been supported by Helvetas/SDC’s PS ARD project in advocating this planning approach and further supported though the WB-financed NMPRP-2. Recently, some provinces have also institutionalized the block grant model.

At the completion of Programme 135-II and the NTP PR 2006-2010, there were collective efforts by the DPs, especially the World Bank, EUD, Irish Aid, UNDP, AusAID (now DFAT), SDC, Finland expressed their concerns on the lack of innovations and learning in the draft documents of the new programmes. However, such innovations were not observed in the final program documents.

For instance, MARD should be in charge of supporting sustainable livelihoods development (in the context of climate change), MoET and MoH should be responsible to manage supports to public utilities, MPI could be best in charge of infrastructure, MOLISA should be in charge of vocational training, labour market policies.

There are positive signals that such reforms have been discussed at high levels of the Government and National Assembly. (a) The Government Office has stated in Document 143/TB-VPCP dated 8/4/2014 to all line ministries on the working session of the National Steering Committee on Poverty Reduction to request the review and consolidation of the current policies and programmes for poverty reduction. (b) the 7th Congress of the National Assembly XIII between 20/5 and 24/6/2014 was scheduled with one working session to discuss the findings from the Supervision of Policies and Programs on Poverty Reduction.

This study is conducted by the consultant – Dr Pham Thai Hung at Indochina Research and Consulting (IRC) - commissioned by the Irish Aid and EU Delegation in Vietnam. Many representatives of the Government agencies and development partners have contributed their opinions during the consultation process with the consultant. Findings and recommendations are those of the author and do not necessarily reflect the views of Irish Aid, EU Delegation in Vietnam or of any other parties that were consulted.
CONSERVATION STRATEGIES AND APPROACHES FOR SUSTAINABLE DEVELOPMENT AND POVERTY ALLEVIATION IN THE MOUNTAIN AREAS OF NEPAL

Prabhu Budhathoki, PhD

ABSTRACT

Himalayan region of Nepal is repository of rich biodiversity and home to diverse ethnic communities. These mountain areas are living landscapes where human–nature interactions can be found quite direct and intense. In this region, the nature is largely shaped by people and people’s socio cultural and livelihood systems are shaped by the nature. Although mountain people are considered minorities in numbers, they are the main custodian of biological resources and their management knowledge.

In order to ensure sustainable conservation of these mountain ecosystems and biological resources, Nepal has been establishing impressive networks of protected areas of different IUCN categories. Fifty percent of the protected areas of the country are in the Himalayan region. These protected area networks include the Mt. Everest National Park and the eastern Himalayan ecosystems – one of the global biodiversity hotspots. Varieties of conservation governance models have been adopted to ensure participation of people in conservation. Furthermore, elaborated conservation benefit sharing mechanisms have been introduced as an incentive and help improve local livelihood opportunities. This paper discusses and analyses different conservation approaches currently practiced in the Himalayan protected areas and presents their weakness and strengths in achieving sustainable development and poverty alleviation objectives. The paper suggests that every conservation approaches have some limitations, and combination of protective and participatory tools are necessary for sustainable conservation and local livelihood improvement. Similarly, inclusive governance and equity in benefit sharing are keys to widen conservation constituencies and participation of marginalised and ethnic communities in conservation.

Keywords: Himalayas, protected areas, conservation governance, poverty alleviation.

Introduction

Nepal, a small brick shaped mountainous country lies in the southern slope of the Himalayas and is surrounded by India from three sides and by China (Tibet) from the North. Within the average width of about 193 Km, the altitudinal variation of the country ranges from lowland tropical Terai (approximately 90m a.s.l.) bordering Indian plain in the south to Mt. Everest (8848m a.s.l.), the highest mountain in the world in the north. The country is located in the transition between the Indo-Malayan and Palaearctic bio-geographical realms. This unique geographical position as well as its altitudinal and climatic variations make the country more land-linked rather than land-locked, harbouring rich and unique biological diversities.

Within an area of 147 181 sq km which is just 0.1% of the world mass and less than half the size of Vietnam, the country hosts over 2% of the world’s species of flowering plants, 8% of its birds and 4% of its mammals [1]. It can be argued that Nepal has a wealth of biodiversity out of proportion to its area.

Similarly, the country is also rich in ethnic diversity comprising more than 125 cast/ethnic groups with 123 languages spoken as mother tongue [2]. These people have rich and unique socio – cultural practices and possess a wealth of knowledge on the use and management of biodiversity. For example, a study suggests that in Gaurishankar Conservation Area, various wildlife species have been used by local people as food (11 species), medicine (11 species) and cultural (12 species) purposes [3].

Conservation achievements and challenges

Nepal has been successful in establishing impressive networks of protected areas (PAs) to
conserve nation’s rich biodiversity. To date there are 20 protected areas (fig. 1) of different IUCN categories which cover more than 23% (34186 sq km) of the surface areas of the country. Nepal is one of the top 20 countries in the world and second in South Asia in terms of percentage of national territory under protected area systems. The country has been successful in achieving the protected area coverage target set by the Convention of Biological Diversity (CBD).

Nepal’s conservation efforts have also been successful in protecting and reviving the population of many globally significant species such as Asian one horned rhino (*Rhinoceros unicornis*), royal Bengal tiger (*Panthera tigris* tigers) and the Asiatic elephants (*Elephas maximus*) in the Terai region (plain area) and snow leopard (*Panthera uncia*), musk deer (*Moschus chrysogaster*) and red panda (*Ailurus fulgens*) etc in the Himalayan regions.

The protected areas are also successful in attracting domestic and international tourists. Nearly 50% of the tourists (502,092 in 2011 fiscal year) visiting Nepal visit various protected area for trekking and wildlife viewing and are the major sources of PAs incomes

The impressive conservation outcomes have been achieved by inflicting the significant costs particularly to communities living in and around protected areas. This reveals that protected areas management approaches should be more balanced, holistic and integrated where people – park interface are quite direct and intense due to heavy dependency of people on natural resources for their subsistence livelihoods.

**An overview of conservation policies and practices**

From the mid 1970s Nepal embarked on modern conservation practices. In the beginning conservation practices were largely based on
exclusionary and strict protection policies i.e. ‘fence and fine’ approaches. Earlier legislations were mainly focused on protecting species and their habitat from people [4, 5].

However, conservation paradigm in Nepal has been always dynamic and progressive. Overall, the conservation trend suggests that within the period of four decades of conservation history, there have been major changes in conservation policies and strategies giving emphasis from sheer protection to people's participation and from species to ecosystem focus. The country has been trying to balance protective and participatory approaches to resource conservation simultaneously. Broadly, the country has been adopting the conservation area model (conservation with people) in creating new protected areas, and the Buffer Zone (BZ) approach (conservation through people) in managing existing parks and reserves, recognising the role and importance of 'people' and 'lived in landscapes' for the long-term conservation of biodiversity [6]. To date, 60% of the protected areas in the country embrace settlements and farmlands and all protected areas have some types of collaborative management mechanisms.

Government of Nepal has been adopting mixed governance and management strategies. Governance analysis of PAs suggests that government is still a dominant actor in conservation, taking direct responsibility for over 70% of the protected areas of various IUCN categories where local communities have no or very little formal role in their management. In total, NGOs/CBOs are responsible for the management of 30% of the PAs whereas private sector is completely absent in the biodiversity governance process. However, the spatial area under co-management regime (61.5%) is more than the area under direct government management regime (38.49%). Four decades ago, the involvement of NGOs and community based organisations (CBOs) in conservation was not in existence and largely unthinkable. Furthermore, analysis also reveals that all PAs in the Himalayan region are under some types of participatory governance arrangements in order to ensure participation of indigenous and local communities for biodiversity conservation and management.

**Conservation practices in the Himalayan regions**

Conservation policies and practices of the government in the Himalayan region have been always more reconciliatory and pragmatic. In the Himalaya region, linking conservation with socioeconomic development is not only crucial to sustainable conservation but also a moral imperative as most of PAs in the Himalayan region are situated in the areas inhabited by poor people with low Human Development Index (HDIs). For example the HDI of Dolpa district where Sey-Phokshundo National Park (SPNP) is located is just 0.371 which is 43% less than Kathmandu and more than 21% less than national average. Similarly, in the Himalayas dependency of local people on PAs resources is very high. In some park, 95% of the fuels for cooking are collected from the park forests [7]. Majority of the family incomes are derived from the park resources through livestock raising and herbs/non wood forest products (NWFP) collection. It is difficult to find the absence of human footprints in any parts of the Himalayan protected areas.

From the beginning, ‘Park with people’ approaches have been promoted in Himalayan protected areas in contrary to ‘park without people’ approaches as practiced in the Plain areas of the country. In 1979, the government introduced Himalayan National Park Regulations which recognises the rights of indigenous people to live in their homeland paving the way to create protected areas in the mountain regions without disturbing the livelihood, culture and traditional practices of the local people.

The reconciliatory policies enabled government to establish more protected areas in the Himalayan region without much public resentments. To date, out of the 20 protected areas in the country, nine are situated in the...
Himalayan regions covering approx. 77% of the area (26196 sq km) under PA systems. Out of 9, four are national parks (IUCN category II) and 5 are conservation areas (V/VI IUCN category).

Although the management categories of these protected areas are similar, governance mechanism i.e the level of public participation in decision making process and their decision making power are different to different protected areas (table 1). Broadly, two types of governance models have been adopted. for Nature Conservation (NTNC) involve people in programme planning, implementation and certain level of decision making and resource mobilizations. However degree and nature of governance mechanisms are different to different PAs (table 1).

Himalayan Protected Areas of Nepal (Mt. Everest National Park/Sagarmatha National Park (SNP), Annapurna Conservation Area and Kanchenjunga Conservation Area) are not only globally known for their scenic beauty but they are also recognised for exemplary and successful protected area management models [8, 9]. Annapurna Conservation Area (ACA) and Kanchenjunga Conservation Area (KCA) are the first protected areas in the country which are managed by a national NGO and local communities respectively.
<table>
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<th>Name of PAs</th>
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Management Objectives and definition

- **SNP, LNP & SPNP**: An area set aside for conservation, management, and utilization of wildlife, vegetation, and landscape together with the natural environment.
- **ANCA Buffers Zones of SNP, LNP and SPNP**: Area managed with an integrated plan for the conservation of the natural environment and the sustainable use of natural resources.
- **ACA, MCA & GSCA**: Area managed with an integrated plan for the conservation of the natural environment and the sustainable use of natural resources.
- **KCA**: Area managed with an integrated plan for the conservation of the natural environment and the sustainable use of natural resources.

Governance type

- **SNP, LNP & SPNP**: Government Managed
- **ANCA Buffers Zones of SNP, LNP and SPNP**: Managed by government with the support of local communities
- **ACA, MCA & GSCA**: Managed by government in collaboration with local communities
- **KCA**: Managed by NGOs in collaboration with local communities

Decision making

- **SNP, LNP & SPNP**: Government sole decision making
- **ANCA Buffers Zones of SNP, LNP and SPNP**: Government consultative and cooperative decision making
- **ACA, MCA & GSCA**: Government joint decision making
- **KCA**: Delegated decision making

Level of public participation in management and decision making power

- **SNP, LNP & SPNP**: Low
- **ANCA Buffers Zones of SNP, LNP and SPNP**: Low
- **ACA, MCA & GSCA**: High
- **KCA**: High

(Source: Author, 2014)

Management and governance mechanism of NGO managed conservation areas

In 1986s, government has handed over the management responsibility of ACA to NTNC (formally the King Mahendra Trust for Nature Conservation (KMTNC)) to promote the idea of conservation by the people, for the people and with the people for people through an integrated
conservation and development approach for sustainable conservation and socio-economic development of the area. Besides management authorities, the NGO has given the power to fix and collect fee from the tourists visiting the area and collection of revenue from the sale of forest products. These incomes are recycled in implementing the conservation and development activities of the area. The ACA which generates NRs. 200 million annually (around US$ 2 million), is the only protected area in Nepal which is currently financially self sustaining without any financial support from the government and NTNC. The NTNC facilitates the implementation of conservation and community development activities planned by the local conservation committees popularly known as Conservation Area Management Committees (CAMC) (see box 1). These management committees are formed in each Village Development Committee areas (the lowest political unit of the government) with

The management and governance mechanisms of other two NGO managed CAs are similar to ACA. However, the scale of operations in MCA and GSCA is very limited due to low income in comparison to ACA.

Management and Governance mechanisms of community managed Conservation Area

The government declared KCA in 1996 and started implementing conservation activities through local conservation committees. Working with local conservation committees with the help of international conservation agencies like World Wildlife Fund (WWF) for about a decade, government formally handed over the management responsibilities of the KCA to Kanchenjunga Conservation Area Management Council (KCAMC) in 2006. This is the first protected areas (more than 2000 sq km) managed by the local communities where representative of local communities including women, ethnic, disadvantaged and minority groups are responsible for all aspects of protected area management viz planning, implementing, revenue collection, imposing rules and controlling illegal activities. A small team of government staff attached with the KCAMC help the council in technical aspects and law enforcements.

Box 1: Achievements of ACAP in nutshell.

ACAP has been able to integrate natural resource management education with alternative energy, ecotourism, gender development, and a variety of other community development programmes. Conservation and development activities of CAP are funded almost entirely by entry fees to the Conservation Area. Recognising that local participation is a fundamental aspect of environmental conservation, ACAP integrates local communities in all stages of development: from planning to implementation and monitoring. This approach has established ACA as a model project in Asia.

(Source: [10])

Management and governance mechanisms of government managed conservation area

The Api Nampa Conservation Area (ANCA) which was established in 2010 is the only conservation area directly managed by the government with the support of local conservation committees. Since this park is very new its governance mechanisms are not fully developed. The governance mechanisms currently adopted are generally in between the BZ and NGO managed conservation areas. Park office takes all decisions based on consultative
decision making approach and implements conservation activities with nominal participation of local communities. Last year (2010/11 fiscal year), the government had allocated NRs.15.42 million for the implementation of various conservation and local development activities. It is hoped that after few years, the conservation area will be managed as per the true spirit of the conservation area policy.

Management and governance mechanisms of Buffer Zones

The government of Nepal introduced buffer zone management concept in 1996 with the objectives of improving park people relationship by reducing the dependency of people on park resources and impacts of park animals on local livelihoods. This legislation allows national park authorities to recycle 30-50% of the parks incomes in the community development activities of the park adjoining areas and handover of BZ forests to local communities as community forests for sustainable management and uses forests. The buffer zone areas of each park have been divided into different units based on population and physical size of the BZ area. In each units, Buffer Zone Users Committees (BZUCs) have been formed. Currently there are 3, 12, 21 and 17 BZUCs in SNP, MBNP, LNP and SPNP respectively. These community based institutions are responsible to plan and implement conservation and development activities in their respective territory. A council formed from the presidents of each BZMCs and park warden as member secretary is the main decision making body for the approval of BZUCs plan and budget, and monitoring of progress. In 2010/11 fiscal year, NRs 23.4 million (equivalent to approx. US$ 246 000 in 2014) were released for the implementation of various activities in the BZs of these national parks [11].

Challenges, gaps and achievements of collaborative conservation governance approaches

Every protected area management and governance mechanisms practiced in the Himalayan Protected areas of Nepal have some weaknesses and strengths. Most of the weaknesses are related to policy, institutions, implementation as well as individual motivation and attitude. Nonetheless, the collaborative conservation mechanisms adopted in the Himalayan PAs are also successful in improving park people relationship and community support to conservation, community empowerment, local livelihood improvements, habitat improvement and expansion, wildlife protection and reduction in poaching. Some of the key achievements and challenges based on the review of reports, studies and personal experience [8, 9, 10, 12] are as follows:

Challenges and gaps

i) Weak capacity of community institutions has been hampering to establish true community managed governance systems. Even after more than 2 decades of NGO support, conservation committees of ACA are still not fully prepared to take up the management responsibilities as envisioned in the ACA management regulation.

ii) Insufficient incomes of these protected areas have been hindering the full management ownership of local institutions.

iii) Unwillingness of the government authorities and NGOs to handover management authorities is another stumbling block to develop true community managed protected areas.

iv) Difficulty to balance development and conservation activities has been one of the major challenges to justify the effectiveness of community managed protected areas approaches.

v) Elite capture of the institutions, decision making process and benefits has been minimising the social impacts of the programme and causing weak public participation in the programme.

vi) Increasing human – wildlife conflicts outside core zone due to improvement of wildlife habitat and lengthy compensation mechanism have been discouraging local communities in habitat management and wildlife protection.

vii) Insufficient devolution of authorities to community institutions making them lame ducks. Most of community institutions such as
CAMC, BZMC are not fully empowered and self functioning.

viii) **Multi-stakeholders approach has been missing**, although the conservation problems are multidimensional and multi-layers. The current governance models are largely a collaborative arrangements between DNPWC, conservation NGO and local communities. The role of wide range of other stakeholders who can directly and indirectly benefits and also influence the conservation outcomes has not been incorporated in the existing governance structures.

**Key achievements**

i) Collaborative governance approaches helped increase **awareness and interests** among local communities towards biodiversity conservation and protected area management.

ii) **Improvement in park – people relationship** and cooperation despite many conflicts.

iii) **Improvement in livelihood opportunities** and rural infrastructures to some extent has been observed after the adoption of collaborative management mechanisms.

iv) **Improvement in the production and distribution** of basic forestry products due to community forestry has helped reduce resource use pressure in core areas.

v) **Improvement of vegetation cover and increase in wildlife population** has been observed in most of the parks under collaborative management regimes.

vi) **Financial burden of the government has been alleviated** in some PAs e.g ACA suggesting that protected areas management could be more effective and financially sustainable if the community managed governance systems are properly adopted.

vii) Community based conservation governance systems has been **empowering local communities** specially women folks and helping democracy at the local level.

viii) Community based and collaborative management and governance approach have been helping the government to **fulfil its international commitment**, increase protected area coverage and attract external support.

ix) These mechanisms have been creating higher chances of conservation at the larger landscape which would **increase social and ecological resilience to climate change impacts**.

**Conclusion**

Experience of protected areas management in the Himalayan region of Nepal suggests that soft category protected areas (V and VI) with participatory conservation governance systems would be more socially acceptable, economically cost effective and ecologically sustainable. In the country like Nepal and may be in many other developing countries where conservation agencies are weak, people are economically poor, and their pressures on natural resources are very high; conservation strategy based on community empowerment and integrated programme approaches would be more appropriate to produce better conservation outcomes rather than enforcement approach and isolated approaches.

Furthermore this review paper also indicates that diversity of governance models needs to be designed considering the local social, economic and ecological contexts. Effective management of diverse ecosystems in a wider landscape for social wellbeing and environmental security including resilience to climate change impacts would only be possible by adopting diverse management and conservation governance systems.

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The Central Andean region of South America, comprised today by the modern nations of Ecuador, Peru and Bolivia, is dominated by the highest and most massive tropical mountain ranges worldwide, and has an old history of habitation with major cultural achievements, been the Incas the climax of an autonomous and endogenous civilizatory development which started sometime over 15,000 years before the present.

The Andean highlands are characterized by a series of high tropical mountains ranges (with peaks close to 7,000 mts. a.s.l.), with intermediate either narrow or broad valleys, flanked to the west by the Pacific Ocean coastal desert, and to their east a gradual piedmont that drops into the Amazon rain forest. This mountainous region is dominated by extremely harsh though fertile environments subject to unpredictable weather variations, and with critical conditions which poses severe threats for the development of vegetation, while at the same time stimulates the diversification of flora.

The first inhabitants moving up from a rain forest environment arrived 15,000 to 20,000 years ago as hunters and gatherers, gradually evolving into complex agricultural societies based on the domestication of over a hundred nutritious plants and the domestication of the South American camelids (llama, a pack animal, and alpaca, a high quality wool provider), and, finally, of the nutritive guinea pig as a source of animal protein.

The Andean subsistence strategies evolved in a way which responded on one hand to the difficult and unpredictable weather conditions and on the other by taking advantage of the extreme biodiversity which offered a bountiful of opportunities towards a highly diversified subsistence system.

Over centuries, these tribal societies evolved into chiefdoms, states, and ultimate expansive multiethnic empires which based their dominance by means of controlling a myriad of differentiated environmental niches along the vertical landscape (from the valleys formed by rivers running from the Andes to the arid Pacific coast, cross cutting the western coastal desert, through the altitudinal variations across the high ranges and Andean valleys, to the eastern piedmont of the Eastern Andes, the upper Amazon basin dominated by the rain forest).

An extended network of long distance trade and barter sustained an elaborate system of exchanges and reciprocities aimed at accessing products of as many ecological niches as possible. Thus, the aspiration to a diversity of vegetal resources as well as assurance of edible products throughout the year resulted in an always expanding food resources base. Simultaneously, the evolution of technologies for preservation of food products (from salting marine resources along the Pacific coast and the eastern Amazon basin, to freeze-drying roots and tubers (potato, oca-Oxalis tuberosa, olluco-Ollucus tuberosus, etc.) at high altitudes along with drying highly nutritional native mountain adapted cereals (quinoa -Chenopodium quinoa-, kiwicha – Amaranthus cuadatus-, cañihua-Chenopodium palidicaule), and a diversity of vegetables. By turning all of these into storable transformed agricultural goods, as well as alpaca wool, critical for the cold weather, communities were able to overcome expectable years of either floods or droughts, crop loss due to frost, snow or hale, etc.(1,2).

With the evolution of the indigenous States, usually of a theocratic and authoritarian nature, preserved food and cloth storage became a state policy, in a context of weather risks and unpredictability. Through the establishment of a type of centralized welfare state, through
extended reciprocity links and ruling family’s alliances, the allegiance of most ethnic group provided the conditions to expand the diversification of food products, cloth, utilities, and luxury items. Among the latter, gold, silver, and precious stones exclusively used for religious ritual and ornaments, but never as a mean to trade for non-sacral commodities. (3).

The whole subsistence strategies were designed in order to reduce crop failure and risk by accumulation of storable surpluses. One of the roles of the Inca Empire was, in a context of high chances of crop failure due to weather conditions at high altitudes in the tropics, to assure food and cloth to an ethnically diversified constituency conquered by gifts, marriage alliances, or straight domination, especially stored for lean or weather catastrophic years.

Along the arid pacific coastline, major irrigation water works had been implemented since way before Inca dominance. Their high levels of productivity brought the interest of the highland Inca, expanding their Empire throughout the coast and as far north as southern Colombia, and as far south as northern Chile and Argentina.

This sort of quite effective welfare state was severely transformed with European (Spanish) conquest starting in 1542, an un-restful enterprise with the sword on one hand and the Christian cross on the other, targeting one of the mayor resources available in this part of the world: gold. With the European conquest the basically ritual functions of gold in an empire were the Sun was the main deity came to an end. However, despite their craving for gold, one of the findings that surprised the most these warring conquistadores who came from a poor country at that time (Spain), was the abundance of food, its diversity and their massive state storage deposits full of edible goods and cloth. These large storage granaries (tambos) which were stationed very 50 kilometers or so along the main Inca highways fed the conquering armies for over two decades.

With the Spanish invasion, within a few decades an agro-centric indigenous society was literally turned into a society dominated by the establishment of a system of forced workers. This was accomplished through a mandatory serfdom Spanish crown sponsored policy directed to the extraction of gold and silver from the mountain ores. Within three generations the native population was decimated to somewhere around a 10% of the original inhabitants. Black slaves were brought as laborers. However over the next three centuries natives gradually recuperated their demographic conditions, being still today the majority of the population in the highlands of the three contemporary countries.

The Spaniards did not use that unexpected wealth to improve their poor living conditions in their own country. Most of the gold ended up in the UK and the Netherlands triggering the industrial revolution. Another share of the gold ended up in the hands of the Chinese ruling Ming dynasty, exported from the Viceroyalty of Peru through the Philippines, then under Spanish rule. Spaniards traded gold for silk and top Chinese porcelain for the Spanish crown (4).

The new colonial dominated society thought of the native crops of the Andes as “food of the lower classes”, and thus for their own consumption they promoted the introduction into Peru – or the cultivation of crops- of foreign origin (wheat, barley, rice, olives, grapes for wine, along with pigs, horses, cows and bulls), few of which became adaptable to their new environments. In most cases this brought a subsequent drop in the formerly highly productive indigenous farming traditions. Furthermore some of these crops and animals, as well as some of the new agricultural tools (such as the oxen driven plow) negatively affected the fragile high altitude soils of the Andes. The neglected native crops (such as potato) were initially introduced by the Spaniards to their home nation to feed prisoners; this due to their high productivity and adaptability (potato became popular much later through the Germans, Irish and British, who later introduced this novel crop in India and southern and central Asia).
Not even the vast indigenous knowledge on medicinal plants was a matter of concern, despite the wealth brought later to the Spanish crown by the discovery of the properties of some of our wild medicinal plants which save lives of literally millions in Europe, such as the case of the Peruvian quinine tree (*Cinchona sp.*), whose properties were made know to the Spaniards by a native herbal healer, towards the end of colonial rule becoming the main income of the Spanish crown monopoly throughout the XVIII century (5).

During the colonial period mountain people became serfs of the conquerors, forced to converse to Christianity and to work for them and the Spanish crown. Very few legislation to protect extreme abuse were given, but in general there was no policy to uplift those conquered, gradually becoming the poorest sector of a new colonial society.

With independence (1821), promoted by the new urban elites, indigenous people did not benefitted much, though some laws to protect them from forced labor were given. However the trends did not changed much, in a country ruled by the descendants of the Spaniards who ignored the importance of the natural cornucopia of Peru (except for its priced mineral wealth), with its over 6,000 varieties of potato, many other nutritious tubers and roots, and an extremely rich diversity of seed crops and fruits which had been domesticated in globally record numbers.

After independence and the end of Spanish monopoly many foreign scientific expeditions from European countries arrived to the Andes and Amazonia with the purpose of studying our rich flora and collecting the seeds of some plants that had become valued commodities in the world markets. Seeds were taken to be grown in their African and South-East Asian colonies, such as the quina tree, coca (*Erythroxylon coca*) and the rubber tree (*Hevea sp.*). Serfdom and slavery were abolished but that did not change the oppressive poverty of native Peruvians in the rural areas. Natives kept subject to the trends of an economy dominated by the demand for minerals from the Euro-American world.

After the turn of the XIX century, along with the initiation of technical mining operations in the highlands (with severe environmental impacts on cultivated and grazing lands), the coast became the scenario of the establishment of sugar cane and cotton plantations. Gradually many of the native crops became restricted to the self-consumption of these by the remote and poor indigenous communities.

It was only after the 1920’s that the modern Peruvian State started giving legislation to protect the land of the original indigenous owners, which had been mostly faced encroachment of large landholdings. Simultaneously, the State started expanding public education, tinted with a perspective of integration and acculturation of native rural communities into the mainstream of the urban society. Basic health service started been promoted throughout the country with total disregard for an existing vast wealth of a rich traditional herbal medicine. Traditional healing practices are still much alive in remote rural areas of the high Andes and the Amazon rain forest, though gradually been forgotten by younger generations impacted by industrial medicinal products promoted through mass media.

In terms of the traditional farming systems the demands for urban environments for some crops (as standard “white” potato, corn, barley for the beer industry, cattle meat and dairy products, etc.) further pressured a process of genetic erosion (6).

There were government attempts at improving the cattle of European origin (cows, sheep) with total disregard for the better adapted native llama and alpaca. Results were negligible. Same happened with projects to promote crops and technologies which overtime it became clear that the Andes were not their adequate habitat and that their productivity turn them not very competitive.

Increased impoverishment of the highland population led to a gradual but geometrical process of migration of indigenous Peruvians to the cities since the 1950’s. New projects to
promote “development” along the same lines as done before did not change the trend. However, the urban presence of migrants from the highlands, and their increased participation in the political life of the nation, started transforming the views regarding viable option to alleviate poverty in their highland homelands.

In the 1960’s and 70’s a gradual process of reevaluation of the indigenous traditions of the native highlanders started, including their traditional crops and their know-how in the management of the natural environment. This is reflected in the exponential growth of research and literature in a formerly forgotten topic (7,8, 9,10,11,12, 13).

For the first time native crops started been researched for the nutritional value, and promoted not just for local consumption, but for the growing urban markets. Further research on the traditional farming technologies and the vast knowledge of the highlanders on the mountain soils and weather conditions started modifying the approach to “sustainable development” on the part of government, international cooperation and NGO’s.

An expanding demand, nationally and internationally, of alpaca wool, put this native South American camelid back into the views of what should be done. The income generated by alpaca wool push the government to set up special programs for the promotion of this native species. However, a history of 500 years of introduction of European cattle still makes it difficult to change the trends at the level of the small farmer, especially under a growing demand of dairy, meat and hides from the urban agro-industrial sector.

The real turning point in the trend towards the revalorization of the many rich crops of the Andes was the so called “Peruvian gourmet cuisine” revolution, that has in less than 20 years has promoted Peruvian cuisine in the world restaurants markets. This phenomenon is currently creating an increase demand for the formerly neglected native crops of the Andes, opening enormous opportunities for the small mountain peasant.

However, as part of the expansion of money in a traditional society, the impact of advancing roads and mass communications has reached the most remote communities in the highland, creating a mesmerizing effect on young rural inhabitants. Younger generations have started seeing a promissory future only if they move to the urban centers (14).

To this psychological impacts, the poor public educational and health services in the highland rural areas further stimulates migration to the cities. A good part of the migrants, due to their lack of qualifications, end up in poorly paid jobs, triggering frustration and delinquency.

Mountain inhabitants now confront at times where income opportunities open up for their crops, lack of incentives to remain in their homelands accessing the attractions of the urban world as presented by mass media. Furthermore, the mining boom of the last decade and the highly competitive salaries offered to untrained highlanders to do non-qualified jobs at camps and mines, further des-incentives farming in the harsh conditions of the Andes.

On the other hand, a process of revivalism of the lost ancestral traditions is becoming a fashionable trend in the cities, however, uprooted from their rural agricultural origins.

A promoted policy of “social inclusion” sponsored by the government, though focused on access to economic opportunities to better socio-economic conditions of the poor, to some extent resembles a stimulus for acculturation. Being rural is thus seen as a symbol of poverty and backwardness. Lack of competitive income for those working the land in harsh conditions drains the highland inhabitants from what for millennia was the environment that shaped their culture. Peruvian inheritors of an ancestral mountain culture, as well as its neighbors of Bolivia and Ecuador faces the drama of losing its cultural identity in exchange for the material benefits of a modern world that can bring them out of deprivations, at an irreversible cost.
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ABSTRACT

The Bank-funded Rural Alliances Project (Proyecto Allianzas Rurales- PAR) is implemented by the Ministry of Rural Development and Land. The project has surpassed expectations by financing about 770 alliances, covering a large range of agricultural and non-agricultural products and services in 110 poor rural municipalities. PAR I was approved in 2005 as a pilot project to test new means of helping poor rural producers to improve their access to markets.

Keywords: rural alliances, income generation, producers’ organizations, sustainable development, mountainous area.

1. Project context

The Bolivian Plurinacional state is a country situated in Centre West of South America. Its population is about 10.1 million. In the north and in east it borders with Brazil, in the south with Paraguay and Argentina and to the west with Chile and Peru. In terms of size it is the sixth largest country of South America (1.098.581 km²). Because of its geographical location, its mountains (6542 m AMSL), valleys and plains (70 m AMSL) it has a great variety of climates from hot to cold, from very humid to dry. As result in Bolivia one can find a great variety of ecosystems, like highland ecosystems or tropical savannas. Consequently biodiversity is very high (one of the highest in the world).

Bolivia has the largest indigenous population in South America consisting of 36 recognized ethnical groups. Still 60% of the Bolivian population speaks an indigenous language, as a first language (12%) or second language after Spanish (48%). Although Bolivia is normally identified as an Andean Highland country with its Quechua and Aimara indigenous majority. However its mayor land mass is in the lowlands with dry (Chaco) and tropical humid (Amazon) Savannas and here the greatest ethnical and language variety can be found.

Bolivia has gone through a period of important changes since the election of its first indigenous president, Evo Morales, in 2005. Poverty and inequality has reduced importantly during recent years, although in the rural areas, where still 34% of the population lives, poverty is still relatively high. Poverty and extreme poverty in the rural areas are still 66.4% and 45.5% respectively, compared to 43.6% and 16.1% en the urban areas. Equally this problem exists in terms of equality with a Gini Coefficient of 0.53 for the rural area and 0.45 for the urban area.
Agricultural activity represents 9.8% of GDP while 76% of the rural population is involved in agriculture. The difficult topography, the unequal land distribution, the high levels of soil erosion, the high climatic variability and the low technological levels, generate important challenges for agricultural production. As a result productivity levels are very low. Additionally the rural population is very disperse, generating additional problem in terms of the provision of infrastructure like roads, irrigation systems but also in the provision of technology or credit.

These high transaction costs impair private sector investment and reduce access to credit and technology.

The provision of credit has improved more recently, caused in part by the high liquidity of the financial sector but also due to the approval of a new banking law which focuses on financial inclusion of especially the productive sector.

Although access to credit has improved for small rural producers, access to working and investment capital is still perceived as a limiting factor.

The actual government, in order to reduce rural poverty, has recognized that investing in this sector is crucial and as a consequence is implementing a number of initiatives to support specifically rural producers.

2. The Rural Alliances Program

The Rural Alliances program is an operator to implement public policy. It is a response to the productive sector strategy part of the National Development Plan. The objective of this plan is to transform the country, during one generation, in a country that is worthy, sovern, productive, democratic and inclusive to provide high quality living standards for the Bolivians.

The Rural Alliance Program aims to connect small rural producers to the market based on moving part of their production system from a system focused on auto consumption and selling excess to the market to producing specifically for the market.

The selection of intervention areas was based on i) Inclusion Factor; Groups of municipality selected on the basis of above average population growth, percentage of population in rural areas ii) Exclusion Factors; low population density, high levels of extreme poverty.

In the selected areas, the population is highly divers, in terms of ethnical origin and economic and organizational structures. 70.4% of the target population is indigenous and therefore the structure of the program had to respond to this context.

The objective of the program is to **improve the access to the market for small rural producers in selected areas**. This on the basis of a) Promotion of strategic alliances between organizations of small producers and the buyers of their production; (b) Empowerment of the rural producers thorough the creation and or improved functioning of their organizations; (c) Increased access to productive goods, technology and financial services; (d) Promotion of improved services and infrastructure at local level; y (e) Improving environmental sustainability of agricultural practices.
Operative principles of the program

The economic agreements between the small producer’s organizations and the buyers of their produce needed to be based on the following principles:

Support to market opportunities and not daily perceived needs. Alliances are developed on the basis of a process of problem analysis with the producers, focusing on market opportunities.

Alliances need to be sustainable from a social, environmental, economic and financial perspective.

Co financing, the producers need to co finance the initiative with at least 30% in cash.

Social Control, transparency generated of the basis of checks between farmers and public presentations by their leaders.

The process of generating and executing an alliance

The first step in generating alliances is a public call for business ideas from the farmers and there associations. These business ideas where than ranked on the basis of their viability in terms of market potential. Preselected business ideas where than further developed together with the farmers and a potential buyer of the product, into a full business plan. As a last filter before approval, all business plans are evaluated by an external party. If approved, funds are transferred to the farmer association and they execute the business plan. The latter accompanied by technicians in terms of administrative and technical support.

3. Results of the program

The most important result of the program is 30.000 families of small producers, organized in 769 organizations the program managed to increase annual income by 300% (from USD 686.- a USD 2.095.-).

The alliances which were finished show an average increase in production of 116% and an average sales volume increase of 114%, an average increase of 51% in terms of productivity and a 40% increase in the product price.

The intervention has shown that the rural producers increase their production capacity en terms of quantity and quality, responding to market demand, in this way assuring the continuity and sustainability of their production system. This all, using the producer as the executing agent of the intervention.

The Rural Alliances Program also improved social and economic inclusion, besides the positive effects on household income, empowerment of the farmer organizations in terms of market access and community development. More than 90% of the farmer organizations supported, achieved a real positive net return on their investments. While a failure rate of 20% was expected. A large part of this result can be explained because the project responded to a need identified by the producers themselves, based on a efficient implementation using competitive allocation mechanisms.

An independent systematization by the financial institution SEMBRAR, suggests that the projects financed by the program in the six regions have generated an impact in GDP of Bs.
543,599,940, which implies a contribution to the GDP of 2%.

During the implementation of the program 42 viability studies where prepared for subprojects to implement supplementary public infrastructure, through external evaluation 32 were approved and finally 19 were executed.

As from its design, the program has been an example in terms of social inclusion and social control. As confirmed by a study of CARE (2008).

For the Bolivian Government, this program is successful and has the potential for replication on a national scale. Recently is has also been adapted to the context of other countries like Argentina and the Dominican Republic. Mainly because of its capacity to provide solutions for small producers and its ability to produce results within a short time frame.

4. Two success stories from the valleys and the highlands

Asociación de productores agropecuarios y ecológicos "Bella Vista". After building greenhouses and introducing technological innovations, the Bella Vista smallholder producer organization managed to double its total production value. As a result, their annual family income increased from US$ 200 to US$ 3,000 after only two years. The alliance is currently diversifying its production and penetrating new market niches.

Quinoa alliances in the Altiplano. Approximately 95 percent of the organic quinoa produced in Bolivia is redirected to western countries; the demand for the product has consistently increased over the past decade. To this end, the PAR has thus far co-funded 100 alliances for quinoa organizations, benefitting nearly 4,000 people. Comprised by 54 families, one of these alliances (the “Asociación de Productores de Quinua Quillacas Marca”) has achieved remarkable success with PAR’s support. After introducing new techniques and better-quality inputs such as certified seeds, the organization has managed to increase its production volume by over 30 percent.

5. Sustainability of the alliance model

The sustainability of the interventions is based on four interrelated factors:

a) At the level of the Family Production Unit; determined by the rentability of the investments, the introduction of technology should result in increased family net income with the possibility of future growth.

b) At the level of the farmer organization; investment should focus on services which have an economic impact on its members and should be economically sustainable in the future.

c) At the level of the alliance with relation to the buyer. A relation should be generated which is based not only on commercial exchange but also based on the exchange of technical knowledge.

d) At the level of the institutional context; meaning the support in terms of a norms and institutional framework supporting the implementation of the alliances.

6. Lessons learned

The methodology of generating a high level of inclusion of small farmers, women and ethnical minorities, but with productive potential, and which are organized and committed has allowed to improve income and market access for these groups.

Focusing on sustainability and reducing environmental impact resulted on a number of alliances aiming on the ecological and organic markets. Analyzing this subset of alliances, these were the alliances which generated the highest impact in terms of family income.

As a result of the high level of responsibility that the producers assume, the empowerment process is faster and more profound and interestingly also reduces the institutional implementation cost. Importantly generated high levels of ownership and social accountability and strengthened the social control process.
The sustainability of the alliance (relation producer buyer) was heavily dependent on market conditions and the level of confidence that could be generated between parties. A flexible approach should be taken accepting that relations can change during the implementation of the alliance and thereafter.

A side effect of the program was that local technical capacity was improved especially in terms of generating market orientated interventions.

When selecting interventions, it is important to recognize the importance of leaders and innovators in the organizations of producers which are not always the poorest.

7. Future Challenges
In Bolivia their exist about 700,000 rural productive units, the program has reached up to now 30,000 of these, the challenge is to reach a 100% of these units.

The program has generated improvements in terms of technology, productive infrastructure and organizational capacities. It is now important that the financial sector capitalizes on this potential to assure sustained growth of the initiatives developed.

The program is currently financed by the World Bank, to generate sustainability of the proposal, it is important that the national, regional and local governments start financing the program directly.
DEVELOPING THE MODEL OF PERMANENT LIVELIHOOD IMPROVEMENT FOR COMMUNITIES BASING ON POTENTIAL INDIGENOUS KNOWLEDGE OF ETHNIC MINORITIES

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I. The current status of ethnic minority livelihoods and the impacts of indigenous knowledge on livelihood development

1. Sustainable livelihoods for Ethnic Minorities

A sustainable livelihood means ability to face economic depression and recover after that; it can maintain or enhance competence and property, provide opportunities of a sustainable livelihood for future generations and contribute durable benefits to other occupations from divisional level to national level in short and long terms. The connotation of ethnic minority livelihood includes two basic elements: human resource and capital sources for livelihood guarantee and concrete livelihood plans.

Two specific mountainous provinces in two particular regions of Vietnam are Lai Chau in Northwest and Dak Lak in Southwest of Truong Son range. Among 20 ethnic minorities in Lai Chau, Thai group accounts for over 30%, Mong group 30% and Dao group about 7%. In Dak Lak, there are about 41 ethnic groups of which 13.98% is Ede group, Mong 10%, M’Nong 4.4% and Gia Rai 0.8%, etc. According to a study on 4 big ethnic groups including Ede and Gia Rai in Dak Lak and Mong and Dao in Lai Chau from 2010 to 2013, it can be concluded about some livelihood sources and activities as follow:

(1) Livelihood sources

According to the result analysis, it is shown that the capital and property sources for the permanent livelihood including 5 basic types (materials, finance, society, human and nature) have been gradually improved in quality as well as quantity. Among the five types, finance sources are progressively enhanced: income and occupation opportunities are increasing, the number of poor households is reducing, loan incentive is more possible to approach, government subsidies are rising and for more beneficiaries, etc. Besides, human resources are dramatically improved in physical force, mental power and spirit energy. However, there are still remaining problems as follow:

Material sources, which include infrastructure and products needed to support ethnic livelihood, do not meet the requirement in many places. Infrastructure maintains some weaknesses such as poor transportation facilities: almost 30% communes do not have roads for big vehicles, 2% villages do not have roads for motorbikes. Other material drawbacks are that health care and education are unqualified (30% communes lack standard medical stations and schools); there is a huge shortage of electricity, water, irrigation, accommodation and living applications especially in Mong and Dao groups.

Finance sources, which are used to carry out the livelihood, are still insufficient. Most of the sources are from savings, wages, sales of agriculture and handicraft products and government pension. Those result from inefficient production and shortcoming in approaching and using loan incentive.

Society sources, which are cooperation relationship, cooperation network, group members and trust, are constrained: manufacture cooperation among ethnic groups in one area is weak, self-depreciative and prejudiced sometimes; the roles of traditional organizations as well as the commune rules are decreasing significantly; commune groups and organizations are working ineffectively.
Human resources, which come to good skills, knowledge, working capacity and health in order to pursue and achieve the livelihood goals, are scarce: physical indicators in height, weight and longevity, which are lower than the national average, show the weak health of ethnic people (Mong’s lifespan is 66.5 years old, others 69.2 years old). In addition to the weak physical health, there is restriction in their mental power: illiteracy rate is high (the percentage of illiteracy population from 7 years old of Gia Lai ethnic is 35.7%, E De 27.5%, Mong 39.2%, Dao 46.1%); the rate of uneducated household lords is also high: Mong 36.9%, Dao 43.3%, Gia Lai 40.8%, E De 32.1%; 95% labor force of the four ethnic groups do not get professional training and technical specialties, the rest of 5% get primary level in technology; the integration capabilities and knowledge of the outside society are very limited, living skills are incomplete and unsuitable with the overall development of the society.

Natural resources, which are sources like lands, water sources and forests in order to establish the livelihood, are more and more scarce now: production lands are decreasing; forests are exhausted, damaged and degraded severely; aquatic resources are many but only in the potential forms, water is contaminated due to indiscriminate exploitation.

(2) Livelihood activities

Activities like agriculture production, traditional business, hunting and gathering are the main and popular means of subsistence. Among these activities, agriculture production and natural exploitation is the major livelihood activities of ethnic communities. The livelihood activities of the ethnic minorities in two provinces of Northwest and Central Highlands are still heavily based on simple production and traditional agricultural of which the main farming techniques are mainly based on the natural exploitation using experiences and indigenous knowledge, but not approaching and using the scientific advances and modern technology much. The goal of production is to meet the need of self-demand and self-supply.

2. Developing stable livelihood basing on indigenous knowledge of ethnic communities

2.1 The main livelihood of E De ethnic in Dak Lak

Agriculture production: cultivation is the main work of E De group; rice is the major crop in comparison with corn, sweet potato, gourd, tobacco, squash, onion, chilli, cotton, etc. Cattle-breeding has become an important production with valuable cattle such as pigs, buffalos, cows, elephants and poultry. Traditional business of E De groups includes rattan and bamboo plaiting (household applications), traditional weaving (brocade), folk medicine, forging (mending tools and forging household applications), wine distilling (Can wine) and carpentry (houses and tombs, klao and kboa pillars, decorative patterns).

2.2. The main livelihood of Gia Rai ethnic in Dak Lak

Gia Lai groups live mainly on cultivation and ordinary rice is the main crop. Raising cattle (buffalos, cows, dogs, pigs and chicken) has been developing and brings significant income for each household. Besides, traditional business includes rattan and bamboo plaiting (papooses, baskets), weaving (waist clothes, skirts, blankets, clothes and others). Other economic activities are hunting, gathering, fishing which have been playing important roles in their life by now.

2.3. The main livelihood of Mong ethnic in Lai Chau

Cultivating wet rice and some other crops is the major work of Mong group in Lai Chau province. They also raise cattle such as buffalos, cows, pigs, chicken and horses. Mong’s traditional handicrafts are: plaiting (household applications such as mats, wattles, papooses, basket, buckets), carpentry (indigo dying, wooden buckets, basins, spoons, etc.), embroidery and weaving (clothes, bags, blankets, pillows, etc. made of cotton and linen), forging (axes, knife, gun barrels, pickaxes, etc)
2.4. The main livelihood of Dao ethnic in Lai Chau

Cultivation on wet fields is the main job of Dao groups in Lai Chau. They also raise cattle such as buffalos, horses, pigs, chicken, dogs and cats. Few raise cows, ducks and geese. Traditional business includes weaving (costumes, traditional applications), carpentry (working tools, housing materials, and household applications such as: tables and chairs, cupboards, saddles, etc.)

2.5. Indigenous knowledge’s positive impacts on livelihood development

Indigenous knowledge, experiences which have being challenged for many years, has to meet with the environment and culture of each region, each community and each ethnic group. Although the knowledge has been being obtained from life’s experiences for long time, it is changing to keep up with new conditions and new society systems. Generally, indigenous knowledge is classified into two groups: technological knowledge and knowledge about customary regulation and religious beliefs. The knowledge is the foundation in order to maintain the traditional societies of ethnic communities for hundreds of years from historic time to present. Despite the emergence of modern scientific knowledge, local indigenous knowledge still parallely survives and contributes significantly to the resolution of local issues. Current indigenous knowledge is directly related to existing livelihoods of four ethnic minorities Ede, Gia Rai (Dak Lak province), and Mong, Dao (Lai Chau province) as follows:

*Indigenous knowledge in the use, protection and management of natural resources*

It is already known that the lives of ethnic minorities are closely connected with nature, especially the three resources: forests, land and water resources. Thus, the exploitation, utilization, protection and management of these resources (forest product usage, watershed forest protection, wildlife protection, water and land conservation...) are always seriously concentrated on by the four ethnic minorities Ede, Gia Rai, Mong and Dao. The first generation of knowledge mentioned is the values specified in the conventional and customary laws of each ethnic community. This is a product that contains the value of important traditional knowledge which all the four ethnic minorities Ede, Gia Rai, Mong and Dao possess to regulate behaviors of all members of the community when using natural resources. In addition to customary laws, to protect natural resources in particular cases each ethnic group has built legends and myths for deification, with the goal to avoid violation and sabotage (ghost forests, sacred forests of Mong, Dao, and water god, king of water of the E De, Gia Rai ...).

*Indigenous knowledge in agriculture*

These four ethnic minorities live mainly on agriculture, so the system of traditional knowledge on this field is quite diversified. The knowledge on arable land (land selection and specific land grubbing): People in Mong ethnic group in Lai Chau own specific local knowledge about the process clearing terraces (selecting sloping areas with the slopes lower than 400, with sources of natural water or spring water extrusion, or relatively flat areas with thick humus); Dao ethnic minorities are knowledgeable in selecting land for shifting in jungles, bamboo forests, humid places ...; Ede and Gia Rai people have the skills to select arable land with excellent soil quality, water station nearby, staying away from the destruction of wild animals and ensuring closed plot shifting cultivation...

The knowledge system about agricultural calendar is also considered products formed in traditional agricultural practices closely linked to each ethnic group. The calculation of agricultural calendar is based on understandings of the characteristics of growth and development of crops and livestock, of the evolution of natural conditions, climate and farming peculiar characteristics.

*Indigenous knowledge of traditional crafts*

Each ethnic group has traditional crafts showing its distinctly unique identity; it contains
special knowledge values, expressing creativity and proficiency in each of their products. The four ethnic groups Ede, Gia Rai, Hmong and Dao have a number of similar crafts such as weaving, knitting, carpentry … but the form, value and creation of their products are very different. With regard to carpentry, Ede people have special techniques to make nicely crafted house floors and staircases. Manipulated objects in the grave are the most complicated carved forms, while Mong people with only an ax and a knife, no chisels and saws, but still can build houses, produce furniture, and couple water tanks, mainly using good nail-jointed techniques…

In addition, each ethnic group has its own traditional crafts such as: Mongolia with very strong casted plowshares which can cut roots, reeds, plow dry soil 10 to 15 cm deep on steep rocky areas. They also have honed knives, just sharper and stronger than any other ethnic types of knives and industrial knives. Moreover, they can forge and drill barrels using water drilling methods. The Dao can embroider unique contours with delicate patterns on fabric or clothing bearing the available cultural nuances. Ede, Gia Rai people hunt and tame wild elephants and make renowned Can wine. These things have become the goods and services bringing high economic values …

Indigenous knowledge of folk medicine and health care

With particular natural and socioeconomic characteristics, in order to survive and sustain their own development, all ethnic groups have formed the knowledge of traditional medicine and health care. It’s the knowledge that helped the ethnic communities themselves address the threats from diseases and preserve their race.

Indigenous knowledge about operating and managing community and society

All the four ethnic minorities have traditional knowledge on operating and managing communities. The most valuable knowledge affecting the existence of each ethnic group is the institution of villages and hamlets and general rules of relationships, relationship adjustment in the community in the form of customary laws and conventions. Regarding the institution of villages or hamlets, these fairly stable colonies gather a few dozen houses, even hundreds of houses. In each village, there exist a forest range and scope of private residence, the boundary of which is a natural indicator such as a stream, a tree or a cliff. Within the scope of forest land and residence, all of the village members have the freedom to mine, hunt, gather, select land for cultivation purposes but outside the range, violation is a taboo.

2.6. Indigenous knowledge’s negative impacts on livelihood development

Besides positive effects, indigenous knowledge of Ede, Gia Rai, Mong and Dao people also creates many barriers and obstacles for their livelihood.

Backward customs

Child marriage and consanguineous marriage have not been controlled.

Home birth and unplanned birth, like child marriage and consanguineous marriage, are still popular, as stated by the local medical staff, leaders of villages and residents. The number of ethnic women, especially those from remote areas, who give birth at home without medical support, accounts for 80%. 40% of the cases are helped by lay midwives or relatives.

Backward and unhygienic habits of housing and eating

The number of households using hygienic water by the Mong and Dao people takes up very little. This figure for Ede and Gia Rai minorities is higher; however there remains 40% of the locals who have to live on unhygienic water.

Customs of funeral, marriage and traditional festivals: each ethnic minority has their own customs and rules of funeral, marriage and traditional festivals, and the Mong, Dao, Ede and Gia Rai are no exception. Besides positive values, those customs have had adverse effects on the locals’ livelihood. For example,
they have to spend as much as 20 -30 millions VND for a single event though they are so poor.

**Outdated farming habits**

**Family plan of production:** it is easy to find that the ethnic people are not used to planning their production, yet mainly follow the people around.

**Person in charge of producing activities:** in most ethnic families, men are breadwinners and make important decisions. The Mong and Dao are of this trend, as indicated by the fact male members in 50% of families decide producing activities. Very few of the Mong and Dao families (2.78% and 6.67% respectively) are run by females. In contrast, Ede and Gia Rai families are patriarchal, that means there must be discussion and agreement between husbands and wives before reaching final decisions.

**Backward producing activities:** the most highlighted in ethnic production involves habits of raising cattle, including buffalos, cows and pigs. The extension and development of cattle-breeding do not match changes in breeding habits and awareness of environment protection, leading to increase in the number of cattle, however, set free. Setting cattle free or keeping them under floors is considered inappropriate as they can pollute environment quickly. These habits are causes of increasing diseases, badly affecting cattle’s development and people’s health.

**Exploitation of natural resources:** Life of the four ethnic minorities Mong, Dao, Ede, Gia Rai is much dependent on exploiting natural resources, particularly forests. In the past, when coverage and benefits of forests were sufficient, exploiting activities appeared to be harmless. However, now forests have become exhausted because of over exploitation, and natural products have been rare. Consequently, activities of hunting, gathering, firing for cultivation and illegal logging will exhaust natural resources and influence negatively environment as well as human beings.

Culture exchange and manner of production

According to a survey, 40-45% of the householders reported that they have never traveled beyond their commune; whereas the remaining, making up 55% of the householders, just traveled within their district or province.

II. **Solutions for livelihood development basing on abundant indigenous knowledge of ethnic minorities**

1. **Principles for giving solutions**

   Originating From the current issues of livelihood, positive/ negative impacts of cultural factors and indigenous knowledge on means of livelihood of 4 ethnic minorities Ede, Gia Rai (Dak Lak province), and Mong, Dao (Lai Chau province); and from typical features of regional nature, society and economy, the approach and construction of solutions aiming at livelihood improvement for the 4 groups should base on some following points:

   Level of development of the 4 minorities is low. Resources and livelihood activities are closely associated with traditional culture as well as indigenous knowledge of the whole community and each of the groups.

   Livelihoods of ethnic people are not efficient and sustainable, caused by a combination of many factors such as capital and quality of livelihood activities, internal factors from ethnic people and external ones like economics, culture and society.

   Different from other matters, solutions for livelihood improvement for ethnic people in general and for the Ede, Gia Rai, Mong and Dao in particular should be patiently carried out step by step to avoid “shocks”.

   Proposals of solutions for livelihood improvement for the 4 ethnic groups should be placed in the common institutional context, united about policies and lines of the Party, as well as laws and related principles of the government. There should be harmony and relevance with other minorities of the region and of the whole country.

   Solutions should aim at adjustment of inappropriate cultural factors and indigenous
knowledge which are barriers having unfavorable effects; and promotion of progressive and valuable ones.

2. Solutions for livelihood development suitable with traditional culture and indigenous knowledge

2.1. Solution 1: Propagating and mobilizing to raise people’s awareness

This is one of the most important solutions to improve and enhance quality of livelihoods which are appropriate with traditional culture and indigenous. Propagating to raise awareness is applied for not only the ethnic people but also relevant staff, especially local ones.

2.2. Solution 2: Establishing policies for livelihood improvement suitable with traditional culture and indigenous knowledge

For short term, selecting necessary solutions for livelihood improvement involves effective implementation of policies related to fund and livelihood activities for the four groups:

- Policies of enhancing capacity of physical and natural sources
- Policies of enhancing capacity of financial sources
- Policies of human and social sources

Along with efficient practice of the above policies, the current status of capital and livelihood activities of the four minorities require supplementation and completion in policy system, in which some items should be promulgated or changed, including:

- Policies of investment in infrastructure
- Policies of natural resources

Government needs to study and issue several new policies to improve human and social sources for ethnic minorities in general and the four groups in particular.

Moreover, support of the government plays a significant role in livelihood improvement. Nevertheless, it is a fact that sources and means of livelihoods of ethnic minorities in general and the four groups in particular are not efficient and stable. The system of policies lack synchronization and union in both administration and implementation; and inequality among groups and regions. Some policies can result in certain economic benefits, yet have adverse cultural impacts, reduce autonomy and boost dependence. Some are just temporary solutions which not only cannot address profound causes but also barrier development and sustainability. Therefore, it is of necessity to transform mechanism of constructing and implementing policies. Institutionalizing progress of constructing and implementing policies should be the first thing to consider.

2.3. Solution 3: Transferring advances of science and technology suitable with traditional culture and indigenous knowledge

Livelihood improvement cannot rely on only given indigenous experiences and knowledge of people and community. With attention to traditional culture and indigenous knowledge, transference of advanced science and technology in their life and production is indispensable. Integration of modern knowledge on science and technology and indigenous knowledge of each group demand deep study and accurate evaluation of scientific values as well as discovery of limitations or unsuitability of the given knowledge. That will help to apply progressive science and technology effectively and promote indigenous knowledge of the people and community.

The selection of science and technology should be suitable with the locals’ intellectual level and producing conditions. The diversified transference should be implemented step by step with participation of the locals at the beginning, so that they can accept and adopt the modern knowledge (through training and building model of application of advanced technology).

2.4. Solution 4: Establishing reputable staff

This solution roots from the idea that it is the minorities themselves who can address their
problems of livelihoods and culture with effective support from external sources like the government and other sectors. Nonetheless, with the current level of development, it is difficult for the locals to be self aware of and decide to improve their livelihoods basing on promotion of their positive cultural values and elimination of negative ones if none of them initiates to mobilize and guide the whole community.

That the government should pay more attention to establish a group of staff and reputable members of the four groups is important. With the community, this group, as a nuclear, will make choices and decisions to reduce barriers and obstacles as well as promote favorable conditions for their development.

2.5. Solution 5: Developing the model of permanent livelihood improvement basing on potential indigenous knowledge of ethnic minorities

This is a significant solution as it will enable the four minorities to approach or participate in the models to raise their awareness and knowledge for their livelihood improvement. Building the models is also the base to propose relevant policies. The possible models consist of:

- Packaged models
  - Models of traditional festivals and credence values of each minority
  - Models of local propagandas for the four groups in two provinces
  - Models of integration of indigenous and modern knowledge
  - Models of changing backward customs and habits

2.6. Solution 6: Promoting financial resources

It is a crucial solution and also a decisive factor for success of the above solutions. Obviously, solutions of propagating to raise awareness, of completing policy system, of transferring advanced knowledge, of establishing staff need to be financially supported.

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DEVELOPING MEDICINAL PLANTS ENTERPRISES IN EAST NEPAL: PRACTICAL LESSONS LEARNED AND FORWARD CHALLENGES

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Introduction of the Mountain Institute

Since 1972, The Mountain Institute has worked to empower communities in the Andes, Appalachians and Himalayas through education, conservation and sustainable development. Since its founding as an international non-government organization 40 years ago, TMI has worked closely with mountain people frequently predominately ethnic minorities, to identify and implement solutions to challenges that threaten livelihoods and the health of mountain cultures and environments. TMI’s mission is to ensure that mountains will continue to conserve and provide the essential resources — natural, cultural, and inspirational — needed for humankind’s survival on a healthy planet. TMI works to create partnerships between host governments, civil society organizations and local communities, creating mechanisms that conserve the environment while improving local and sustainable livelihoods and build upon local knowledge and culture.

Summary of Medicinal and Aromatic Plants enterprises in East Nepal

Starting with 30 farmers in 2001 in Ilam, East Nepal TMI’s medicinal plants program has grown incrementally and now works with over 16,000 farmers in 12 mountainous districts of eastern and central Nepal from Dhading north of Kathmandu to Ilam and Panchtar in eastern Nepal. TMI first invests in people by using the cultivation of medicinal and aromatic plants (MAPs) as an entry point to create direct economic incentives, build relationships, and gain the trust of the communities. Then it gradually introduces a range of activities in forestry, conservation, organizational capacity building, and natural resource governance. The activities have a triple bottom line approach; providing livelihoods and economic benefits, helping reduce the pressure on wild collected medicinal plants (ecological benefits) and promoting greater equity by reaching underserved mountain communities, often predominately ethnic minorities.

Initial activities focused on cultivation, weeding, thinning, transplanting and harvesting of endangered medicinal and aromatic plant species. As farmer skills and capacities expand, the training approach shifts from a farmer group into enterprise based approach, weaving in more cooperative development training, business and enterprise skills and market development (such as value addition, certification, fair trade, etc).

By 2012, TMI trained farmers sold nearly $1,400,000 worth of plant materials to Indian and Chinese markets, comprising nearly 10% of Nepal’s formally recognized medicinal plant trade with India. In 2013, revenues from sales of medicinal plants dropped to $780,000, reflecting fluctuations in plant yields as crops take several years to mature after planting. The project is now evolving and project staff are exploring how to increase the benefits to farmers through value addition such as drying, grading and sorting raw materials, increased on site processing of plant materials and organic/fair trade labelling. In addition, the project is converting farmer groups into village cooperatives, small cottage industries and eventually into much more competitive village enterprises, helping equip mountain farmers with financial, administrative and organizations skills so that they can compete more effectively in local, national and regional markets. Eventually, it is anticipated that mountain farmers will be able to compete in international markets. This paper shares some of the lessons learned and challenges moving forward.
Project Progression and Key Lessons Learned

In 2001, TMI began working with MAPs as it was investigating alternative livelihoods and new ways to work in the conflict situation of Nepal’s decade-long insurgency. Staff member, Karma Bhutia conducted a 6 month reconnaissance trip and feasibility study to assess the MAPs market conditions, prices, and value chains. Visiting 37 Village Development Committees (VDCs) in Rasuwa, Sankhuwasabha, Taplejung, Ilam, and Panchthar districts on foot to remote field sites, Mr. Bhutia visited wild MAP collection sites, community forests and pastures. Traveling with local informants including MAP collectors, herders, and Community Forest User Group (CFUG) members, he collected data on medicinal plants collection while beginning to build the community relationships and trust essential in this work.

Feasibility Studies on Local Products, Skills and Markets

Based on feasibility findings, collection of wild medicinal and aromatic plants was seen to provide a significant portion of rural livelihoods and wild plant stocks were being over harvested, risking environmental damage and declining village livelihoods. It was also determined that there was considerable basic knowledge of the reproductive biology and ecology of medicinal plants providing a strong foundation to build upon. Finally, the feasibility study demonstrated that there were strong existing markets for a number of commercial plant species. Thus, training thirty farmers in one village of Ilam District was initiated. Initial community response was strong and soon other farmer groups demanded cultivation training, resulting in additional trainings in nearby villages. The replication trainings used the original cultivation sites as demonstration plots and the original trained farmers as training assistants. Using farmers to train other farmers was very effective to establish trust while enhancing confidence and skills of the original farmers. It is said that the best way to master a skill is to train others. Cultivation training grew incrementally and gradually the number of trained farmers has increased from the original 30 farmers to over 16,000 farmers by 2014. Project staff directly trained nearly 7,500 farmers, who have in turn trained an additional 8,500 farmers using farmer-to-farmer training techniques. The number of hectares cultivated expanded from an initial 6.1 ha to over 1,800 hectares by 2014.

Group Formation for Efficiency and Effectiveness

Once the cultivation training was well established, farmers were formed into more formal groups, to expedite refresher training and make monitoring more efficient. As groups were established, training topics also expanded, to include nursery establishment, transplanting, weeding, harvesting and grafting techniques. Farmers were also trained to cultivate additional plant species, providing diversification in case of climatic changes or market fluctuations.

As skills progress, project staff continued providing technical and marketing training to the initial farmers while expanding activities by establishing community demonstration nurseries and training new farmers in adjacent districts. Communities formed informal MAPs conservation and cultivation groups, which facilitate delivery of extension services and follow up training, and strengthen the direct links between farmers and local and district traders. Gradually, project activities became locally renowned and visitors from other development projects and local NGO came to learn from the program, further empowering the original farmers and building their confidence as informal “on the job” trainers and knowledge transfer centers.

Supplementing Existing Farming Systems

Many of the first farmers to adopt MAPs cultivation were more prosperous, as they had the resources and land to risk trying a new crop and activity. Still, these farmers were aiming only to supplement their family income. They
planted MAPs as intercrop between potatoes and corn, on the terrace walls, and in pastures and shrub jungle. The production of food crops has remained their priority. Maintaining a balance between existing food crops and new cash crops in farmer fields was important and reduced risk.

To further reduce risks, project staff also started to promoted cultivation of additional new species of commonly traded marketable plants, to diversify the ecological and economic risks.

**Farmer-to-Farmer Training**

As these farmers succeeded, poorer farmers have been encouraged to try cultivating MAPs. Poor farmers are more likely to respect the experience of other farmers and follow their example than if they had training from project staff alone. The initial farmers began acting as farmer-to-farmer extension agents, training new farmers in remote and vulnerable communities to reach the ‘poorest of the poor’. Using a farmer-to-farmer method has proven to be particularly effective when combined with using technically qualified project staff as resource persons.

**Structured Exposure Tours**

The project has also sponsored exposure tours, taking farmers from new sites to visit successful MAP cultivators in original districts where activities are well established. Previously, the new farmers from new districts were initially reluctant to plant MAPs on a larger scale, until they saw other farmers cultivating MAPs on their own lands. The exposure tours aimed to share knowledge and techniques on MAPs conservation, cultivation techniques, and community based MAPs market management systems.

**Collection Centers and Depots**

As the project progresses, TMI has initiated more activities based on the needs of the MAP cultivators it trained. It helped these once marginalized farmers to form groups to strengthen their capacity to cultivate, market, and process MAPs. As a first task, most groups established MAPs collection centers in their respective VDCs. This united farmers to deal collaboratively with a variety of issues from production to marketing and take action for solutions.

**Collective Bargaining through Cooperatives**

Staff continued to work with MAP cultivation groups to increase their capacity to function as village and district marketing cooperatives. They supported the legal registration of the cooperatives, which constructed MAP collection depots to be able to negotiate higher prices per unit (kg) and store harvested materials to wait out price fluctuations. TMI also supported a market information system for accurate and timely market commodity prices.

**Simple Value Addition**

The cooperatives have a stronger collective voice to influence district and regional NTFP trade policies. They conduct simple value added processing techniques such as drying, cleaning, and grading plant material, and improving storage. As the farmers master basic skills, the project is gradually introducing processing technologies that are more complex.

**Purchase Agreements with Traders and Middlemen**

Cooperatives have established relationships and purchase agreements with MAP traders, who also benefit by being able to purchase larger volumes of quality plant materials with economies of scale. By choosing to work with the middlemen in order to engage them in helping the farmers get better returns on their yield in return for more guarantees on the quality of the MAPs and value additions. For the traders, the depot reduces the middle transaction costs so they can pay a better price to the farmers, who provide more consistent quality MAPs products, generating a win-win situation for all parties.

**Increasing Legal and Regulatory Awareness**
Training is also conducted in basic legal provisions and regulations for the collection, harvest, and sales of MAPs, and their cultivation on private lands, and these policy level training are extremely important for project success and sustainability. As cultivated fields start yielding sufficient volumes of plant materials, information is also shared with the farmer groups on knowledge of markets, names and contact information of MAP traders and factory owners, and monthly price information of MAP species traded nationally and internationally is shared, often by radio in remote and inaccessible areas. During training sessions, local and district-based MAP traders made presentations to farmers, encouraging them to consolidate their MAP products and building important trade relations between MAP growers (supply side) and MAPs traders and marketers (demand side).

To sell products effectively some policy and legal training was also required. Farmers selling MAPs cultivated on private land do not need permits or to pay revenue, however, the systems were not yet in place to facilitate this trade. A solution was found in issuing the farmers cultivating MAPs with certificates to more easily promote and market their products by exempting them from royalties charged on wild gathered plants. TMI’s NGO partners and District Forest Offices in Panchthar and Ilam signed an agreement to develop and distribute certificates and identity cards for approximately 5,000 farmers cultivating MAPs. TMI and its NGO partners have been facilitating the field verification and preparation of the necessary documentation including the recommendation of VDC secretary, name lists, photographs, land ownership legal papers, and details of cultivated area of the MAPs farmers.

**Documenting Change**

To document changes in wild populations of over harvested species, local NGO partner staff were trained in ethno-botanical inventory and recording techniques, increasing their capacity to monitor changes in plant populations in the field. Baseline data was collected at the start of the project through preliminary surveys, using belted transect methods in various field sites to identify the status of high value medicinal plants. Through regular monitoring, cumulative improvements of 16 % were demonstrated in wild MAP populations relative to the baseline providing data to convince future donors to invest. The data suggest that climatic variability is affecting biodiversity even in well managed areas with a short time horizon, and suggest that this is an on-going challenge for future programs.

**Public Audits**

The NGO partners also organized review workshops with district and VDCs partners, including representatives civil society, government officials, journalists, and representatives from different political parties. Having such a broad participation ensured ‘public audit’ of all project activities, and full transparency and accountability concerning the use of funds and equitable distribution of activities.

**Use of Local Organizations and Staff**

The emphasis has been to work with local NGOs since they have closer relationships with the local communities and can often implement activities during periods of uncertainty. INGOs and their staff members are usually from outside, so relationships with local communities can be limited. The issue of personnel is important because in Nepal, there are few institutionalized principles for operating – the accomplishment of many activities depends on personal relationships, and the personal attitude and interpretation of anyone who is ‘in-charge.’ The lesson learned was the need to build and maintain relationships to both stakeholders and local people.

Whenever possible, hiring staff from the local area is preferable, to invest in their training and build their capacities rather than recruiting staff from outside the project area. This allows for efficiency, low investment costs and increases the rate that local trust with communities can be established.
Transfer of Duties from INGO to NGO Staff

The staff of the NGO partners gradually took on the work of the TMI project staff, who initially worked alongside them in the field. The partners help to mobilize community members to conduct activities aimed at improving natural resource management and select participants for training using criteria including ethnic group, income level, gender, level of motivation, and residency in a vulnerable community. Partner organizations conduct MAP cultivation training by themselves. TMI staff help develop training curriculum and manuals, but all local level training is now conducted by local NGOs.

Need for Constant Reflection and Monitoring

However, there is a need for constant monitoring and self-reflection and TMI continues to refine its approaches. For instance, while TMI assumes that its programs are inclusive and that the staff members are being inclusive, it needs continued monitoring systems to verify this. When working areas are increased, more consistent systems are needed to ensure that programs do not exclude poor and disadvantaged people, even unintentionally. Furthermore, continued work to ensure good monitoring systems that can be independently and systematic verified is necessary. In addition, strengthened monitoring by TMI staff of the field monitoring by its local partners is necessary as this is also an area where complacency can set it if not carefully tracked.

Opportunities and moving forward

Future programs have two main areas of focus; one) to expand the number of farmers and produce more raw materials, and two) to expand the skills of participating farmers and help them retain more of the benefits from their labor.

This means investing in more farmer-to-farmer training, group formation and training, cultivation and technical training, nursery establishment and other core technical aspects including monitoring. It also means identifying and training more local ngo partners and their staff, and TMI staff becoming more comfortable sharing their knowledge and skills more broadly in order to reach more beneficiaries.

Focus on poor and vulnerable households

Most households in these corridors are poor and vulnerable people from marginalized ethnic groups. They often suffer from a lack food security for up to 6 months per year and depend highly on natural resources for their livelihoods by collecting wild MAPs to supplement their incomes. Often, women head many of these poorest households, having been either widowed, abandoned, or left when their husband migrated for work. Hence, future work will need to respond to their needs, especially since women are already about 60% of the participants at trainings for MAPs cultivation.

Strengthening small business and enterprise for MAPs

Further strengthening the ability of existing MAP groups to operate as marketing and distribution cooperatives is also needed. While the foundations are in place, these groups need additional capacity building and training to function at their full capacity within the market system. This requires further investments to convert these groups into effective small businesses and micro enterprises. Additional trainings in business development services, business planning, sub-sector market analysis, marketing and distribution, improved storage, and technical and market aspects of value added processing are needed. Strengthening the market elements of the program requires some expansion into providing basic financial services in order to break the patterns of community debt, which is forcing farmers to sell their products at sub optimal prices.

Given Nepal’s strategic position between India and China, TMI and local people also governance, including decentralization and possibly even ethnic based, federal states. Staying abreast of these possible changes and remaining focused on local level issues will help
local communities keep ahead of these challenges. The uncertainty also affects NTFP policies, which remain unclear, poorly communicated and often irregularly enforced.

Despite these challenges and uncertainties, the current medicinal and aromatic plants project has demonstrated that a well planned mountain livelihoods project can help lift ethnic communities in mountain regions out of poverty, provide economically viable and environmentally beneficial benefits and help encourage the next generation and youth to remain in mountain communities, as long as adaptive management principles and a learning process approach are utilized.
MARKET FEATURES IN THE DEVELOPMENT OF ETHNIC MINORITY LIVELIHOODS: EXPERIENCE FROM THE SECOND NORTHERN MOUNTAINS POVERTY REDUCTION PROJECT

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ABSTRACT

Enhancing the livelihoods of ethnic minority people living in the western northern mountains region of Viet Nam through improved market linkages is the objective of the second Northern Mountains Poverty Reduction Project. Livelihoods development based on predominantly agricultural activities, that are common in the local area with an established market demand, is facilitated through Common Interest Groups consisting of up to 15 members. Using a Community Driven Development approach the group members decide upon a livelihood activity that they will pursue. Project grants and technical support assist the Common Interest Groups to develop improved production, business and marketing methods. Some 6000 groups have been formed that feature a diverse range of livelihoods activities, and have about 80,000 members. Although the majority of groups are still in their growth and development stage (the oldest groups are only 2 years old) they have already started to contribute to increasing beneficiary household income. Shorter cycle livelihoods activities such as meat pig production, vegetable crops, and meat chickens, and goats have achieved at least 3 production cycles and also enabled the expansion of production stock numbers over successive cycles. Farmers, however, have continued to predominantly market their produce on-farm, as they did before the project. A major reason for this is that better roads, due to the project and other national programs, have improved access for small traders. An increased number of traders now provide inputs for farmers, as well as providing marketing services. Future project market linkage activities will include developing the farmers’ negotiation skills and also their market price analysis skills. The aim is to better equip the farmers to make decisions over selling on-farm, or at markets further along the product value chain.

Keywords: Common Interest Groups, Community Driven Development, ethnic minorities, income, livelihoods, market linkages, traders, value chain.

Introduction

Development challenges in the northwest of Viet Nam are vast and these are compounded by the extremely dissected topography, limited areas of concentrated commercial development, long distance to markets for agricultural products, and low social capital development of the large ethnic minority population. Poverty is a major challenge and the north western Northern Mountains region has the highest rates of poverty in the country. Based on the World Bank/Government Statistics Office data the total number of poor in 2012 in the 6 project provinces was 2,375,271 [1]. The overall poverty rate in the region is 60.1%.

Experience with the developing market connectivity for ethnic minority farmers in the Second Northern Mountains Poverty Reduction Project (NMPRP-2) is reported upon in this paper. The main emphasis in the paper is upon how the ethnic minority small farmers have responded to the increased market opportunities provided by the project’s investment in
infrastructure and in livelihoods development. Some rural development policy implications of the NMPRP-2’s initial marketing linkages experience are presented and discussed.

**Project features**

Targeting the poorest region in Viet Nam, where the majority of project beneficiaries are from over 30 different ethnic minority groups living in remote and difficult-to-reach communes, the NMPRP-2 has the objective of enhancing the living standards of the project beneficiaries by improving: (i) their access to productive infrastructure; (ii) the productive and institutional capacity of local government and communities, and; (iii) market linkages and business innovation.

Coordinated by the Ministry of Planning and Investment the NMPRP-2 is supported by a Specific Investment Loan of USD 150 million. Implementation of the project is the responsibility of the 6 project provinces: Dien Bien, Lao Cai, Yen Bai, Son La, Lai Chau and Dien Bien. The NMPRP2 features a community-driven development (CDD) and “demand-driven” project approach to enhance living standards in 230 communes within 27 districts of the 6 project provinces. Implementation of the NMPRP-2 commenced in August 2010 and was scheduled to be completed in June 2015. It is now to be extended until the end of 2017.

**2.1 Community Driven Development Approach**

Community based planning is a major project feature. Each year the NMPRP-2 project staff facilitate preparation of a commune annual plan in each of the project communes that includes investments in both infrastructure and livelihoods. Village planning meetings are held over June and July and the the project’s Commune Facilitators support the meetings and provide information about the available investment budget, and potential livelihood options. The active participation of all village members is encouraged, especially women. Management of all aspects of the commune investment program is the responsibility of the commune: the project aims to encourage empowerment of commune staff.

**2.2 Infrastructure**

Infrastructure development is the dominant investment activity in the project. The infrastructure investments are aimed to directly benefit the project communes. The majority of investments include intra-commune roads (including roads to farm production areas), small-scale irrigation schemes, and community drinking water schemes.

**2.3 Livelihoods**

Livelihoods development in the project consisted of twin approaches: a “resource based approach” and a “market led approach”. The aim being to assist the poor farmers to make better use of their limited resources, while also developing improved market linkages through local and longer value chains. Market led strategies have featured the aggregation of small farmers around products with a potential market for growth, and linkages with agribusiness partners. Assisting farmers to “move up” their product value chains, to achieve the higher product prices that occur further along the chain, is a feature of the project’s livelihoods development approach.

**Marketing Failures**

On-farm (farm gate) marketing is the marketing method that is being predominantly used by the CIG farmers. This is consistent across the 5 project provinces that there is data available for as shown in Figure 1 below. Selling at the market is also practiced by some farmers, but this is at a much lower level than on-farm marketing.
Creating opportunities for the CIG small farmers to move up the value chain is a feature of the design of the NMPRP-2’s livelihoods component. The resource-based approach emanates from the logic of organizing project activities around dominant pro-poor livelihoods in local areas and aims to bring the producers and buyers closer. The CIG farmers have, however, not responded to the opportunity to move along the value chain. Instead they have increased their on-farm marketing. In the project baseline study conducted in 2010 about 70% of the farmers were selling their produce on-farm. Assuming that farmers will be better off by moving up the value chain needs to be justified by financial analysis of the marketing options available to the farmers. Value chain theory features the ‘make or buy’ decision. In the context of the CIG farmers they need to decide if they should concentrate upon farming, and get the traders to do the marketing, or should they both farm and also market along the value chain [2]. The decision about what marketing strategy to follow will depend on a number of things: First, what are the farmer’s objectives, goals, and core competencies? Some farmers will prefer to stay inside the farm-gate and others prefer to go further along the chain; second, what are the farmer’s resources and how best do they use them? Do the CIG farmers have the capital to move down the chain e.g. the motorbikes, or more importantly, does marketing take them away from other farming activities, and they do not have enough labour to carry on with farming activities i.e. the labour constraint? Finally, there are the financial implications. Is it financially more worthwhile for a farmer to undertake the marketing themselves, or is it more profitable to focus on their farming activities and use traders for marketing?

No financial analysis of the marketing options has been done yet by the project. But it is postulated that the scarce resources decision factor outlined above may be a major reason for the high level of on-farm sales. Limited marketing training has been provided for the CIG farmers so far in the NMPRP-2. Once the farmers have had marketing training their marketing methods may change. Farmers with better education were found to have received better prices for their maize (3). This is most likely to be because they have a greater knowledge of financial issues and also better negotiation skills.

One other factor that is a probable contributor to the higher levels of on-farm marketing is improved roads access, and the associated increase in the number of traders who visit the farmers. Poor road access is a major constraint in the northern mountains region, and the NMPRP-2, and other projects have made considerable investment in road development. Over 4,230km of rural roads have been upgraded in the NMPRP-2 alone. Project monitoring and evaluation data showed that following road upgrading farmers had a 48% increase in the number of traders visiting their farms. In a study of maize farmers in Son La province it was found that the farmers who were close to a paved road...
received higher prices for their maize [3]. The Son La study also showed that farmers were regularly able to negotiate with the traders and that the farmers had a choice of about 4 traders to deal with.

**Conclusions and policy discussion**

The livelihoods program has grown quickly and the oldest CIGs are just over 2 years old. It is a very large program spread over the 6 project provinces. While it is too early yet to assess its success there are a number of positive features.

Marketing findings from the first 3 years of the NMPRP-2 have some policy implications, especially for ethnic minority farmers in remote locations. The increase in on-farm marketing is an important finding. Increasing market connectivity through the value chain approach is a common feature in rural development projects in Viet Nam. These projects tend to emphasise the need for farmers to be involved in longer chains connecting to more distant markets, and for farmers to market further along the value chain. The experience in the NMPRP-2, however, challenges the approach in other projects and suggests that development projects should not assume which marketing option is best for farmers. Moreover, there needs to be more analysis of the farmers’ resources and marketing options before any particular marketing approach is proposed.

Ethnic groups respond to livelihoods development and marketing in different ways. In the NMPRP-2 the Muong, Dzao and Thai ethnic groups have responded to the livelihoods opportunities provided by the project by developing profitable farming activities. This is due to a combination of their closer integration with the Kinh people, their use of the Kinh (national) language, and their location closer to roads and main towns. Other ethnic groups such as Nhang and Cong in live more remote areas, and the potential for socio economic development is limited due to their social, economic and physical isolation. Thus the planning and implementation of project interventions must recognize the differences between the social and cultural characteristics, and other features, of the various ethnic groups.

Improved road access is essential for market connectivity. While improved roads do give the farmers the opportunity to transport their produce to other selling points in the value chain they also provide opportunities for local entrepreneurs (traders) to increase their supply of services to the farmers. These services include input supplies, as well as marketing services. The increase in the number of traders, and more competition between the traders, may be a factor in the farmers’ decision to sell on-farm. Other studies have shown a similar on-farm marketing response by ethnic minority farmers to improved access and the increase in the number of traders [4,5]. Thus policies for rural development must not assume that farmers will respond to improved road access by marketing their produce further along their product value chains.

Local entrepreneurs are vital members of the value chains and provide significant agribusiness services to small farmers. These entrepreneurs are small traders who supply both farm inputs and also buy the farmers produce. Some of them are also local farmers. Value chain evolution often occurs from entrepreneurial households reaching out to markets [6]. Although projects feature value chain development there are often not explicit policies to support the development of these local entrepreneurs. Finance is a common constraint to the development of these entrepreneurial households, and they have to rely upon their savings to finance their business development (6). Projects and programs that feature market connectivity need to ensure that vital role of small entrepreneurs in value chains is recognised. There should be specific interventions that assist small entrepreneur development.

Flow of information along value chains is an important feature that contributes to the strengthening of the business relationship between farmers and other members of the chain (2). Information is not just about prices, and quantities of produce, but should also include
feedback on such aspects as produce quality and food safety requirements. The high proportion of farmers with cell phones (over 90% in the NMPRP-2) should be utilised to improve information flows.

The initial marketing findings from the project show that farmers and their marketing decisions evolve and that value chains have considerable capacity to adjust (6). This raises the important policy issue that external interventions to directly assist farmers to develop market linkages may simply replace one evolving chain by another, without increasing market access or efficiency [7]. Therefore should projects attempt to build value chains, or should they create the enabling environment that supports the evolution of the existing value chains?

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FOOD SECURITY, ENVIRONMENTAL PROTECTION AND POVERTY REDUCTION IN THE MOUNTAINOUS REGION OF SOUTH-EAST ASIA

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ABSTRACT

The northern mountainous region of mainland south-east Asia covers a wide area spread over Thailand, Myanmar, southern China (Yunnan province), Lao PDR and Vietnam. These areas are typically remote, poorly connected with markets, and home of many ethnic minority communities. The incidence of poverty and food insecurity is high in these areas, with farmers mostly engaged in subsistence farming using practices that are often environmentally unsustainable. Past attempts to promote commercial agriculture for raising farmer incomes have not always been successful in promoting equitable income growth, improving food security and protecting the upland environments which generate important ecosystems services. Although the mountainous regions have exhibited substantial dynamism in recent years in response to various development interventions, the fundamental issue related to food security, poverty and environmental protection continue to remain major concerns.

The paper draws lessons from various past approaches to upland development used in the region taking specific examples from northern Thailand, southern China, and northern Vietnam. These examples cover a diversity of approaches which include encouraging a switch-over from food to readily-marketable cash crop production, intensifying food production in favourable parts of the mountainous landscape (valley bottoms, terraced fields), using improved technologies to overcome constraints to food production in less favourable marginal areas, and promoting non-farm income generating activities. These examples illustrate that no single pathway is suitable for all situations and the diversity of upland conditions (bio-physical, historical and social) calls for the use of a blend of approaches that promotes multiple pathways for upland development, with the relative importance of different components varying across space and over time. Key implications of this comparative analysis for the design of development policies and programs for the mountainous region are derived.

Introduction

Mountainous upland areas in Asia represent a large domain covering over 50 million hectares with over 100 million people depending directly on uplands for their livelihoods (Pandey 2000). In the mainland south-east Asia, the domain mainly spans across northern mountainous parts of countries including Myanmar, Thailand, Laos, and Vietnam and southern parts of the Yunnan province of China. The upland areas represent high levels of diversity in terms of topography, climate, and flora/fauna. Human adaptations to these intrinsic diversities are also equally diverse.

Upland areas are mostly inhabited by ethnic minorities who are economically and socially marginalized. Poverty has remained concentrated and has decreased very slowly among these ethnic minorities despite the rapid economic growth and consequent reductions in poverty at the national level during the past two decades (World Bank 2012). In fact, ethnic minorities now represent the “majority” of the poor. Despite increasing linkages with markets, food security of ethnic minorities depends largely on adequate household-level production of rice which is a major staple. Reducing poverty of these ethnic minorities while ensuring their food security and environmental sustainability of upland systems represents important inter-linked challenges for the post-MDG agenda.

A strategy for exit from a vicious cycle of poverty
Upland farming is an important source of livelihood for ethnic minorities. They are, however, caught up on a doubly-reinforcing vicious cycle that makes escape from poverty difficult (Figure 1).

![Figure 1. A vicious cycle that perpetuates poverty and food insecurity](image)

Low food productivity in these upland areas adversely affects food security which encourages farmers to expand production into fragile sloping areas and forest margins resulting in environmental degradation which in turn perpetuates low food productivity. This first vicious cycle is reinforced by a second cycle in which food insecurity constraint prevents farmers from engaging in market-oriented agriculture as their meagre land and labor resources are largely tied up on food production leaving very little for income generating activities.

There are many potential entry points to break up this vicious cycle but raising the food productivity is an important one. This can turn the vicious cycle into a doubly-reinforcing virtuous cycle as higher food productivity improves food security, reduces the intensification pressure on fragile uplands, and contributes towards environmental benefits (Fig 2).
Higher food productivity also helps “free-up” part of the land and labor resources hitherto tied up in food production for engaging in income-generating activities. This reinforcing process can provide a solid livelihood-based foundation, when complemented by other broader interventions, for an incremental and sustainable exit from poverty.

The essence of this process has in fact played out well during the “green revolution” and has resulted in a dramatic reduction in poverty in many Asian countries (Fig 3).
their children’s education and engaged incrementally on income-generating non-farm activities (Otsuka 2009). Children with education got engaged in more remunerative non-farm employment thus contributing to an overall increase in income through this positive interaction between education and non-farm employment. This process cumulatively resulted in an overall poverty reduction. This basic economic process is equally applicable for achieving poverty reduction of ethnic minorities although major social and other binding constraints adversely affecting such minority groups would also need to be overcome.

Some key experiences from uplands of South-East Asia

Three examples from the region illustrate the process described above for reducing poverty while achieving food security and environmental protection in uplands. The first example is from the mountainous region of southern Yunnan, China. In late 1980s and early 1990s, many upland farmers in southern Yunnan used to grow upland rice in a system using the traditional practice of slash-and-burn. The yield of rice was low (<2t/ha) and farmers expanded the rice area by encroaching into forests to meet their food needs. The government of Yunnan attempted to control this practice through legal bans on forest encroachment but the practice continued as such bans were not enforceable in the context of unmet food needs. In late 1990s, improved rice technologies with higher yield per unit area were developed and disseminated to upland farmers. The improved technology consisting of improved rice varieties, fertilizer application and terracing led to a rapid increase in rice yield during the early 2000s. Farmers who adopted these practices were able to produce adequate quantities of rice to meet the family food needs without expanding the rice area and many farmers were able to do so from even smaller area (Wang et al. 2010, Wu et al. 2010). This reduced the intensification pressure on fragile lands and helped farmers “return the land to forest”. Simultaneously, promotion of cash cropping (corn, cassava, rubber and tea) by the government helped generate additional incomes to farmers who did not have to sacrifice their food production to gain cash income. This income generating strategy which had household food security at its core was thus able to achieve improved food security and higher income simultaneously, clearly demonstrating that income gain and food security can be compatible not competitive objectives. An offshoot of this process was the environmental benefits resulting from a reduced intensification pressure in the forest margins.

In the case of northern Thailand (Chiang Mai province), horticultural crops led this process of change from subsistence to market-oriented agriculture. With increased access to markets, sloping upland areas in northern Thailand evolved to become a center for vegetable and fruit production which has ready market in urban centers of Bangkok and beyond. As a result, incomes increased and the incidence of poverty decreased rapidly (Rice Today 2010). Although upland rice production was largely replaced by horticultural crops, many poor ethnic minorities who were unable to engage fully in somewhat capital intensive and risky horticultural production continued to grow upland rice in some parts of their land to meet the household food needs, thus combining both subsistence and commercial production. While poverty levels have decreased substantially over time, emerging concerns in these areas are related to competition for resource use (mainly water) and downstream pollution resulting from the increased use of agro-chemicals.

The third example is from northern Vietnam where increased rice productivity in the lowlands (valley bottoms, lower slopes and irrigated terraces in the hills) within the larger mountainous domain has led to a rapid increase in rice production and improvements in household food security. This process has helped generate income and reduce poverty in the uplands generally by promoting agricultural diversification and commercialization (Pandey et al. 2006). However, ethnic minorities who have limited or no endowments of such productive
land and rely mainly on cultivation on sloping fields have not benefitted much from this change. Subsistence mode of food production in sloping uplands is still their dominant strategy. Clearly, such farmers would benefit from interventions that increase productivity of land and labor in subsistence production so that they too, together with support for other income generating activities, can break out of the vicious cycle of poverty mentioned earlier.

Key interventions for exit from poverty

The above implies that improvements in agriculture must be a key component of poverty reduction strategy as agriculture is a major source of livelihoods for ethnic minorities. Improved agricultural technologies make it possible to achieve the dual objectives of household food security and income generation simultaneously. This emphasizes the need to develop and promote improved technologies that raise productivity of land, labor and water resources in uplands. Ethnic minorities generally have poorer endowments of these resources, not only in terms of quantity but also in quality. Clearly, technologies tailored to the specific resource endowments of ethnic minorities, not broader generic ones, are needed. Yet, most agricultural research systems in Asia are not designed to produce such specific tailored technologies.

Another important agricultural intervention is to strengthen the value chain to the benefit of poor upland farmers. Local processing of agricultural products can benefit the poor farmers by increasing their share of value addition. Similarly, small scale producers in uplands can reap the benefit of scale in production and marketing by being organized in institutions that reduce transaction costs and increase overall efficiency. Such institutions include group farming, contract farming, community organizations and cooperatives. These can be linked as important components of the vertically-linked value chain from producers to consumers. Obviously, private sector is a central component of the overall value chain but public sector support will be needed, especially in poorer upland areas to create enabling conditions for attracting the private sector and providing a suitable regulatory framework.

Beyond these agricultural technology/value chain interventions, broader interventions some of which fall outside agriculture are also needed for upland development. These include the security of land tenure. It is well-established that security of land tenure is essential for encouraging long-term investments to enhance land quality. Yet, land tenure in upland areas is often very insecure, with land concessions and land zoning being important sources of tenure insecurity from the perspectives of local farmers. Clearly, local communities must have a major say in land use planning rather than this being a top down process with major decisions being made in the capital cities.

Other major areas of interventions that benefit the minorities are the investment in education and health services. Due to linguistic barriers and social customs/traditions specific to ethnic minorities, they are often excluded or are not able to participate fully in rural education programs. Similarly, modern health services rarely reach the ethnic minorities adequately. Special programs suited to their circumstances and requirements are needed in both the health and education fronts.

Last but not the least is the promotion of income generating non-farm activities in rural areas. Small manufacturing, handicrafts, and eco-tourism are some of the activities that can substantially boost the incomes in rural areas including those of ethnic minorities.

Concluding remarks

Several concluding remarks are in order in this final section. First, agriculture is a key entry point to improve food security and reduce poverty of ethnic minorities as agriculture is their main source of livelihoods in most cases. Improved technologies that increase the productivity of resources managed by ethnic minorities are needed for ensuring household level food security while promoting diversification for income generation. Such technologies can also have important environmental benefits. Second, a transition to
more remunerative non-farm sector through expansion of rural non-farm activities is equally important for reducing vulnerability of the poor. Ethnic minorities who have long been marginalized need to be empowered through adequate investments in both health services and education. Clearly, all these programs must be tailored and targeted to ethnic minorities who have their own specific aspirations, resource endowments, social customs and identities. “One size fits all” approach simply will not work.

Fourth, productive safety nets are needed to provide protection not only from consumption shortfalls during shocks but also to build the productive capacity of ethnic minorities for reducing long-term vulnerabilities. Finally, institutional capacity of local line agencies and grass-roots organizations needs considerable strengthening so that truly bottom-up planning and effective implementation of programs can be accomplished. Integration of various programs supported by different ministries must ultimately take place at the local level, and in this regard, capacity enhancements of local institutions are critical to increase efficiency and achieve effective integration of various program components.

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ABSTRACT

As a multi-ethnic country, Vietnamese ethnic minorities have a multi-culture local knowledge which is expressed abundantly in different ways. The Northern Ethnic Minorities are closely associated with the natural resources, for example: if water is considered to be the foremost factor of many Vietnamese, therefore, water is given the primary attention (water is the first). However, the first to receive attention among the ethnic minorities is the forest even more important than land and water source. The indigenous knowledge of the ethnic minority (EM) in the northern mountainous is focused on forest protection which is considered as their life, thus, giving their full understanding and experience. Forest protection is their real life’s formation and has been accumulated in the course of conduct. They have learned to adapt to the geographical and ecological conditions and socio-economic development of the forest. The folk knowledge that has been transmitted from generation to generation by memory, especially the social practices has become relatively an efficient mechanism of forest management and forest protection.

Key words: natural resources, forest, indigenous knowledge, customs, and ethnic minorities

1. Introduction

The northern mountainous region is vast, the birthplace of many ethnic minorities for a long time, such as Tay, Nung, Thai, Muong, Ha Nhi, Lo Lo, Mong, Dao, San Diu, San Chi, Pu Peo, Si La, La Hu ... This is also a strategic area of economic potential with abundant and diverse resources. With steep terrain and large vegetation, the northern mountainous areas played an important role for the ecological environment of the country.

Forest resources are of great importance for the survival of individuals and communities. Therefore, for these forest resources, apart from being rigorously defined by the communities in customary laws or regulations of the village, their exploitation and use have been accumulated and exploited with familiarity to a large extent by EM communities. Those familiarities are folk knowledge created by groups, transmitted in the survival process, and labor practices in dealing with the natural environment.

2. The EM’s indigenous knowledge in Northern mountainous areas

2.1. Viewpoint of indigenous knowledge

Recently in Vietnam, the term local knowledge or indigenous knowledge has been used in different names by scholars: local knowledge, folk knowledge, indigenous understanding, traditional understanding, local understanding, cultural identity of ethnic groups, ethnic groups'understanding, customs, practices, v.v. In so doing, different scholars have different understanding of the essential meaning of “local knowledge”.

Prof. Dr. Le Trong Cuc claimed that: “local knowledge or indigenous knowledge is a system of knowledge of indigenous inhabitants in the communities in different scales of territory. It has been formed during the long history, through behavioral experiences in society, and shaped in different forms, transmitted over generations through memory, production activity and social practices. It aims at guiding and regulating social relations, and relations between human and nature.”

Prof. Ngo Duc Thinh said that: “Indigenous knowledge is the whole of human knowledge about nature, society and oneself, formed and accumulated during the long history of the community, through experience in the production activities, social relationships and environment adaptation. It exists in many different forms and handed down from..."
generation to generation by memory and social practices."

According to Prof. Dr. Tran Cong Khanh and Tran Van: "Indigenous knowledge is a system of understanding, including many areas related to production, customs, habits, beliefs, health, and community organizations of the ethnic group or community in a specific geographic area. It was formed in lifetime and during working of the whole community, from men, women and the elderly to children. It is stored in memory and transmitted orally."

Dr. Pham Quang Hoan said: "Local knowledge is understood at different levels.

Firstly, "local knowledge" (or "indigenous knowledge", "folk knowledge", "ethnic knowledge") is the whole of understanding and experiences of a certain ethnic group that is accumulated, selected and transmitted from generation to generation. It is reflected in all spheres of life so that every ethnic community survives, develop and adapt in response to previous and ongoing changes. In other words, local knowledge is reflected in their mode of conduct, adaptability characteristics of each ethnic group in ecological and human conditions It can also be seen as the cultural identity of peoples.

Secondly, the "local knowledge" is knowledge shared by ethnic communities who together inhabit a certain ecological region or a particular culture. In this case, local knowledge also reflects the exchanges and cultural change and cultural adaptation among ethnic groups ... ". According to the general definition of UNESCO, the term "indigenous knowledge or local knowledge" refers to complete knowledge components which are maintained, developed in a long time together with the human-natural close interaction. It is part of the overall culture,a collection of knowledge including language, naming(nomenclature) and classification, methods of using resources, production activities, rituals, spiritual values and world viewpoint".

In short, local knowledge is the knowledge formed during its long history, human behavioral experiences with the natural environment and society; been handed down from generation to generation by memory and social practices. It is endemic factor which survives and thrives in a certain ecological environment and geographical space, a creation of a community in a particular area.

There are many ways of classifying local knowledge according to the different research perspectives. Here, we categorize the indigenous knowledge associated with their relations to nature and society in the ethnic groups’ elements as follows:

- Local knowledge of local exploitation and rational use of natural resources (forest, land, water ...).
- Local knowledge of production (land selection experience, breeding, farming techniques, weather, farming calendar ...).
- Local knowledge of material culture (housing, clothing, food ...).
- Local knowledge in social behavior and community management (behavior families, clans, villages, festivals, religion, creed ...).
- Local knowledge of health care (abstinence, birth, child care, health care, medical treatment

2.2. Knowledge of forest protection by some ethnic minorities (EM) in the North

As the ethnic minorities whose livelihoods mainly come from the forest (source of food, construction timber, farming on forest land, belief in the protection of the mountain gods, the god of the forest, god of trees, entertainment and community activities in the forest god-thanking festival), the ethnic minorities in the North have accumulated the experience and knowledge of reasonable exploitation and use of forest resources.

The EM’s indigenous knowledge in the northern mountainous region of forest protection refers to the entire understanding and experience
formed and accumulated in the course of conduct, adapted to ecological conditions and social-economic development. That folk knowledge has been handed down from generation to generation by memory, social practice and become a relatively efficient mechanism of forest management and protection.

"Water first, fertilizer second, diligence third, and breed fourth ". The Kinh ethnic group who mainly settle in the Red River Delta, formed early a wet rice civilization and respected the role of irrigation, water being the most important factor. The ethnic minorities however live in the northern mountainous region, whose life is closely associated with natural resources; above all there are ideas and beliefs focusing especially on the role of forest - a vital resource for everyday life and the creation of cultural characteristics that are locally and geographically typical. This is not only found among groups living in « reo, high reo » with traditionally farm field cultivation (the ethnic groups in Burma Tibetan language, Hmong - Dao, Mon - Khmer) but also in some ethnic groups who have long traditional wet rice cultivation as Thai, Muong, Tay, Nung ... Even for the Thai, Muong, the provisions in exploitation and use of forest resources are defined and documented in law customs of the community.

In Thai customary rules, nobody is allowed to touch forbidden forest of shoots (panotan) and and to hunt in the desert (denhua) before the arrival of hunting and gathering seasons. Any infringement against the rules without permission will be considered as stealing the property of the community. Only after the first rain of the season when shoots of mushroom appear, the people are permitted to pick up the forest shoots. Then the forest is "closed", and people must wait until the next growth of bamboo shoots or the next year. People must not pick up small shoots so that they can grow into trees, not cut down trees in mass during exploitation because the hunting and shoot forests are always preserved and maintain theirs natural development. Every year, at the end of lunar May, shoots can be picked up but just in the first and fourth growth. Those who violate will be fined with a bar of silver accompanied by wine and meat.

However big or small, once trees and cinammons have their trunk engraved with a cross (+) or multiplication (x), they are supposed to belong to one person and no one is allowed to cut them down.

It requires a permission from the village authority “Tao ban” to legally clear the forest for agriculture; if voluntarily made, one shall be fined from 1 to 3 bars of silver together with wine and meat.

As for protection forests in the watershed, mining is prohibited; forest is just exploited for bamboo and wood for building, not for other needs of life then it is possible to slash burning. Each hamlet “muong” has its scarcity “minh ban nen muong”, some even buries the hamlet soul pillar “lạc muong”. The beginning of “muong” has “rừng hòn chiều” named “Cùa Xin”, and its end part has “rừng hòn chiếu” named “Cùa Pong”; next to each “muong” is a forest called “Chiềng Káo” which is its own ghost forest. These forests are all prohibited from cutting trees or clearing land.

The “don khuong” are considered to be dwelled by spirits and absolutely not to be broken. One who violates will suffer incalculable consequences. Nobody dares to disobey these forbidden forests, just picking a flame shoots, cutting a branch or hunting a bird. People even bow when passing and even the village head “phia tao” must bend down; women must take off or remove their remove their piêu (a traditional towel) and quietly walk through; once the wounded animal in hunts run to these forests, no one can chase it and the forests will protect it. Thai Group have the saying that: “Tai pà phăng, nhăng pà liễu”, which means “raised by forests in personhood and buried by forest in death”

Or: “Hiệm pà vây lun lòng chẳng mà
Vây hai năm chu bộ lay lòng
Phạt chưa đây khởi năm mận chẳng pen còn”
Which means:

Keep forest grow forever
So that water stream willflow abundantly;
Those who remember it will really grow up

Thai people talk about forests, sacred forests and responsibilities for forest protection of each person in a specific way: “Pá dòng xong cót, may pê kin, còn pê nước, pà cắm dòng kheo, may hua ta, nga hua bò, pà tâm din piêng, pà heo dòng câm, pà câm dong xen...” which means "just as trees have roots ( old trees), the elderly have beards, green immense forest is the watershed and endless forest at the water stream, and the forest is the place for praying, it is untouched and sacred . Let’s protect forests for today, for tomorrow and for future generations forever.

Muong Customary law claims about bamboo harvesting: Right on lunar June 20th (depending on the village self-regulation, it can be ahead or behind this date a few days) annually, the village heads (”lì trưong, lang, đạo cai quan”) will meet up and give commands with gongs or drums orally, only then can people pick up shoots.

According to Muong traditional experience, crops begin to grow in spring. During the period from spring until near the end of the 6th lunar month, the number of shoots which are developed into a bamboo is very high because in this period the climate, environment, heat and humidity are favorable to gather with high resistance to pests and diseases. From lunar July onwards, shoots still grow a lot in this season but it is often during rainy days, there is a greater risk of pests, accompanied by winds, storms which usually make shoots fall. As a result, the number of bamboo developed from shoots in this time is very low. That is the reason why the ancient people harvested bamboo in this period. Those who violate, whether children or adults (including family whose grazing cattle trampled shoots in the forests) when discovered must pay a fine for the village “mướp” one female pig.

Muong’s customary law in this regard displays their fairly deep understanding of natural science, which is quite scientific in nature.

Ha Nhi group: Village of Ha Nhi camp is called "Phu". Each "phu" owns forbidden forest, sacred forests and shared forest for exploitation by the community.

In the forbidden forest "Ga Ma", Ha Nhi people choose a tree which has fruit and high and straight trunk. Hanhi Black group in Bat Xat district often choose tree "sour" (medlar) with fruit as god tree. Hanhi Hoa GROUP in Mu Ca - Muong Te choose the “gạo tree” ( a tree with red star-shaped flowers) as the god tree. Hanhi flower in "phu" Ga Loong - Mu Ca commune select ancient pine tree in the forest as their god. Under the tree root, they arranged two perpendicular stones to build temples for praying gods. This is also a place of worship of the whole community on festive occasions, or when the community get diseases or sickness, and when livestock and poultry are killed on large scale because of epidemics...

For Ha Nhi people, the most important sacred forest is the one that worships guardian angel " Ga Ma do". The fate of the villagers is tied to the destiny of the sacred forest “Ga Ma do”. So, the Ha Nhi people banned other people from entering the scared forest "Ga Ma do", which is at the top of the village. This is also the reason why the local families do not build their house across the sacred forests. Along the sacred forest, thorn trees "Păng hop" is grown as fences to separate the forest from the residential areas. According to their traditions, the thorn trees "pang hop" helps prevent ghosts and separate the forest from the village. All dry and broken trees in the forest are forbidden to be carried home. Every year only on worship day to "Ga Ma do" (usually, on the dragon day "Lô no", on the louse day “Xê no”, or the horse day "Mò no", or on the tiger day somewhere “Khà là no” of January or February, can male representative of families follow the forest praying manager “Mí cù” and his assistant “La cha” to hold wordships
in the forest. Contents of worships are for happiness of people, prosperity of things, good crops, and villagers free from accidents. People must not urinate and defecate indiscriminately, or impure the forest. Particularly, women are not always allowed to visit this forest because they are perceived unclean body with regular pregnancy and childbirth. When carrying the worship ceremonial stuff to the forest, people should remove all shoes and sandals outside the forest and avoid wearing red clothes. They should burn local community’s black incense instead of red one. As for the forest, only on the Dragon day in lunar January can people take timber. This is the occasion when all the villagers organize rituals to worship the forest. After the shaman’s ceremony to ask for the forest god, male and young villagers can get enough number of timbers from the forest to build a tower on which the shaman made sacrifices for satyrs. Also on this day, only the village head can go into the forest to collect timber and deliver it to the village family. According to Mr. Phu Che Vu, cultural officials of Y Ty commune, Bat Xat district, Lao Cai province: "Villagers who take timber in the forbidden forest will have to compensate with a 36 –kg pig, 20 liters of wine, 20 kg of rice, equivalent to approximately 4 million dong today.”

In can be concluded that the villages “phu” of Ha Nhi people have been covered by a system of forbidden surrounding and sacred forests. The sacredness in this group’s sense of protecting the forest has helped protect the forbidden and sacred forests. They are not allowed to cut down trees, even not take the dry branches or dead and broken ones (except on worship and opening days).

Apart from forbidden forests, Ha Nhi people have many shared forest owned by the whole community named “Li Xo Tá Cha” which provides them with materials for building houses, cooking and vegetables. They also hold huntings in this shared forest but in accordance with certain conventions in order to protect the forests as well as small animals.

Table 1: Calendar for Gathering forest resources of Ha Nhi people

<table>
<thead>
<tr>
<th>What to gather</th>
<th>Lunar month</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Bitter shoots</td>
<td></td>
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<tr>
<td>Neohouzeaua shoots</td>
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<tr>
<td>Mai shoot</td>
<td></td>
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<tr>
<td>Bamboo shoot</td>
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<tr>
<td>Fruits and roots</td>
<td></td>
</tr>
<tr>
<td>Rice</td>
<td></td>
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<tr>
<td>Centella</td>
<td></td>
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<td>Medical herb</td>
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</tbody>
</table>
Table 2. Calendar for Hunting animals of Ha Nhi people

<table>
<thead>
<tr>
<th>What to hunt</th>
<th>Lunar month</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Stag</td>
<td></td>
</tr>
<tr>
<td>Wild pig</td>
<td></td>
</tr>
<tr>
<td>fishing</td>
<td></td>
</tr>
<tr>
<td>Crab and fish</td>
<td></td>
</tr>
<tr>
<td>By casting net</td>
<td></td>
</tr>
<tr>
<td>shrimp</td>
<td></td>
</tr>
<tr>
<td>Crab and shellfish</td>
<td></td>
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</tbody>
</table>

Hmong ethnic minority group has a custom to “ăn ước” or, also known as “nào sòng” or “nào cống” holidays on the Dragon day of lunar January. During this festival, people expand and repeat the forest protection rules, at the same time regulate again sanctions for offender. Those who donot respect forest protection regulations are sanctioned to give a fine like cattle which destroy crops. For those who arbitrarily enter the forbidden forest to cut trees will be fined a pig or cash valued from 50,000 to 100,000 dong. Each family has its own forest patches, everyone must respect the right of use of that person. Those who do not respect the forest protection regulations are sanctioned with the following two forms: Compensation for damage by planting the trees, or giving the breed, or giving the product at the levels of harvest per season. People own and use their own wood and bamboo forest. If they cut trees owned by other people’s forest, they will be accused as thieves. Anyone who would like to take the trees must tell their heads and can only be done with permission. No land clearance is allowed in the forbidden forest. After the forest worship festives, Hmong group take three days off work to give thanks to the Satyr. Also in these three days that are regulated by the law, that is, they are not allowed to enter the forest to cut trees down, to carry green leaves home from the forest, neither to dig roots nor to pick up bamboos, and not to graze cattle.

Although there are no written regulations, local people obey the rules voluntarily and seriously, which show a great respect for the forest.

During logging season, local people must avoid touching “lá ngón” tree (a wild toxic plant). According to Hmong group’s concept, this tree is home of demons. Once you touch the trees in the forest, the ghosts will follow people who will then be dominated by the devil until they cannot bear anymore and have to eat its leaves to be killed. Especially for the girls in their adulthood - the most beautiful age, will be highly loved to be followed by ghost of that tree.

Hmong group’s knowledge of forest protection also varies from family to family. Ms Hờ Thị Mao, a Hmong girl from Lang Nhi commune, Tram Tau district, Yen Bai province, said the Sùng and Thảo hold their worships to the Sun on 17th and 27th, lunar January. In those days, people must not enter the forest and use knives which are a way to bleed the trees, so the satyr may give punishment. That festive is held on the 19th and 29th, lunar September by the Hờ and the Tráng. The Sun is the supreme being of the
human mind. Satyrs are supervisor and protective guardian of the village and mountainous communities.

**Dao ethnic minority group:** According to the Red Dao’s customs, every year on January 15, families have a meeting at village’s head to discuss about the implementation of the convention in exploitation of forest resources.

In some regions, the Dao also specify whether the couple have children, they must plant a bamboo, indigo or cinnamon to mark this important event, if the child die, they have to plant a banana tree or a fruit tree and have to take care of this tree until it blossoms and gives fruits. This customs shows that in the concept of the Dao, the forest resource is precious and sacred as the life of a child. People and forest has a very close relationship as blood of parents with children. This is understandable because the Dao is primarily residential community gathered at rural and highland areas, unstable economic life, they must rely on forest resources to supply their food needs, solve problems about clothes and housing. All of this, people rely on timber in the forest for houses, shoots, vegetables, herbs, leaves to cover themselves…

**Kho Mu customary law** specifies that whoever take the forbidden forest trees will be fined in cash or confiscated for public fund. If they violate the "ghost forest", they are fined with chicken, wine, rice to worship first, and then invited by villager to remind the offender not to commit again. In Kho Mu group’s conventions, after an option of land for cultivation, the selector will perform “the le (a loosely-knitted wattle put near the bottom of the big tree or hung on a branch) and clear a land so that it is not covered by the forest trees. “The le” is a mark that the land is already owned by someone. The owner will have a right to collect all the yields from any one who violates and intentionally cultivates on that ground. During the upland cultivation, families having cattle must appoint a person to carefully look after it because if the fence on the upland ground is destroyed by the neighbor’s cattle, the neighbor who owns the cattle must build the fence again. If cattle destroying crops and rice for the first and second times, the owner will have to pay a 20,000 VND fine. The land owner has the right to shoot the cattle on its third violation. The planted forest is assigned to be managed by each family; A 10,000 VND penalty is given in case of a big tree destroyed by the cattle, and 5,000VND for small tree. Watershed and forbidden forests are not cut down arbitrarily.

These are the community rules concerning the protection of forest resources of some northern mountainous ethnic minorities. They contain abundant knowledge of the ancients on the conservation and exploitation of natural resources in a balanced, rational way to serve a useful and practical way of daily life.

**2.2. Discussions**

First of all, the local knowledge of ethnic minorities is the creation of communities to adapt to their ecological conditions. It is associated with activities and experiences in dealing with the environment of each ethnic group in each particular location. In the past, ethnic minorities living in the North depends heavily on the natural environment and to adapt to that ecological condition, they create treasures of knowledge about the local environment.

Most of the indigenous knowledge of EM in the North are maintained in memory, orally, and social practice. Only in the Thai, Muong people, the knowledge is documented in customary laws. Even so, we can see that the local knowledge is of prime importance, so it has vitality and get transmitted and used from generation to generation.

Settling in mountainous terrain conditions and having close relationship with the forests, northern EM has rich treasures of experiences in forest protection in indigenous knowledge systems.

Seventy five percent of Vietnam’s territory is mountainous, which give favourable condition with large forest reserves, ecologically rich potential, economic and natural resources ... for the ethnic communities living in the northern mountainous region. Forests provide wood for
house construction, firewood, herbal medicine ... Also such old and primary forests are also inhabited by valued and rare animals which are beneficial to humans such as leopards, deer, stag, elephants, and many precious strange birds. Forests protect human life against natural disasters and act as the green lungs to regulate climate ... This is the natural preference for humans.

Seeing the importance of forests, EM in the north has long drawn a lot of valuable experience in the protection of forests.

Forest resources are not only of great value in the economic life but also have social significance in the spiritual life.

Indigenous knowledge of the northern mountainous ethnic minorities reflects vividly and clearly the lifestyle, customs and traditions; it is an expression of the cultural identity of the people. In particular, local knowledge in protecting forest resources is a deep reflection of people’s religious and spiritual conception and belief. This is the mechanism that leads to believe in forest and its role to scare the community.

Each hamlet of the EM in the northern mountains has its own sacred forests – the watershed forests which prohibit logging, hunting and cultivation and always keep the water fresh for domestic production, agriculture and animal raising. Especially, when clearing forest clearance agriculture, people are always leaving the forest patches on the mountain top. Conventionally, this is the land for gods to reside, but local knowledge suggests these forests prevent torrential rain and flood events from top of the mountain at the same time, regenerate the birth of wild plants to be burnt during rotational moments.

There is a commonsense amongst groups that forests, forest trees, and forest animals have souls like humans. Each tree in the forest has a sacred tree god.

As for Ha Nhi, god of ferns is "Tá", the god of reed is “Prў”, the god of “chit” is "Trzung". In the poem "Xa Nhá Ca", the gods created the first four tree species are ferns (Sông), reed (Phoóng), Chrysopogon (İ), and “chit” ( Toόng). The trees along their god was sent to the ground to be the forest. Then bamboo, wood was also sent to the ground. Lush forests, wild animals are released back. When collecting firewood, picking vegetables, cutting of trees in the forest Ha Nhi must ask the god for permission to do.

Many animals and plants in the forest have souls like humans, some plant and animal species are tokens of the clan. People have kinships with animals in forest. So a lot of people avoid eating some animals, trees and consider them the token of the clan in the community.

Hanh: the fox is considered to be the token of Dơ names, lions to be that of Ché names.

Khomu groups considered musk-cat to be their token, and the family name is Tmoong. People of Quàng and Luông family avoid meat from tigers and weasel. The Lơ avoid bird meat from Ôm bird, The Tòng avoid Chrm Dre bird. The Thai, Luong, Hoàng, Quàng avoid tiger, they pray to tigers and present raw materials in the altar (especially in Chiềng Châu, Mai Châu, Hòa Bình). The Lơ worship the “tang lơ” bird, the Hà worship “bım bip” birds.

Thus, the concept and perceptions of forest have seen both reflected friendly relationship in harmony with the forest and make forests sacred. As a result, EM in the North are particularly interested in the forest, respectful and afraid of and always taking care of forest and trees there as their relatives or seniors.

Mechanism of making forest sacred helps local knowledge to implement in the community.

Derived from sacred trust, any member of the community will follow the strict conventions of villages in exploitation and use of forest resources. Therefore, we can see that local knowledge plays a role in management and organization, and regulating human behaviors, guiding them to follow life’s standards: no violations into the conventions of the community when exploiting and using forest resources. In addition, local knowledge also mirrors and
reflects the life of the ethnic minorities: it educates, deters, encourages, rewards and sanctions individual behaviours. Those who violate will have to make sacrifices to the gods and give fines under the provisions of the village. Part of offerings and punishments will be worshiping the god of forests and all people will enjoy.

Indigenous knowledge in protecting forest resources sets clear rules about exploitation. This suggests that ethnic minorities have certain perceptions on periods of plant growth, animal habits, and the appropriate time for planting.

Thus, in using forest resources, the people were initially thinking about sustainable development. So, the local knowledge of the ethnic minorities in the North not only makes sense in traditional society but also have practical significance in making decisions for socio-economic development among EM in a sustainable way.

3. Conclusion

Indigenous knowledge is the basis for maintaining life of the self-governing traditional closed societies with self-sufficient economy. In context of scientific, technical, and ethnic restrictions, northern EM created and accumulated a treasure of experience during their interaction with the nature and society. However, local knowledge also has limitations. Derived from local properties, it is difficult to understand with other communities and other areas. Despite this, there should be a confirmation of the role of indigenous knowledge in the protection of forest resources, and constructions of models for sustainable rural development.

Research on local knowledge in protecting forest resources has important implications for policy makers to sustain community-based forest conservation and cultural identity of ethnic minorities in the North - ecological, economic, cultural and social strategic area.

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DEVELOPING COMMUNITY BASED ENTERPRISES AND TRADITIONAL MARKETING FOR INDIGENOUS CRAFTS: A MODEL EXPERIENCE

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ABSTRACT

With the persistent poverty situation in the Philippines, the government is continuously searching for economic development solutions for the nation’s poor specifically those in the upland, forest areas. Unfortunately, the economic projects being currently promoted in the uplands and in the areas of the indigenous people are often commercial, agro-chemical based industries such as logging, large scale plantations and mining.

Lack of knowledge in enterprise development and management and market access among the IP communities are the basic needs to be addressed. They have the traditional skills, knowledge and practices in non-timber forest products based craft weaving which have good potential in the market. The Non-Timber Forest Products-

Philippines (NTFP-Philippines) works with the development of community-based enterprises as an effective strategy to promote the sustainable community forest management among the local folks while earning additional income to meet their needs. To support these community-based initiatives the CustomMade Crafts Center (CMCC) was established by NTFP-Philippines. This serves as the integrated marketing arm and design center for the crafts program. The center takes the lead in product development, design, assembly, finishing and marketing.

This program focuses on both market development and community enterprise development - working towards establishing a sustainable business that can generate demand for partners’ products. For the past 8 years, NTFP has gone beyond the traditional marketing for indigenous crafts. It creates and penetrates new markets for the community products through product adaptation, product diversification and branding. It has established a niche in supplying products made from indigenous textiles and crafts with varied functions to a wide range of market segments, including the niches for high-end fashion and home accessories, conference kits and gifts.
1. Introduction

With the persistent poverty situation in the Philippines, the government is continuously searching for economic development solutions for the nation’s poor specifically those in the upland, forest areas. Unfortunately, the economic projects being currently promoted in the uplands and in the areas of the indigenous people are often commercial, agro-chemical based industries such as logging, large scale plantations and mining.

Lack of knowledge in enterprise development and management and market access among the IP communities are the basic needs to be addressed. They have the traditional skills, knowledge and practices in non-timber forest products based craft weaving which have good potential in the market.

2. Developing Community Based Enterprises: The NTFP EP- Philippines Experience

A. The Non-Timber Forest Products-Philippines

The NTFP-Philippines is a collaborative network of Philippine grassroots-based non-government organizations and Peoples Organizations established to address the emerging livelihood needs of the upland forest dwellers, particularly those depended on NTFPs. It also focuses on issues related to NTFP development and management within the context of sustainable forest management.

A. Vision, Mission and Objectives

Vision: We envision a sustainable forest environment and quality life for forest-dependent communities.

Mission: We are a network of NGOs and POs working towards the empowerment of forest-dependent communities to strengthen, develop and promote non-timber forest products (ntfp)-based forest management strategies that are sustainable, culturally-appropriate and gender responsive.

Objectives

1. To promote a favorable policy environment on community and NTFP-based forest management at local and national levels.
2. To institutionalize NTFP-TF as a network of POs and NGOs working towards the promotion of and sustainability of community and NTFP-based forest management at the local and national levels.
3. To strengthen, develop and promote the sustainable management of NTFP resources.
4. To improve economic and social benefits and promote indigenous culture of forest based communities through sustainable enterprises.

Programs and Services

1. Programs
   a) Resource Management
   b) Policy Advocacy
   c) Network Development & Information Sharing,
   d) Community-based Enterprises
   e) Marketing

2. Services

Non Government Organizations and Peoples Organizations Partners(NGO and PO partners)

1. Tribal Council for Development (TCD)
2. Samahan ng mga Agta na Binabaka at Ipinaglalaban ang Lupaing Ninuno (SAGIBIN-LN)
3. Kalahan Educational Foundation (KEF)
4. Kabalikat sa Kaunlaran ng mga Ayta Inc. (KAKAI)
5. Kapulungan ng mga Mangyan Para sa Lupaing Ninuno (KPLN)
6. Samahan ng Nagkakaisang Mangyan Alangan (SANAMA)
7. Pantribung Samahan ng Kanlurang Mindoro (PASAKAMI)
8. Nagkakaisang Tribu ng Palawan (NATRIPAL)
9. Upland Marketing Foundation Inc (UMFI)
10. EnterpriseWorks Worldwide- Philippines (EWW/P)
11. Custom Made Crafts Center (CMCC)
12. Broad Initiatives for Negros Development (BIND)
13. Father Vincent Cullen Tulugan Learning and Development Center (FVCTLD)
14. Agtulawon Mintapod Higaonon Cumadon (AGMIHICU)
15. Mangyan Mission (MM)

**B. The NTFP Enterprise Development Program**

Community based enterprises use business to improve the life of a community. They are different from private enterprises because their business activity is undertaken as a means of achieving community benefits, not private gain (www.communitypartnering.info/what45.html).

The NTFP Enterprise Development Program aims to improve the economic and social conditions and women and men from upland communities (including indigenous peoples) by increasing their incomes and capabilities through the production and marketing of fairly traded, high quality NTFP based crafts and food products.

Crafts products include NTFP products that do not go through chemical change; non-timber forest products; recycled/waste products; and cultural products. On the other hand, processed NTFP food includes forest food like wild fruits, nuts, and other raw ingredients transformed into other forms like juices for consumption by humans or animals either in the home or by food processing industry.

CBE shall be community-owned; community-led; community-controlled; able to generate profits or surplus; socially and environmentally responsible; and financially self sustaining. The CBEs established by NTFP are mainly forest communities, cultural communities, with at least 10 members and willing to expand.

Small enterprises like that of the CBEs continue to contribute to the country’s economic stability and well being. These enterprises create jobs for the unemployed and put what would otherwise be idle resources into productive means (Business Plan Workbook).

1. *Operating the Community-Based NTFP Enterprises*
   a) Organizing and strengthening CBNEs
   b) Capacity building
   c) Incorporating indigenous knowledge, systems and practices into CBNEs.
   d) Integrating sustainable resource management plans in CBNE operations.
   e) Identifying appropriate markets.
   f) Developing products and appropriate technologies.
   g) Linking CBNEs to value chain actors.
   h) Conducting needs-based research
   i) Providing access to finance.
   j) Monitoring impact
2. Geographic Coverage of the Enterprise Development Program

The enterprise development program of Non-Timber Forest Products Philippines (NTFP-Philippines) for the year 2012 covers 12 provinces, 32 municipalities, 5 cities, 100 barangays and more than 120 small villages or sitios.

Provinces covered are Ifugao, Benguet, Nueva Vizcaya, Quezon, Oriental Mindoro, Occidental Mindoro, Palawan, Aklan, Zamboanga del Norte, Zamboanga del Sur, Misamis Oriental, and Bukidnon.

3. The Community-Based Enterprises (CBEs) Status

Fifty-three (53) community-based enterprises (CBEs) have been assisted, mentored and provided with technical support for the year; 30 are in the start-up period; 18 are in a build-up status and 5 are already at the take-off stage.

The CBEs are located at Oriental Mindoro (11), Palawan (10) and Occidental Mindoro (9) have the most number of CBEs assisted

15 CBEs registered / accredited with government agency (SEC-10, CDA-1, DOLE-4)

Funded / implemented under 7 Projects (CORDAID 1.3–14; CORDAID Crafts-15; EU/NSA-8; EU/PLAN-9; ADVANCE-REDD-4; EU/IUCN C2P2-2; TEFI-1)

Core Businesses: Food (23); Crafts (23) Others (natural dyes; eco-tourism; seedlings; essential oils; marketing (11).

Table 1: Direct and Indirect Beneficiaries of the Enterprise Development Program (2012)

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
<th>Mix</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Beneficiaries</td>
<td>758</td>
<td>528</td>
<td>-</td>
<td>1,286</td>
</tr>
<tr>
<td>Indirect Enterprise</td>
<td>524</td>
<td>607</td>
<td>233</td>
<td>1,364</td>
</tr>
<tr>
<td>Indirect Household</td>
<td>1,423</td>
<td>1,476</td>
<td>2,345</td>
<td>5,244</td>
</tr>
<tr>
<td>Total</td>
<td>2,705</td>
<td>2,611</td>
<td>2,578</td>
<td>7,894</td>
</tr>
</tbody>
</table>
Beneficiaries

A total of 7894 individuals benefited from the various enterprise activities implemented in these provinces. These beneficiaries were categorized into three:

Direct Beneficiaries (DB)

These individuals have directly benefited from the projects implemented by NTFP-Philippines. They are members of the community-based enterprises assisted by the NTFP-TF enterprise development officers (EDOs). They participated in the various activities related to enterprise development and leadership formation conducted for the entire year. This group comprises 16% (1,286) of the total beneficiaries where 59% are women. Most of the women producers are engaged in crafts production and food processing while the men are more into harvesting activities for honey and other food products.

Indirect Beneficiaries-Enterprise (IBE)

This group of beneficiaries indirectly benefited from the project by gaining income as a result of their participation in various stages of the CBEs' value chain. They may either be harvesters and suppliers of the semi-processed materials used by the DB in their production activities. Others are engaged in transport and delivery while others are stand-by subcontractors who assist in production activities when orders are high. They also gain income as a result of the CBE enterprise operations. For the year 2012, the indirect beneficiaries have almost the same count as the direct beneficiaries. Many of these IBEs are from the provinces of Occidental and Oriental Mindoro where most were engaged in honey harvesting and beadwork production.

Indirect Beneficiaries-Household (IBH)

They are not involved in the CBE operations but benefiting from the income derived by the member of the CBE. They may either be household or family members of the direct beneficiary. On the average, each CBE member shares the benefits to four household members. There were a total of 5244 household members. Not included in this count are the household and family members of the IBEs who in one way or another also benefited from the income derived by the IBEs.

The beneficiaries belong to 10 indigenous and 1 rural upland community: Agta-Dumagat, Aplay Kankanaey, Ifugao, Kalanguya, Mangyan, Pala’wan, Tagbanua, Batak, Higaonon, Subanen, Aklanon.

III. Traditional Marketing of the Indigenous Crafts

A. The Custom Made Crafts Center

CustomMade was informally launched in 2003 as an initiative to expand the market for indigenous and rural crafts in order to create a regular source of livelihood for the upland dwellers and provide a venue for the continuation of their traditional arts. CustomMade, through continuous product development and market linking, finds new niches, uses and applications for the traditional products and skills. This serves as the integrated marketing arm and design center for the crafts program. The center takes the lead in product development, design, assembly, finishing and marketing.

CMCC also seeks a stable income source for artisans and a venue for their self-expression through traditional art forms

A. Strategies – through the following strategies, CMCC ensures fair trade and respect for cultures:

1. Creating opportunities for economically disadvantaged producers
2. Capacity building
3. Better environment practices and consumer education
4. Respect for cultural identity
5. Transparency and accountability
6. Payment for fair prices
7. Gender equity
8. Humane working conditions

A. Markets and Marketing

Marketing is the process of communicating the value of a product or service to customers, for the purpose of selling that product or service.
Drop in sales from 2011 to 2012 was due to high export sales in 2011; no honey harvested in 2012; sales of some CBEs under crafts project was only until June 2012 because the project ended;

Through the years, CMCC developed different markets for the products. Regular buyers include the government offices, Non-Government Organizations, the academe and private individuals. Strategies to market the products also includes participating to different trade fairs, shows and exhibits and conferences.

The CBEs were also given training on marketing strategies and business planning. Aside from the CMCC as primary market at the national level, the CBEs also strengthens their local markets. They participate in local trades fairs, maintain product display at local shops, hotels and restaurants and encourage walk-in buyers. Among the total CBEs, 23 of them already developed their own marketing plans which they successfully implemented last year.

IV. Impacts of the CBNEs

CBEs primary objective is to provide additional income for the members. However, beyond this goal, they were also able to finance other household needs such as education of children and other businesses of the family.

Seventeen (17) CBEs have generated a total of Php738,305.91 for the year 2012. The average is 43,429 per household and this is about 23% of the total household income.

According to the beneficiaries, this supplementary income from the enterprise is used to finance the income deficit which is mostly used to finance their children’s education and purchase of basic household items.

Household savings is not yet common but 3 CBEs (the high income earners) have already started which hopefully will set the trend among CBEs.
VII. Acknowledgement

The author gratefully acknowledged Ms. Olivia Magpili for her assistance and invitation to this international conference. He also wishes to extend his gratitude to Ms. Ruth P. Canlas, NTFP Philippines Executive Director for allowing the author to participate in the conference and for all her support. Sincerest thank is also extended especially to Ms. Beng Camba, NTFP Philippines Enterprise Coordinator for all the materials and presentations used in this paper. To his wife and daughter, thank you very much.

VIII. References

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ASSESS THE IMPACT OF MODEL LIVELIHOOD OF PRO POOR FOREST PROGRAM TO INHABITANTS IN HONG HOA COMMUNITY, MINH HOA DISTRICT, QUANG BINH PROVINCE

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ABSTRACT

Hong Hoa is one of 15 high mountainous communes of Minh Hoa district, Quang Binh province. Due to harsh natural conditions so life of people here are very difficult. In recent years, Hong Hoa commune has been supported by the government in creating favorable conditions for economic development, including "Pro Poor Forestry Programme in the North Central Agro-ecological Zone" (PPFP) that partially overcomes the difficulties that Hong Hoa commune people are facing. The results of the article assess the impact of the livelihood patterns of PPFP to Hong Hoa commune people.

Keywords: impact of livelihoods, PPFP project

1. Introduction

Minh Hoa district is located in the high mountainous north-western province of Quang Binh, bordering the Democratic Republic of Lao People with 89 km border, north of Tuyen Hoa district, southern and southeastern borders Bo Trach district. The district has 15 communes and one town with a natural area of 1,410 km². Its population is over 49 thousand people, in which the population of working age is over 27 thousand people [7]. This is a district with great potential and strengths as connecting to international border gate Chalo – Nà Phàu, with an important transportation route as a focal point which goes through the Ho Chi Minh trail and runs through the length of district with road route number 12C. The shortest route connecting the northeastern provinces of Thailand through Laos, highway 1A, the Hon La (Quang Binh), and Vung Ang (Ha Tinh). Besides, there are many historical sites such as Pass supple leather, leather caps, Underground Rinh, Khe Ve, Chalo, ... Heaven Gate, the natural forests, an attractive place to build a resort ecotourism as Tu Lan cave in Tan Hoa, Thac Mo in Hoa Hop, Water Loss in Dan Hoa, Northern Pass caves in Hoa Thuong, Hoa Tien, Hoa Thanh [7] However, Minh Hoa district currently remains a poor and economically underdeveloped, fragmented production, dependent on natural resources. The economic structural shift is also the slowest industry in terms of handicrafts and services. The main economic components are economic households, smallholder and individual economy.

Hong Hoa communes lies in the West of Hong Hoa district, with a natural area of 71.57 ha, the 5th largest in the 15 communes of the district. There are 833 households with 3,357 people, of which there are many different ethnic minorities such as Kinh, Bru, Chứt, Thổ, Mường và Thái [1]. Its income mainly come from corn production, cassava, beans, and rice, including pig, chicken and cattle raising along the valley, but only on a small scale, so the lives of the people here face a lot of difficulties (especially for Bru và Chứt) [2], [3], [4]. The poverty rate in this area was 52%. With an area of large forest land and high poverty rate as Hong Hoa
In the past years, together with the interest of the Party and the State, the project program has actively supported ethnic minority households in mountainous commune’s model for building family economic development, contributing to hunger elimination and poverty reduction leading to a stable community life [5].

The project "Pro-poor Forestry Ecological Agriculture in the North Central" (abbreviated as PPFP) funded by Trust Fund which was approved on 05/05/2008 by virtue of Decision No.1342/QD-BNN-HTQT of the Minister of Agriculture and Rural Development supported six (6) units, including Quang Binh province. Under the leadership of the Department of Agriculture and Rural Development, Forest Protection Department of Quang Binh People's Committee in collaboration with 4 communes of Cao Quang, Nam Hoa (Tuyen Hoa district) and Trong Hoa, Hong Hoa (Minh Hoa district) multiple agro-forestry models [2], [6] were deployed. After nearly 5 years of implementation, the project achieved the criteria outlined in the projects, including many models in Hong Hoa which brought transparent economic benefits, wherein the local people responded to the application and contributed to the restructuring of crops, livestock, diversification of products, hence, these action resulted to poverty alleviation as desired by the project.

Hong Hoa Commune’s Map
II. Subjects and Methods

2.1. Subjects

- Households participate in PPFP Hong Hoa commune, Minh Hoa district, Quang Binh province.
- The policies support the economic development for Hong Hoa commune

2.2. Methods

Research materials, documents relating to the policies supporting the economic development in Hong Hoa commune are collected. Households and community surveys are conducted.

III. Results and discussion

In order to implement the project successfully, Forest Protection Department collaborated with People Committee of commune to organize meetings with local people to select households for implementation of independent models (giving priority to households with available labor but lack of budget), and to select households who own forest land (with certificate of land use/rights) to perform group household models (planting acacia trees). The Board of Project Management depended on actual survey results about land conditions, water, labor, ability of household’s counterpart funds in order to consult them on what types of animal, cattle to raise, and the tree that they should plant effectively. Specifically, the Board of Project Management selected three (3) main models for 89 participating households, which include: model of planting economy forest tree (planting acacia trees), NTFP model (bamboo and rattan) and agroforestry models (fruits, native plants, porcupine, fish, beef Sind, and goat).

3.1. Evaluation of PPFP livelihood models in Hong Hoa commune

3.1.1. Evaluation of model of planting economy forest tree

With an area of 21 ha (7 ha pilot, 14 ha replication), the investment of 189,541,100 VND was allocated for 81 households (20 participating households replication model, 61 participating households pilot). The participating households were supported seeds, fertilizer, actual price to prepare land, with the guidance of technicians on how to take care of plants. Therefore, most forest trees grow in good condition. Currently, acacia trees fully cover all hills in Hong Hoa communes, with an average height of approximately 6.0 m, and 8 cm in diameter.

![Pie chart](image)

Figure 1. The percentage of people in agreement with Acacia hybrid model
As shown in Figure 1, only 13.58% of the interviewees said that Acacia hybrid model in Hồng Hóa commune will not bring economic efficiency because the harvest time was too long, instead they prefer to grow short-term crops which provide rapid income generation for people; while 34.57% of the people interviewed said that this model is normal; and 51.85% of the people said that this model will bring economic sufficiency. Besides, this project has contributed to environmental protection, soil erosion control, flood protection, and has raised awareness of the people in forest protection.

Currently, the initial model has not brought economic efficiency yet, but it is expected to have benefit in 2015 with an estimated value of 40,000,000 VND/1ha. In general, the total harvested area reached 840,000,000 VND. In addition to the impact of environmental model, it is not ordinary because it is contributory to climate control through reducing heat from the sun, protect soil, flood protection. In conclusion, the people were excited and they appreciated the effectiveness of this model.

3.1.2. Evaluation of agroforestry models

Agroforestry models had investment fund of 137,352,000 VND, with 8 participating households, including components: raising porcupines, goats, fish, Sind cow, planting fruit trees and other native plants.

Initially, some components brought income to people (especially Sind cow model), however after a period of time some components failed to maintain their operations because of many reasons, such as: no gazing place for goats, no market for porcupines, and fruit trees are not suitable with local conditions.

Figure 2 shows the number of households participating in agroforestry model. Results shows that the most model decreased through the years with only some models still existed. For example, Sind cow model is considered as good because from 5 pairs of cow in 2009 increased to more than 30 cow heads at present. The people are excited to leverage this model because it reused residual products of agriculture and bring stable income.
3.1.3. Evaluation of NTFP model

This model consists of two components, the filled bamboo and rattan construction. In this model, 03 households in two villages with an area of 1.2 hectares used filled bamboo architecture model 0.5 ha, and 0.7 ha of rattan. In general, the structure of bamboo and rattan are fully developed and grown well in natural conditions in society, but the output of the product showed similar difficulty..

As shown in diagrams 3 and 4, the size and number of dust (clusters) of bamboo and rattan filled structure in Hong Hoa commune changed over the years, mostly descending (especially rattan plantation model).

Figure 3. The variation in the area of component models NTFPs

![Graph 3](image1.png)

Figure 4. The variation in the number of components in the model of non-timber forest products

![Graph 4](image2.png)
3.2. Cause non-maintainance of some components in livelihood patterns of PPFP

During the course of the study, interviews with households in Hong Hoa commune revealed that some causes of livelihood models PPFP were not effective as set out in the initial target, as follows:

First, the poor or lack of access to credit, due to no collateral and they must rely on investment (passive) or mortgage loans with a minimal amount. On the other hand, they have no specific plans to produce or use borrowed funds for appropriate purposes. It is for this reason that makes them vulnerable and prone to high risk.

Secondly, they do not have high opportunities to access to services such as agricultural production, fishery, and animal and plant protection due to low levels of education. This situation has increased costs, reduced income on a unit of product. At the same time, they are passive in finding outlets for products and much dependent on the wholesale traders.

Third, a number of components in the model of the project is not really consistent with natural conditions and cannot meet the needs of local people.

Fourth: unresolved output stages for the product in the model project.

We can confirm that the failure to maintain the above model was due to many objective and subjective reasons linked with random course and due to limited and inefficient sustainability of livelihood patterns.

Although there are some models no longer maintained or reduced in number of participants, but it is clearly that the PPFP has positively impacts to socio-economic development in Hong Hoa. Along with the efforts of participants, pilot demonstration models such as raising sind cow, planting bamboo and native trees continue to promote efficiency to local households.

3.3. Solutions to effectively reduce poverty

To support efficient projects for poor people, there is no one single solution but to sum up the different solutions. Within the scope of this paper, we suggest some solutions:

First, create a favorable environment for the poor. Particularly, the investment of projects which are not directly for the poor, but will create a favorable environment, i.e. create good opportunities for the poor to be able to grasp in order to help them escape from poverty, avoid erroneous feed back to the State, the political organizations - social ...

Second, the sub-regional impact of poverty. Specifically, the project will proceed to split the areas of study into different characteristics (in terms of natural conditions, economic - social, poverty rate ...) in order to apply these solutions in reducing poverty, thus bringing practical results for each region, and each households.

Third, direct support for the poor, to implement synchronous social policies to address immediate challenges for the poor, the social policy beneficiaries, poor households. At the same time, implementing synchronous measures to boost economic development in order to increase income stability for farmers. Specifically, the implementation of policies through exchange support care and protection of forests, forests and forest land to increase the production...

Fourth, the development of livelihood model into diversify and progressive model by combining crops and perennial crops on the basis of intercropping, crop rotation, and eventually to widen the project for their staple
food, creating jobs and bringing in immediate income for the people.

Fifth, introduce livelihood models which do not require big investment and requiring intensive use of too much work, such as products which are hard to buy and sell, prone to disease risk and high market prices. Prioritize livelihood models based on local knowledge of the people under the motto "every village with an outstanding product"; combine agricultural and non-agricultural employment sustainability.

**IV. CONCLUSION**

Poverty reduction is the priority policy of the government to improve the living standards of the poor, and to bridge the gap and the level of development among regions, localities and among nations and residents. Achievement of poverty reduction in recent years has contributed to economic growth and social justice, improving the quality of human life. After nearly 5 years of implementation of PPFP in Hong Hoa commune has made significant positive changes. The first step shows that the model has generated revenue and established livelihood for the people, built and enhanced the people’s sense of economic development, and self-help towards poverty alleviation.

However, some weaknesses have arisen in the implementation process, not as good as the work of community consultation in the selection of building economic models, hence, there is no consistent pattern, and lack of promotion of internal resources of the community which obtain benefits from the model; weak quality management model; weak and not proactive management strategy in terms of supply of inputs and consumption, leading to risk and causing harm to the people; passive training and technology transfer among farmers. The project managers are local people who have not undergone trainings in the profession.

**REFERENCES**


MARKET ACCESS AND THE SUSTAINABILITY OF COMMUNITY BASED TOURISM ENTERPRISES: CASE STUDY IN DROONG VILLAGE, DONG GIANG DISTRICT, QUANG NAM PROVINCE, VIETNAM

Ngo Thi Tra My[1], Doan Van Tin[2]

Quang Nam University

ABSTRACT

Community – based tourism (CBT) is currently considered as a model of tourism optimizing the benefit and the importance of the host community. The community – based tourism enterprises (CBTEs) is trusted to guarantee the prosperity of the whole community through appropriate distribution of social and financial benefits. However, only a CBTEs could partially fulfill these objectives. The main reason of failure of CBT projects is widely confirmed regarding to market access. Despite of the efforts of sponsor – SIT/ILO, the Droong CBT village confront the threats of its survival. It is necessary to clarify the status of market access in which the community based ventures are undertaking and highlight the urgent issues toward the long-term viability of these businesses.

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[2] Doan Van Tin, Master of Tourism, Monash University, Australia; Head of Geography and Tourism Division, Faculty of Culture and Tourism - Quang Nam University.
Introduction

Traveling to the pristine destinations, with wild nature and indigenous culture, has been emerged as an addictive trend attracting many responsible travelers. The role of tourism as a tool for sustainability and poor alleviation has been promoted significantly. Also, it is believed that mass tourism has exacerbated the exclusion of vulnerable groups and commodified indigenous culture. These trends have paved way to the feasibility of community-based tourism (CBT) activities (Mitchell and Muckosy, 2008). Community based tourism is accepted worldwide as a model of tourism involving community participation in terms of ownership, decision-making, management and focusing on generating benefits for local communities.

The prevalence of CBT gave rise to the concept of community-based tourism enterprises. This refers to a venture established, owned and managed by an individual or group with a common interest at host community, satisfying the following criterias: Community initiates offering products/services based on the community assets and resources (Manyara et al, 2006) and community reaps the benefits of tourism activities (Forstner, 2004). The CBT enterprise directly involves a certain individuals or groups who are organized in tourism committees or other institutional structures. On the basis of community acknowledge, these ventures assume the tasks and economic benefits rotationally between different households.

Studies in CBTEs have been given the attention by many researchers globally. Ideally, CBTEs have great significance in pro-poor benefits, offering opportunities for local economic, social and environmental development. International Finance Corporation (cited in Jones, 2008) admitted that CBTEs could generate a variety of positive social and economic development impacts in highly rural, biodiversity area. World Tourism Organization (cited in Manyara and Jones, 2007) asserts tourism as a tool for economic development and poverty alleviation in developing countries, emphasizing the role of small and medium enterprises development, stressing government support in such development. It is small and medium tourism enterprises who are best to sustain local economies and to reduce poverty. They are promoted as an additional livelihood option for rural residents who can not depend solely on agricultural production as the only source of income (Forstner, 2004). This function enables CBT to be assigned as a tool by many international organizations in alleviating poverty such as: the Dutch development organization SNV, International Labour Organization, World Bank.

However, in fact, a few CBTEs could partially fulfill these objectives. Three out of 25 CBTEs in Zambia were evaluated as successful enough (Dixey, 2008). Mielke (2012) highlighted four out of 26 CBT projects in Brazil that achieve sustainable success. In a survey conducted by Rainforest Alliance/Conservation International involving 200 CBT projects across the Americas, many showed accommodation occupancy rates of just 5% (cited in Mitchell and Muckosy, 2008). The reasons for the failure of such CBT models have been resounded throughout the literature, in which the main cause is poor market access (Ashley et al (2001), Goodwin (2006), Mitchell and Muckosy (2008)). Also, marketing skills have been identified as the major challenge for sustainable development of community-based ventures (Sebele, 2010).

Droong village (Ta Lu commune, Dong Giang district, Quang Nam province, Vietnam) has been encouraged to focus on tourism as an additional livelihood for locals, beside brocade weaving and farming. Under the support of SIT/ILLO[3] project, Droong community based tourism village entered to tourism market place with a well-prepared marketing strategy. Irrespective of all related stakeholders’ efforts in maintaining the benefits reaped in the aided

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[3] Strengthening of Inland Tourism in Quang Nam province/International Labour Organization
period, the CBTEs in this village, like the other project’s beneficiaries, currently confront the threats of prosperity. This paper aims at identifying the current situation of market access in which the community based ventures are undertaking, hence, highlighting the urgent issues toward the long-term viability of these businesses, in accordance with the expected outcomes of CBTEs.

**Role of market access in the sustainability of CBTEs**

It is apparent that marketing plays a vital role for the survival and development of CBT ventures. Marketing research and demand-driven product development are among the key conditions for the success of CBTEs (Armstrong, 2012). The marketing efforts are necessary to align the local products and services with the needs and expectations of targeted travelers in terms of quality and design. According to Rozga and Spenceley (2006), market access in tourism means getting accurate and adequate information to the proper sales channel and providing the means and confidence to make a purchase decision. Forstner (2004) assumed market access refers to understandings of service and marketing intermediaries. In this paper, the concept of market access illustrates the capability of conducting and expanding intermediary channels and promotional tools to integrate CBT information and/or CBT products into the marketplace. It is important to have the trade relationships with intermediaries for products/services distribution and promotion. The representatives from intermediaries are experts in tourism market in comparison to local people, thus, they would give the useful assistance in promoting community’s products and make these products to high-quality standard (Mielke, 2012). The personnel provides technical support for optimizing various communicational tools, both in personal and mass media should be included.

Nevertheless, local communities have to face many limitations in implementing tourism projects: lack of financial resources, infrastructure or know-how, limitations of a cultural kind and potential conflicts between the different public administrations (Nyaupane, Morais and Dowler, 2006). These weaknesses might interfere with the potentiality of being successful of such community-owned ventures, including the marketing competence. Another reason explaining the barrier to market access experienced by the CBT ventures is their location in remote regions. This includes distance from the markets, lack of road and communication infrastructure, lack of market information and business skills as well as a lack of political terms and conditions upon which they participate in the market (Forstner, 2004)

Thus, any initiatives taken toward CBTEs, irrespective of external aids or internal fund, need to address these threats of sales and marketing in order to avoid the potential failure of the business.

**Community-based tourism enterprises in Droong village, Dong Giang district, Quang Nam province**

Droong village locates in Ta Lu commune, Dong Giang district, 93 km from Hoi An - a tourism hub of Quang Nam province. This village is rich in culture with an ethnic minority Cotu community. Its seduction also derives from beautiful landscape and natural warmth of the village residents. Furthermore, Droong village is on a tourism route leading to the Western parts of Quang Nam provinve, with many attractions clustered around the legendary Ho Chi Minh Trail. This route could be reached directly from Da Nang and Hoi An (via 14G national road) and Thua Thien Hue province via Ho Chi Minh highway. Thus, the source of tourist generation is feasible for Droong village, as well as a group of destinations in mountainous region of Quang Nam where Droong is a part of.
Community based tourism activities has been initiated in Droong village (Dong Giang district, Quang Nam province) in early 2012, under the financial aid and technical support of SIT/ILO project. And, community based tourism services have officially launched in 23 June 2013, on the occasion of Quang Nam Heritage Festival 2013. With sustained donor funds, committed technical assistance and initial market linkages, CBTEs in Droong village have achieved some outstanding pro-poor benefits.

Droong village attracts visitors with woven brocade products, handicraft demonstration by Cotu women, traditional dance performance in front of Guol house, trekking tours, local guide, fishing, homestay and Cotu’s cuisine.

Cotu people used to weave textiles for local needs only: traditional clothes used for ceremony purposes, gift for the relatives. Only a small percentage of brocade wefts were sold for cash or exchanged for other furniture on the local market. All of the textile products are made by Cotu women, beside their time of farming. Under the support of SIT/ILO project with tourism oriented, brocade textiles of Cotu women have had a chance to access tourism market, which is believed to upgrade the economic value of handicrafts remarkably. Tourists will have chance to study traditional culture of Cotu people through the patterns decorated on Cotu’s fabrics, clothing and other products. The combination between the original and modernly designed patterns provide tourists with a wide range of souvenirs from Cotu’s crafts. Also, it would be a great experience for the visitors to witness the weaving artists demonstrating their works.

Apart from very first impressive attraction of textiles and weaving performance, other community-based tourism services have also been available for various traveling options. Behind the village gate with slopping road, the world of indigenous Cotu culture still remains authentic. The Guol house in the centre,
surrounded by low-rooted stilt-houses and tranquil landscape, catches the tourists’ eyes. The pace of life is still slow here where the visitor can see the kids playing joyfully in frontyard, the ladies in traditional dress doing weaving and the farmers with their unique back basket chilling out together. A trekking tour to the jungles, escorted by local guide, will take the visitors to the pristine stream, cool waterfall, paddy fields and spiritual area of Cotu tombs. At night, when the large bonfire is burning up, the travelers could participate into tung-tung-ya-ya dance in the echoes of gong and sounds of the night. Meanwhile, the taste of “Can” wine (local specialty of the village), harmonized with “com lam” (ticky rice cooked in bamboo), wild vegetables and Cotu barbecue, all add more mystery to the mountainous area. The tourists could choose a homestay to stay overnight in the village. Being member of a Cotu family, giving a hand on their daily work and relaxing in a wooded stilt will be an unforgettable experience for visitors.

In order to operate all the services and products of Droong CBT village, there are two business groups: (1) COTU YAYA brocade weaving and (2) community based tourism services. They work under the principles of tasks proposed and benefits received correspondingly. Every business will leave 5000 dong per traveler to contribute into the foundation of community development.

In details, a group of female weavers has established a community - owned venture providing handicrafts and weaving demonstration for visitors. They consist of 16 Cotu women (initially 18 people), dividing into two alternate shifts. With the support of SIT/ILO project and the local government, they set up their own production workshop and outlet on the 14G road in front of Droong village. The products include scarf, shirt, skirt, wallet, table cloth blanket, handbag, and so forth. All of them are hand made, branded as COTU YAYA, crafted in Quang Nam and attached with details of manufacture information. The head and deputy head are elected as facilitators for all contrasts, financial management and planning the working roster. A meeting is held every month-end for clarifying revenue, cost and delivering profit for members.

The second group, with total of 38 peoples, takes in charge of offering community based tourism services. There are four divisions in the group (cuisine, homestay, local guide for village sightseeing, fishing and trekking, traditional dance and folk song performance) and they respond to all bookings, prepare the readiness of the service, give warm welcome and serve with hospitality. Two homestays in the village have maximum capacity of serving eight guests. Alternatively, Goul house potentially provides accommodation for a group of ten plus travelers if equipped with appropriate facilities and amenities. The service of trekking takes approximately three hours to enjoy and photograph the daily life of local residents, beautiful wild flowers, paddy fields, waterfalls and Rame stream. Three local guides are available to escort the visitor to enhance the pleasure and experience of the walk. Another option for travelers with lesser time duration is fishing tour at the local people’s fishponds. Foods and beverages made from local ingredients, herbs and recipes are served on request in advance. A team of 20 up to 30 actors perform dance and folk songs on demand or in festival season. For every services reserved, the concerned parties reap the benefits after deduction of 5% into the foundation of community development.

**Market access of community-based tourism enterprises in Droong village, Dong Giang district, Quang Nam province**

This village of over forty years old has exposed many pros and cons in which the CBTEs have generated. A deep analysis of SWOT would clarify the local context influencing the operation of CBTEs in term of marketing capabilities.
Figure 2: SWOT matrix of Droong’s CBTEs

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Well-preserved indigenous culture of Cotu ethnic people</td>
<td>- The aids from local and central authorities, in correlation with NGO projects</td>
</tr>
<tr>
<td>- Magnificent landscape and fresh nature</td>
<td>- The possibility of connecting other surrounding attractions into different packaged tours</td>
</tr>
<tr>
<td>- Skillful artists in brocade and rattan weaving</td>
<td>- Easy accessibility from Hoi An, Da Nang and Hue – hubs of tourist generation</td>
</tr>
<tr>
<td>- Hospitality of local residents</td>
<td>- The transition of tourism strategy with further focus on inland and mountainous regions of Quang Nam, where Droong village is a part of</td>
</tr>
<tr>
<td>- Integrity of village’s community</td>
<td>- The scarcity of skilled weaving artists on other surrounded counterparts</td>
</tr>
<tr>
<td></td>
<td>- The emergence of tourism trend toward responsible tourism oriented outside world heritages</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weaknesses</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>- The lack of local residents’ understandings about tourism knowledge and business management</td>
<td>- The blossomed prevalence of similar mode of tourism service in the area</td>
</tr>
<tr>
<td></td>
<td>- Continuous increase regarding cost and acknowledgement of marketing activities</td>
</tr>
<tr>
<td>- The conflict between locals’ expectation of short-term result and long period of investment and training required</td>
<td>- The potentiality of adverse impacts of tourism commodity on local culture and nature</td>
</tr>
<tr>
<td>- Limited capital initiated from community for community based ventures’ investment</td>
<td></td>
</tr>
<tr>
<td>- The incident weaknesses of ethnic minority in term of passive attitudes</td>
<td></td>
</tr>
</tbody>
</table>

It is obvious that Droong village confronts crucial challenges in capacity of market access. Being aware of these constraints, the sponsor (SIT/ILO) has devoted their efforts in establishing market linkage for the ventures of weaving and CBT in Droong village.

(1) Toward the CBTE of brocade weaving, the products are sold directly at the group owned outlet in front of the village. Located in 14G national road and 2 km from Ho Chi Minh highway, the outlet has many advantages in being accessed by both free individual travelers (FIT) and groups inclusive travelers (GIT). In fact, there are averagely three to four groups of stop-over travelers at the outlet for sightseeing and purchasing souvenirs of woven handicraft.

The primary retail partner of Droong textile group is Avana shop in Hoi An city, Quang Nam. This boutique, at the heart of Hoi An ancient town and locally produced, provides house-designed garments and accessories. The partnership agreement is undertaken by means of
introducing the product for business approval, negotiating the contrast, applying the wholesale’s design into selected products, and other relevant terms. This business cooperation has inevitably benefited to the weaving artists, maintained the stability of the group’s production.

Below figure shows the quantities of handicrafts consumed by Avana shop for the last five months, since January (2013) till present.

Figure 3: Handicraft production transacted in Avana shop from 1/2014 to present

<table>
<thead>
<tr>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>Upto present</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>9</td>
<td>17</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Avana shop’s records

It could be seen from the table that, there is a fluctuation in the amount of handicrafts sold in Avana shop. It is explained by the interruption of supplying chain as per designer’s requirements. Apart from taking branded products from Droong’s brocade weaving business, Avana shop also requests the Cotu artists to provide brocade fabrics on demand of color and pattern design and the designer would take this as a material for totally new products without Cotu brand name. The customers are free to discover more information about the origin of Cotu handicrafts or textiles with help of a catalogue published by SIT/ILO project and two other reference books of Cotu culture in which Cotu weaving is mentioned. Also, the shop sellers, who are trained about Cotu culture in the West of Quang Nam, could convincingly interpret the stories behind every craft or purse made by Cotu women’ weaving skills. On the other hand, COTU YAYA handicraft has been indirectly promoted through Avana marketing activities such as business card, product’s label, magazine’s advertisement and fashion shows.

SIT/ILO project has also collaborated with UNESCO’s “Signature handicrafts” project in adding the function to Tourism Information Centre in Hoi An in display and retail sales of locally produced handicraft products. In addition to this, another collaboration between SIT/ILO project and Life Start Foundation has been raised to sell COTU YAYA products in two their retail locations in Hoi An. However, the perceived effects are worth inconsiderable.

Regarding promoting CBTE’s products to potential markets, the group’s artisans have attended and performed weaving in many tourism events in Ho Chi Minh, Ha Noi, Hue and Quang Nam. The printed media (guidebook to the mountains of Quang Nam published by Quang Nam Promotion Centre, brochure and onsite poster at Goul house) are included.

As a result of all related stakeholders, perceived outcomes is relatively promising. In the last 12 months, the existing weavers have earned substantial monthly cash income, approximately 400,000 dong per person. This is a great success in generating additional livelihood for villagers. The working routine has still been allocating regularly and effectively. However, the deep interference in manufacturing process of retailer, particularly Avana boutique, might lead to an unexpected exchange in role of supplier and distributor in some cases. The Cotu women artisans should be stimulated as a creative supplier rather than a skilled labourers.

The partnership to other stakeholders (UNESCO, Life Start Foundation) has not likely been fruited as expected. In comparison to other private intermediaries (travel agents), these organizations, with their non – profit oriented objectives, tend to have less expertise in business development and tourism marketing (Forstner, 2004).

(2) For the group business of CBT services, the SIT/ILO project facilitated a public - private partnership in order to stretch the channels of distributions and promotion for CBTE in the village. This cooperation must be established,
particularly when CBTEs are initially designed (Mielke, 2012) and has stretched until the CBTEs is able to independently obtain a certain market share directly (supplier - customer) and indirectly (via intermediaries). The trade relationships are crucial to fulfill the weaknesses of community enterprise in generating essential market share. Thus, it is required to establish some sort of agreement with tourism intermediaries, which forms a supply chain to achieve common goals. In order to maintain the agreement with intermediaries, a juridical contrast signed between CBT entity and Le Nguyen travel. The cooperation is signed for the first three years (upto 2016) and could be continued if agreed. This travel company will work as gross sale agent and has exclusive right to exploit all CBT products/services in any time with prior bookings. Furthermore, they could benefits from project’s support in structuring itineraries, promoting products externally, attending travel fairs and other training courses. In turn, Le Nguyen travel would voluntarily donate 5000 dong per guest to the foundation of community development, operate promotion campaigns and other marketing techniques.

On the other hand, the promotional tools have been established both by SIT/ILO project and Le Nguyen travel. Identifying the target market of foreign students who are interested in Cotu ethnic minority experience, Le Nguyen Travel has effectively promoted the itineraries of Cotu culture and Droong village, by means of the company’s official website, social network (tripadvisor), and Student Unions abroad.

Nevertheless, the tangible results are still scarce. Over the last six months, the total of 70 travelers visited the village via Le Nguyen travel, and mostly used cuisine and dance performance without trekking, fishing, local guiding and homestay. The poor condition of homestay services causes the company’s refusal of taking their customers overnight in Droong village. There are total of 16 homestay visitors and 22 meals served upto December of 2013\(^4\). Almost CBT activities are temporarily not ready for serving customers. Three local guides have no chance to practice escorting tourist in the village sightseeing and trekking tours. It is undeniable that Droong CBT business group needs a particular promotion strategy tailored to attract those perceiving their trips as an opportunity to improve local lives. This niche market requires a conscious research of customer’s behavior and tools of gathering information respectively. In addition to this issue, it seems unreasonable to evaluate the marketing achievements in short period whether it is successful. The marketing activities should extend for a sufficient duration to perceive the visible effects. Unfortunately, when the SIT/ILO project ended, there is no plan raised to continue the previous marketing attempts. Also, the unsustainability of CBTE in Droong village has been realized by the sole dependence of the local enterprise toward a travel agent without any extension of intermediaries. The monopsony would hinder the other travel operators to joint business with the CBTEs. Furthermore, the potential private intermediaries will definitely find difficulties in making business contact with board of CBT managers because of no active email and telephone and this would threatens the CBTE’s ability to connect market place. Both are accelerating the unfeasibility of Droong CBTE in accessing market while this community owned business is not strong and matured enough to establish market linkage itself.

**Conclusions**

Market access is among the key criteria for the success of CBT projects. The urgent issue is how the CBT project as in Droong village could avoid being collapsed after the completion of funded period. Droong village has great advantage of unique culture, pristine landscapes and skillful waving artists. Meanwhile, the limitation of tourism service knowledge and

\(^4\) ILO technical cooperation final report
market understanding hinders the wellbeing of Droong CBTEs. For the weaving group, there are only two distribution channels for the textiles products. The number of sold products at the village owned outlet is fluctuating due to its dependence on the walk-in tourists in 14G road. The partnership between Cotu women with retailer – Avana shop in Hoi An has brought a positive result; nevertheless, the implicit exchange of the role of supplier/distributor is raising the risk for the business. The cooperation among Droong CBT group and intermediary - Le Nguyen Travel, on the other hand, significantly generates the income for local ventures during the aided period. When the sponsored project finished, the sole dependence becomes the barrier to sustain the business operation.

It is too early to label whether the Droong CBT village is successful or failed. Nevertheless, the awareness of the indicated issues in market access can be the fundamental foundation for the village committee to have appropriate adjustment in their action plan.

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EXCHANGE AND CONSERVATION OF KHMER NATIVE LANGUAGE IN VIETNAM'S SOUTHEAST MOUNTAINOUS BORDER REGION

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Dong Thap University

ABSTRACT

The Southwest today occupies 12.1% of national area and 19.8% of country’s population, 1.2 million of whom are Khmer group who reside quite densely in some southwest mountainous border provinces like Kien Giang, An Giang. They live in villages together with groups of Vietnamese, Chinese, Cham. In the process of economic-cultural exchange, peoples have become closer together, tightening solidarity among multi-ethnic communities in this area.

With open cultural space, Khmer group in the mountainous southwestern frontier can speak Chinese, Cham, Vietnamese, but they concurrently still preserve their native language through a variety of activities under various forms. Besides, other ethnic groups in the area still use the Khmer language in everyday communication. It is not easy to realize a person’s ethnic origin in a conversation by a group of people speaking the language fluently unless they themselves reveal which group they come from. However, due to various reasons, a number of Khmer youths today have become less familiarized with the language in speech and writing, causing difficulties in the preservation of traditional cultural values related to Khmer language.

Therefore, an understanding of the exchange and conservation of Khmer language in the southwestern frontier mountainous area will contribute to preserving the traditional cultural values of the Southwest Khmer community.

Keywords: South West, Khmer language, Khmer, cultural exchange, conservation of native language

1. Native language and Khmer community in the southwest mountainous frontier region

Vietnam is a multi-ethnic nation, each of which has its own language and lives together in villages or hamlets. Due to communication needs, those coming from other groups must have a shared channel for understanding - language to glue different groups to a community.

Spoken by over 85% of the population, Vietnamese is the official and common language and administratively used nationwide. Therefore, in order to perform his or her citizenship rights and obligations, ethnic minorities in Vietnam must be equipped with that common language. At the same time, to get harmony and cultural-economic exchange, Vietnamese group must learn about languages of the other groups who share a geographical space with them.

Vietnam’s Party and State always respect the diversity of peoples and equality amongst peoples. Ethnic minorities’ native languages are always paid attention for preservation and promotion purposes. Evidence for respects to native languages of the ethnic groups in Vietnam can be found in the Constitutional rights after the success of the August 1945 Revolution to date. In the 1946 Constitution, Article 15 claimed: "At the local elementary school, national minorities have the right to learn their own language," and Article 66 stated that "National minorities have the right to use their language in courts". The 1960 Constitution specifies more rules on the use of the native language of the ethnic minorities in Article 3 and Article 102. The 1980 Constitution also mentions this issue in Article 5 and Article
60. And the 1992 Constitution of the Socialist Republic of Vietnam added: "The peoples have the right to use its own language, preserve ethnic identity and promote the customs, practices, traditions and cultures" (Article 5). People's Court ensures that citizens of the Socialist Republic of Vietnam from all groups have the right to use their spoken and written language of their ethnicity in the courts (Article 133). Most recently, the new Constitution taking effect on 01/01/2014 states that "the national language is Vietnamese. All groups have the right to use their own language, preserve ethnic identity, promote customs, practices, traditions and culture" (Article 5). Also found in the new Constitution is: "Citizens have the right to determine their ethnicity, use their native language, select the language for communication" (Article 42).

Thus in each historic stage of national development, the issue of native language for the people is recognized by the most basic laws - the country's political - legal platform. The provisions in the Constitution function as the starting point, the legal basis for all law groups. This has contributed to improving the preservation and promotion of indigenous languages.

Article 7 of the 2005 Education Law claimed that: The State facilitates ethnic minorities to learn their language and script in order to preserve and promote the ethnic cultural identity so that ethnic students can easily acquire knowledge when learning in schools and other educational institutions. The teaching and learning languages of ethnic minorities shall comply with the provisions of the Government.

In accordance with the Decision No 447/QD-UBDT dated on September 19, 2013 of Minister - Chairman of the Committee for Ethnic Minorities, in the Southwest, 13 hamlets of An Giang and 21 hamlets of Kien Giang province are the severely disadvantaged hamlets in ethnic and mountainous areas. In Kien Giang, the Khmer scattered in some northern mountains in Ha Tien town (especially in Xa Xia) and the large “giòng” (hamlets) of plain as Giong Rieng, Go Quao and Vinh Thuan, Rach Gia and Ha Tien. Currently there are 42,413 households (214,979 people) (accounting for 12.77% of the provincial population), settling more in Chau Thanh District (38,000), Go Quao (23,500 people), Giong Rieng (21,190 people), Ha Tien (15,409 people), An
Bien (9,210 people), Rach Gia (8,032 people) [6]. And in An Giang, there are 18,512 Khmer households (86,592 Khmer people), accounting for 75.54% of the total number of ethnic minorities, and 3.9% of the total provincial population. Out of the household number, 16,838 households (about 80,000 people), accounting for nearly 92% of the Khmer in the province, are settling in two mountainous districts: Tri Ton and Tinh Bien [5].

About naming Khmer ethnic, the most common way of pronunciation is "Kho-me", is the most common way of writing "Khmer". The survey on the Khmer actual knowledge and Khmer people in the South-West frontier province suggests that they agree with the use of the word "Khmer". Currently, entitled "Khmer" became common and agreed in the State’s documents, on the mass media and amongst citizenry. In the Vietnam’s administrative papers Khmer groups are written under the title “Khmer ethnic” (Figure 1), and claim to be Khmer communicating with other people.

Their mother tongue belongs to the Mon - Khmer linguistic group, the South Asian languages. Khmer characters are tender, curved, and flexible. Its writing system consists of 33 consonants, 32 feet and 24 vowels, 13 independent vowels letters. Consonants are pronounced in two ways: allophone O 2 (15 letters) and allophone Ô (18 letters). Khmer grammar is generally like Vietnamese grammar [12].

Like other ethnic minorities in Vietnam, the Khmer people, especially cultural institutions and Theravada Buddhism monks, struggled against provisions of the French colonial authorities to protect the existence of their vernacular. The existence and development of the native language of Khmer communities express Khmer’s vitality and patriotism. In broader terms, it is indicative of and an affirmation for ethnic sense of Khmer ethnic.

The southwestern frontier Khmer see “Phum” (a kind of hamlet) is a traditional residential units, a social-ethnic space. “Sóc” (larger than “phum”, similar to village) includes many “Phum”. “Phum” is a self-governing society under the combined society - religious management regime of high sense of community spirit. In “Phum”, there may be just a few consanguinity families but also a few families without relative ties. A Khmer’s “Phum” can be viewed as equivalent to a village. “Phum” is usually located along the foothills, forest cover, typically of clustered nature (in the case of An Giang province) or along rivers, canals (in case Kien Giang province). In particular, in Kien Giang the Khmer also settled along the Vietnam - Cambodia frontier, the “Phum” lie along the Ha Tien - Hon Dat - Kien Luong – Giang Thanh.

In “phum” and “sóc” (hamlets and villages), besides Khmer are Vietnamese, Chinese, Cham co-residents. In the process of cultural-economic exchange, new cross-cultures are formed but the Khmer manage to retain its ethnic culture, especially the language.

2. Language Exchange by Khmer community with other ethnic groups in the mountainous southwest frontier areas

The exchange of language between Khmer communities and other ethnic groups in the mountainous southwest frontier area is a two-direction process (giving and taking). Process of making a living on the multi-ethnic frontier area has contributed to the ethnic cultural exchanges, primarily in language, gradually the customs and beliefs. Most residents live and work in Southwest frontier can communicate in Khmer, Vietnamese, Chinese, Cham languages.

In particular, the Vietnamese language is accepted by most of the other ethnic groups. As the common language, Vietnamese is used by EMs in general and by Khmer in particular as a necessity. On the other hand, for harmony in communication and livelihoods, other minorities such as Cham, Hoa, Khmer must be proactive to give and get the other’s language to cater for their needs. There is also Vietnamese involvement as a receptor of others’ language.

In particular, due to the geographical location adjacent to the Kingdom of Cambodia -
a country with more than 90% of the population as users of Khmer which is the official language, it is inevitable for Khmer to be received by other ethnic groups living in the mountainous southwestern frontier provinces.

Thanks to the alternated residence among Vietnamese - Chinese - Khmer - Cham groups, they had a chance to learning together about how to do business, technical crops, livestock, and new cultural elements suitable to each ethnic group to add to their own knowledge treasure and culture. These above crossing factors are threads to tight the peoples closer together, tightening the solidarity between the peoples residing in the Southwestern frontier.

Vietnamese, Chinese, Cham, Khmer residents who leave the old hometowns to do business in new areas on the Southwest frontier have contact with different ethnic groups. At first, they did not know each other and had difficulties in communication, and separations in life, gradually, they have adapted to co-settling life. In just a short time, due to the need to exchange and information, they quickly learn each other's language, lifestyles to form a multi-ethnic, solidarity and cordial community. Such works as traders, as workers, agriculture, especially farming and “effort-swap” upland cultivation of southwest communities, require many labors, of many. People who live or have farm fields cultivated adjacent to the other use their efforts to help reap the harvest, threshing, transporting rice and straw. At the end of the working day, they are often invited to dinner or paid. Through forms of side-by-side farming on the same sequence of paddies and “effort-swap”, the Khmer community and other ethnic groups have a chance to chat, exchange information; the harvest season is bustling, which strengthens solidarity among members inside and outside each ethnic minority

In a business environment, sometimes they are the same race, but not the other times. Therefore, in order to exchange information and to create harmony and build relationships in life, they must first learn the language spoken by the others. Inadvertently, the language flow of the other ethnic group mix naturally in every human being, especially in the Vietnamese community who are often open and broad-minded.

In addition, marriages with outsiders of the group also make language exchanges become rich and inevitable. Because of needs for working away from home, many young men and women have settled and married in other places. As a result, these youths’ mother tongue is shared in economic activities and family life; their children acquire them easily because of the availability of the language that is spoken by their parents, grandparents and relatives.

In terms of flexibility, responsiveness, openness in language acquisition by the co-settling co-cultivating groups, most of Khmer people in “phum, sóc” hillside or in the forest cover in the southwestern frontier areas are somewhat more disadvantaged than those of the same group living “phum, sóc” along the highway traffic or the plains, or rivers and canals. The cause may be due to the economic conditions in the hilly areas, forest cover which are more troubling and not as favorable as residence of the other ethnic communities. Therefore, language exchanges between the Khmer and other ethnic groups occur infrequently; they even use only native language if they do not go to school.

Conversely, in areas with the presence of many ethnic groups, bilingualism, multilingualism became popular. That the Khmer, young and old alike, are able to talk two or three languages has always existed throughout the history of that land. It is not easy to realize the ethnic origin of a person in a conversation with a group of people speaking the language fluently unless they themselves reveal from which group they come.

During the cultural exchange and acculturation amongst the communities in the southwest frontier, Vietnamese has become a common language for ethnic groups in addition to bilingualism or multilingualism. Vietnamese now can have the presence of minority languages and vice versa. This swap occurs naturally and
voluntarily, without any restraints, coercion. Today, even many words whose origins are not identified but used by one or more ethnic minorities.

The language exchanges among peoples in mountainous southwestern frontier often end in spoken language, while handwriting language is still dominated by Vietnamese as defined in the national education system. The community can converse with each other, exchange business experience and trade with each other, but most of them cannot read or write the other’s language. Anyway, it is the language “boat” that knits them closer together, contributing to the preservation of folklore cultures of the peoples.

3. Native language conservation of Khmer mountainous south-western frontier people

The implementation of the Directive No. 117 of the Party Central Committee on issues at the Khmer ethnic minority areas for over 10 years (1981-1991) has basically solved the shortage of land for farming and housing for the Khmer people, consolidated and strengthened the radio stations and system in the region of Khmer people, focused on the education for Khmer children, improved medical care conditions, enhanced the training for Khmer staff and so on.

A continuing directive dispatch No. 68-CT/TW of the Secretariat of the Party Central Committee (Session VI), on April 18th, 1991, was on the issues in the Khmer community. Major problems concerning the implementation of policies for ethnic Khmer was claimed, which include: Special care for the Khmer people’s economic-social, cultural, educational and health improvement in order to raise their standards of living and spiritual life, help the Khmer people merge into the overall local and national development; Respect for the people’s freedom of religious belief, maintaining Khmer’s temples, customs, facilitating the activities of Theravada Buddhism and promoting the roles of the temples, Buddhist monks and patriots, preserving and promoting the cultural heritage, traditional values, preserving the Khmer’s cultural identity; Promoting communication with Khmer people on being aware of the nation’s hostiles’ schemes using religious and ethnic matters.

According to the Resolution No. 24/NQ-TW by the 7th Central Executive Committee of the Communist Party on December 3rd, 2003, on promoting the strength of national unity, ethnic affairs which has resolved synchronously ethnic problems should focus on: Developing production to promote poverty alleviation, to improve living standards of ethnic minorities, remarkably improve the social economy of the minority ethnic and mountainous regions; Developing the education, upholding the local people’s knowledge, providing necessary personnel training, making concrete and standardizing 100% health centers at communes and polyclinics in communal clusters, upgrading district and provincial hospitals; Improving the quality of radio and television broadcasting programs in minority ethnic languages in the local region; fostering and improving the grassroots political system for more appropriateness to the features of the ethnic minorities and mountainous areas; strengthening the national defense, ensuring political stability, social order and safety in the regions.

Thanks to the guidelines and policies for mountainous ethnic minorities, the physical and spiritual life of ethnic minorities in general, and Khmer people at the mountainous Southwest frontier in particular, has gained numerous positive changes, which contributes to political stability and social security in the frontier areas. Furthermore, conservation and promotion of cultural values of ethnic Khmers are also focused.

For the Khmer language, Khmer children in a number of schools in An Giang and Kien Giang provinces have been taught bilingually. There are vocational secondary schools and stay-in secondary schools for ethnic minority students in the 02 provinces, among which 1 high school and 1 lower secondary school locate in An Giang, 05 high schools locate in Kien Giang. The stay-in schools have contributed to the conservation of Khmer language and culture. The teaching and
learning Khmer language and literature at the schools has brought much significant practice, contributing to the preservation of the local cultural identity. The children can read Khmer folk tales and proverbs of their ethnic in their own language. By the way, they can understand more of Vietnamese language, gain knowledge of natural and social sciences. Each school has its own music performance groups with students who can dance and play Khmer musical instruments.

The publication on newspapers and magazines, and radio and television programs in ethnic languages has been upgraded in terms of quantity, quality, topics and broadcasting time. The broadcast of Khmer programs throughout 09 southwest provinces, 08 of which are dominated by ethnic minorities, has helped to improve literacy levels, create cognitive changes in the local production and social life. In particular, when both mountainous frontier provinces, An Giang and Kien Giang, provide radio and television broadcasting in Khmer language, Khmer residents here can easily access Vietnam national radio and TV waves entirely in Khmer, instead of those by Cambodia, a neighboring country.

There is no doubt at the important role of the local Theravada Buddhist temples and monks in the preservation of Khmer language. In summers, the monks organize classes of Khmer language for Khmer children at the temples and they themselves are teachers. Preparing for upcoming schoolyears, the monks together with the teachers come and persuade Khmer children to go to school. The teaching can be conducted in the space of the temples of there is a lack of classrooms in the local schools, by monk teachers if there is not enough teaching staff. After school, children can also go to the temples for the monk tutor to help them with their homework. Due to the significant role of Theravada Buddhism in Khmer people’s life, the monks are highly respected, and affected to Khmer students and their parents. This also helps to raise education level of the local people.

Many monks, after being defrocked, have chosen teaching career. They own a range of advantages when participating in the teaching career, including thorough understanding of local culture, knowledge and habits, use of the Khmer language which facilitate their teaching incredibly, and their good reputation among the communities. Therefore, it is convenient for them to teach the Khmer children here.

Theravada Buddhist temples are also highlighted with the functions concerning Khmer culture, beside their usual religious ones (Figure 3). The temples are the place to store old books (the Brahmin and Buddhist canons), the local ethnic cultural heritage, and the place to convey moral Buddhism and transfer mother tongue. There is a custom to go into a temple among Khmer young men. In their conception, going into a temple is not to be a Buddhist monk, but to train to become a good man with good characteristics, and moral manner. During the time at the temple, they learn Khmer language and its writing.

An Giang and Kien Giang has 65 and 76 Khmer pagodas respectively. It is possibly said that Khmer temple is the cultural center of the hamlets, a place for prayers, for learning the language, and learning human morality. To Khmer communities, the temple is the common house of every community member, the ideal place for Khmer people’s activities. The temple is a place to conduct not only Buddhist teaching but also cultural education, teaching knowledge to the local community.

Customs and traditional festivals of the Khmer people also help to preserve their ethnic language. The existence of the rites, rituals and ritual texts in the Khmer language which are currently used in festivals has promoted Khmer people to explore and learn to preserve their ancestors’ legacy, to maintain the social traditional customs and ceremonies of the tribe.

In addition to the above factors, the Khmer people’ self-consciousness to preserve the language is the most important. Because a language is an ethnic group’s cultural identity,
maintaining and protecting the ethnic language is to maintain and protect the ethnic cultural identity. Therefore, despite their economic difficulty to earn living far away from home, but if Khmer people are always self-conscious of preserving and promoting their native language, they will overcome the difficulties in order to send their children to school, even to study after working hours, and to teach their children the language at home.

Khmer people in the mountainous southwest frontier region tend to combine the two languages, Khmer and Vietnamese, in their social life, more and more people can speak the two languages. They use Vietnamese in social communication, and Khmer at their hamlets. Through it, the exchange and conservation of the Khmer language is maintained and promoted.

In fact during the exchanges with other ethnic communities, the Khmer still maintain the internal ethnic relations. This can be seen in their preservation of ethnic cultural identities and native traditional elements of Khmer ethnic. The Khmer people regularly communicate with each other in their mother tongue, exchange experiences of farming and doing business, assist each other in daily life, sending their children to school, etc. Those are significant conditions for the conservation of Khmer language in their native community in the mountainous southwest frontier region of Vietnam.

4. Suggestions for the preservation of Khmer language

Khmer writing, despite longstanding existence, is unpopular. A majority of Khmer people are illiterate in their native language. The exchanges in Khmer language among local people are just conducted orally.

Conserving Khmer language confronts difficulty due to a number of following reasons:

There is a popular fact that Khmer students drop out, and that the quality of the native language education is not as good as expected. Most Khmer people live mainly on agriculture, economic difficulties face them, therefore their children’s schooling is affected, many children stop their study after lower secondary school because they have to work for as a labour in the family.

Local people is not well-aware of schooling, many parents think that Khmer literacy is useless since their children will use Vietnamese language when they are at work instead, or some others are afraid that their children will not be able to learn Vietnamese language at high schools and universities as well as their counterparts after spending years on Khmer language at the lower grades. So they send their children to non-Khmer language preschools and secondary schools for their children’s common study.

In spite of Vietnamese government’s encouragement, the spread and education of Khmer script remains limited. There is a shortage of classes and learning facilities. Teaching staff of Khmer language do not generally have adequate experience and teaching skills, this thereby affects the overall teaching quality. The design of curriculum and reference materials is un-unified and limited. Textbooks for Khmer language teaching in bilingual schools, and stay-in high schools are different in the 9 southwest provinces;

There is the lack of facilities like schools, equipment for education in the Khmer ethnic region. For example, Go Quao district (Kien Giang province) is densely populated with Khmer residents. For recent years, the proportion of Khmer children at schooling age is increasing. At the branch Rach Tia of Dinh An school, because of the shortage of classrooms, Khmer students must learn in 3 shifts, (one extra shift at 12 a.m). Some classes are taken in residents’ houses near the school.

Students just focus on learning Vietnamese language for future job, they do not recognize the value of their mother tongue. From a survey at Dong Thap University from 2008 to 2013, out of 35 Khmer selective-mode students, only 12 students mastered the skills of listening, speaking, writing in Khmer, in which only 02 are
female. It is explained that the 10 male students had taken the study at the local Khmer temples (they arrange the study in the temples during summer vacation), and the two female students are whose father or mother is the Khmer language teacher for ethnic students in Kien Giang. The remainders (23 students) can only be fluent in Khmer orally, and they can do a little reading and writing with the help of dictionaries, and 08 of them even cannot communicate in Khmer because they are mainly exposed to Vietnamese since they are small.

The quantity and quality of radio and television broadcasting in Khmer is limited, lack of diversity.

From the current practice, we would like to give some suggestions:

The authorities need to perfect the system of legal documents on teaching ethnic minority languages in general, the Khmer language in particular.

Improving the quantity and quality of teachers, promoting the training and retraining for ethnic language teachers and administrators.

Investing in facilities, teaching equipment, ensuring adequate schools for children’s study at the different school levels.

Getting related units in other sectors involved and coordinated closely with educational ones, making use of the community’s support for education, especially exploiting the role of Khmer pagodas and monks in Khmer community.

Promoting advocacy and community education so as they realize the importance of learning the native language. Thereby raising their awareness of learning Khmer in families, helping them to recognize their own responsibility for the conservation of the native language.

Organizing traditional festivals of the Khmer people with quality on large scale to motivate and encourage people to preserve and promote their good ethnic cultural elements. Holding cultural and art competitions to encourage art collection, literary creation in oral and written Khmer.

Improving the economic life of the ethnic Khmer mountainous southwestern frontier region so they can send their children to school. Contributing to the preservation of the ethnic culture, including the Khmer language.

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7. The Constitution, 1946
13. Trung Ngon, Preserving the languages and scripts of ethnic minorities, Binh Dinh Newspaper Online, 02/16/2014.
ABSTRACT

Gender equality refers to equality of opportunity and ensures the voices of men and women which is seen as a prerequisite towards equitable growth and sustainability. Compared to ethnic minority groups in remote areas such as Kinh and Koa, San Chi is more disadvantaged. In the matriarchal and patriarchal society, women from ethnic minorities are disadvantaged than men in almost every aspect. This article reviewed the current situation of gender equality in the San Chi family which is expressed through the division of labor in families, access to and control over social resources, decision-making power in the family, as well as the relationship between language elements - Vietnamese for the role and position of women and men. The data in the article were treated by statistical software SPSS version 16.0, based on fieldwork with San Chi people in Khuo Be and Na Lay 2 village, Pac Nam district, Bac Kan province.

1. Methodology

1.1. Some terminology

Gender is a concept that refers about difference in the division of labor, sharing responsibilities and rights between men and women in society. The concept of gender can vary depending on culture with its own traditions and customs, and can change at each stage of social development.

Gender equality means the equal role of male and female who will create conditions and opportunities to promote their capacity for the development of the community and family, and equal enjoyment of the result of this development [the Law on Gender Equality, 2006]

1.2. Research Questions

In order to assess the status and causes of gender inequality in the San Chi family with in-depth difficult socio-economic conditions, this study focused on some of the following research questions:

(1) Are there inequalities in the division of labor in the San Chi family?

(2) How is inequality in access to and control of family resources (assets, land, labor, etc.) between men and women shown?

(3) Which factors most strongly give impact on the status of gender inequality in the San Chi family?

1.3 Tools for data collection

This study mainly used qualitative research methods, specifically:

Observation: to help elucidate these findings, questionnaires were used, particularly necessary for learning about gender inequality.

Interview Questionnaire: field work was carried out at Khuo Be and Na Lay 2 villages - two main living communities of San Chi people in Bac Kan. Information was collected through direct interviews from men and women based on the prepared questionnaires.

In-depth interview: made with 10 cases in the two villages, to gather further information about the concept of role and position of men and women in the San Chi family.

Selected Model: Forty (40) households were selected out of 81 households of Khuo Be and Na Lay 2 villages which were concentrated on
households whose locality preserved almost complete living traditions of this ethnic group.

2. Research sites

Boc Bo is a commune in Pac Nam district, Bac Kan province. This commune has a total area of 5,330 km² natural population of around 3,644 people with a density of 67 persons per km². Although it is a district capital but Boc Bo has no highways running through that route only to DT.258B driving from Cho Ra town and ended up at Cao Tan, which is currently being improved, hence passing through DT.258B level should go back a bit difficult. In the commune there are 06 peoples living together, including the San Chi localized mainly in two villages Khuoi Be and Na Lay. The number of households of two villages is 81 with a population of 776 people.

3. Gender equality in the San Chi family

The analysis of these issues is combined with the findings from the fieldwork and secondary data, synthesizing a number of issues of gender inequality which is focused on the division of labor and production in family, access and control of household resources (assets, land, inheritance, ...), and decision-making power in the family between women and men.

3.1. Gender division of labor

Gender equality in the family is the topic which attracted the attention of researchers and policy makers. In various studies on gender equality, the authors have agreed to consider the gender division of labor in the family which is an important tool to explore issues of gender equality in the family.

According to Le Thi [4, tr.234-243] there are four criteria for recognition of gender equality in the family, namely: opportunities to access the development of family resource, status in building family labor (referring to the contribution of each sex for family), receiving the benefits and power to decide the important work of the family.

Do Thi Binh and Tran Thi Van Anh [1] also provided three tools for gender analysis: division of labor by gender (Answering the question: Who does what?), access to and control over resources and benefits, and decision-making model.

Gender roles are reflected in three aspects: the role of production (creation of material wealth), reproductive role (nurturing, health care, reproductive ...), and role in the community (social activities). Both women and men perform the role, but the level of implementation is different. So far, many authors stated that there is always inequality in the division of household labor, for example: taking care of of children is the responsibility of women, and it is considered a "chore", without compensation. So when considering the contribution to the economy of family, women are often underestimated because the role is less than men.

Labor in ethnic minority’s family in general and the San Chi in particular have been assigned according to "men’s work" and "women’s work". The division of labor stems from the notion of men as "masculine" who will undertake the heavy work, technical work and need to be calculated; while the women who are "the weaker sex" should be in charge of "light work" and "job name" [3: p.70]. The work is said to be “men’s work" which include: slash, tilling, houses, sale, and repair, and the “women’s work " include: pruning, planting, crop care, cooking, and child care, including gathering of firewood, cutting grass for cattle and livestock, and other extra work.

San Chi people under patriarchal family, the man took a leading role in the families, the children follow their father, the inheritance rights of men, so that the division of labor in the families is arranged by men.
Table 1. Division of labor in the San Chi family by gender (%)

<table>
<thead>
<tr>
<th>Labour activities</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Livestock and poultry</td>
<td>36.4</td>
<td>63.6</td>
</tr>
<tr>
<td>Care of crops</td>
<td>22.2</td>
<td>77.8</td>
</tr>
<tr>
<td>Plowing, planting</td>
<td>52.5</td>
<td>47.5</td>
</tr>
<tr>
<td>Trafficking, exchange of economic products</td>
<td>82.6</td>
<td>17.4</td>
</tr>
<tr>
<td>Repair of buildings and household appliances</td>
<td>76.2</td>
<td>23.8</td>
</tr>
<tr>
<td>Housework (cooking, sewing, taking care of family members, ..)</td>
<td>26.3</td>
<td>73.7</td>
</tr>
</tbody>
</table>

Elderly people (including women and men) who are weak labor and have the inability to work in the field will be in charge of the "moderate" work as care of small livestock, poultry, and provide support in some housework.

When asked about the basis of the division of family tasks, people said:

"The work is distributed based on: healthier man do heavier work, like plowing then go back home, while the women still do lighter work, like pruning, cutting of grass, collecting firewood, and cooking, and taking care of swineherd. In fact, the family must have men; he will make money for the livelihood of family" (in-deep interview, San Chi men, 45 years old, farmer).

Table 2: Working time per day for men and women (%)

<table>
<thead>
<tr>
<th>Time (unit: hour)</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 8 hours</td>
<td>64.7</td>
<td>21.7</td>
</tr>
<tr>
<td>8 - 10 hours</td>
<td>29.4</td>
<td>69.6</td>
</tr>
<tr>
<td>≥ 10 hours</td>
<td>5.9</td>
<td>8.7</td>
</tr>
</tbody>
</table>

More than 70% of the women interviewed said that they have to do the amount of work more than men:

"My husband goes to forest for half day then go back home early. In the afternoon, sometimes I request him to apply pesticide for tea but he doesn’t like to do it, he just socialize with other people, meanwhile I have to perform many works to do, like herding, weeding the paddy, no one takes care of my son so I have to sling him on my back, while hashing cassava for food in the evening" (in-depth interviews, San Chi women, 42 years old, farmer).

Also in the family without men, women must perform all the work which is said to be "men's work" such as repair of buildings and household appliances.

The women do not only take part in production but also do the housework in the family, men and women do the same activity but the amount of work and working time of women is more than men. After finishing the job, men can have a break or do the job they want, while women have to do the remaining works, then return home and take care of the family.
In San Chi family, division of labor by gender is not only defined by personality "heavy-light" but also differences in space. "Men’s work" not only requires a lot of labor, but also includes responsibilities related to social interaction. Survey data shows that 82.6% of men are in charge of trade exchange of economic products, the rate is lesser than 20% of women said they undertake this work (primarily fall into family groups that lack men in the house that they had lost or working away). That also means women are mainly engaged in the production, and manufacture of goods.

Men often participate in the meetings in villages and agricultural training. In the family, man often take charge of the necessary procedures in preparing documents related to family property and law.

| Table 3: Level of participation in the community activities of San Chi people by sex (%) |
|-----------------------------------------------|------------------|------------------|
| Community activities                          | Male | Female |
| Meeting at the villages                       | 78.9 | 21.1  |
| Participation in training                     | 80.8 | 19.2  |
| Joining the family work                       | 54.5 | 45.5  |
| Participation in the village / community activities | 63.3 | 36.7  |
| Transaction of bank loans                     | 81.1 | 18.9  |
| Establishment of inheritance rights           | 95.7 | 4.3   |

Labour of women associated with the family affairs, apart from a small number of women participating in the Women Association or other women’s group, most women are only in-charge of preparation of meals at home, family care, from the restricted time led to their limited cognitive capacities as well as access to the development opportunities as well as the source of social information.

3.2. Access to and control over resources and benefits

Men have high rate of participation in agriculture but women of ethnic minorities (EM) virtually have no warranty of land use rights. For agricultural land annually, while 36% of certificates of land use rights of the Kinh / Chinese are women or both women and men in the name, then this figure is only 21% ethnic minorities. The difference was even greater for residential papers when 42% of the Kinh / Chinese paper in the name of women or couples, while the figure for minority women is only 23% (World Bank, 2006). In many ethnic groups, according to tradition, only men inherit land and the woman does not have the knowledge or understanding of their legal rights which worsen the problem [World Bank].

One of the main strategies is to sell land assets and use it as collateral for loans. However, a recent study revealed that among women who were denied loans, 20% said that the reason is because they have no collateral (Mekong Private Sector Development Fund 2006). While the Land Law does not discriminate against women, most people live in rural areas do not have knowledge of these laws and still tend to follow traditional customs, especially for ethnic minority groups.

In the Civil Code of the Constitution, the revised Land Law 2003 concerning Law on marriage and family stipulates that women have equal rights with men with all rights on the use of land and property ownership, acknowledging women's rights on paper. However, according to tradition, the community of ethnic minorities in general and San Chi in particular, women still face many difficulties in whose name the ownership of this asset belong. They are still considered to be dependent on family or her
husband's family, while access to land ownership must go through the father, husband or brother / young brother. By patriarchy with the provisions of the role of men in the worship of ancestral parents, and the assets in family are owned by the household head, the man is the person who naturally possess the land. "Until now when getting married, the woman has never been shared land, only the man has inherited or been transferred the land ownership from parents, because the son has to stay with and look after their parents, and children are husband's responsibilities to care for, there is nothing wrong in this procedure." (In-depth interview, San Chi men, 54 years old, oracles)

<table>
<thead>
<tr>
<th>Resources</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Producing land</td>
<td>67.9</td>
<td>32.1</td>
</tr>
<tr>
<td>Capital / credit</td>
<td>74.1</td>
<td>25.9</td>
</tr>
<tr>
<td>Training / education</td>
<td>63.3</td>
<td>36.7</td>
</tr>
<tr>
<td>Income / savings books</td>
<td>62.5</td>
<td>37.5</td>
</tr>
<tr>
<td>Certificates of land use rights (land in the Red Book)</td>
<td>91.3</td>
<td>8.7</td>
</tr>
<tr>
<td>Motorcycle Papers</td>
<td>100.0</td>
<td>0</td>
</tr>
<tr>
<td>Not in the name of any asset</td>
<td>15.0</td>
<td>85.0</td>
</tr>
</tbody>
</table>

As head of household, men not only hold all assets in family but also continue to control the access to loans and attend training courses (Hoang Ba Thinh, 2007). The survey data showed that the level of access of women and men with social activities and community development programs have significant differences. While men very often and frequent access to the programs and projects of economic development, cultural – social, while the involvement of women is very little level and still do not have access with the local social programs.

<table>
<thead>
<tr>
<th>Table 1: Level of access to social activities and community development programs of San Chi people (Unit:%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Frequent</td>
</tr>
<tr>
<td>Sometimes</td>
</tr>
<tr>
<td>Seldom</td>
</tr>
<tr>
<td>Never</td>
</tr>
</tbody>
</table>

The man maintains to be entitled to access and participate in training courses on economic development, applied science or engineering programs concerning disseminated information about laws and social policies, while women are but human who need to be given opportunities to access and participate because they are the main objects and directly participating in the productive labor and foster families ties.

"Most often there are training programs or projects for the people, I want to go much but no one can help me to take care of our kids, to cook
our food and do gardening so I let my husband to attend to training programs, so whatever he decides I have to follow” (in-depth interviews, San Chi woman, 32 years old, farmer).

Thus, the position of the San Chi women become blurred in society, in addition to having language barriers make them shy away and be behind the door.

3.3. Decision-making affairs in family

Decision-making is an important job that most individuals are required to perform during their lives. There are important decisions affecting the lives not only individuals but also the whole family / society / community. Decision-making power belongs to who is going to perform autonomy in the family and society. In fact, men make most of the important decisions. Although Vietnam gives respect to women, which is derived from the ancient matriarchal, but the influence of the North for thousands of years with Confucian ideology has led to diminish the matriarchal way, instead of respecting male. It is the inherited ideology that has held back on the development of women rights.

The phenomenon of respecting men’s knowledge and disregarding women’s knowledge is quite common; it is considered the cause affecting the voice of women in San Chi family.

"He knows more than me, they also consider what to do then ask me. I am his wife, to believe it, so when he asks something I must nod” (In-depth interviews, San Chi women, 28 years old, farmer)

More than 75% of the population here are of the opinion that men are more knowledgeable, stronger and better than women are. More than 90% of all families with men as the head of household shows that men have the right to interfere in everything in household affairs even from little things like deciding to spend, daily activities and the big things like building houses, weddings, funerals, production, and decision on investment of property in the family.

Table 6: Decision tasks related to productive labor (%)

<table>
<thead>
<tr>
<th>Productive labor</th>
<th>Male</th>
<th>Female</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>The structure of animal and plant</td>
<td>75.04</td>
<td>21.7</td>
<td>3.26</td>
</tr>
<tr>
<td>Cultivation techniques</td>
<td>51.85</td>
<td>37.04</td>
<td>9.26</td>
</tr>
<tr>
<td>Production orientation</td>
<td>91.3</td>
<td>6.7</td>
<td>2.0</td>
</tr>
<tr>
<td>Purchase of agricultural supplies (fertilizers, pesticides ...)</td>
<td>59.26</td>
<td>29.63</td>
<td>9.26</td>
</tr>
<tr>
<td>Trafficking products</td>
<td>82.6</td>
<td>15.4</td>
<td>2.0</td>
</tr>
<tr>
<td>Rental of vehicles, labor</td>
<td>50.95</td>
<td>32.08</td>
<td>11.32</td>
</tr>
</tbody>
</table>

Besides that, the purchase of assets such in family, paying for community activities (weddings, funerals, and festivals), home renovation, or the decision on the number of children is mainly due to men.

Table 7: Status of the decision of family work of San Chi people (%)

<table>
<thead>
<tr>
<th>Productive labor</th>
<th>Male</th>
<th>Female</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase of expensive assets</td>
<td>72.0</td>
<td>23.6</td>
<td>4.4</td>
</tr>
<tr>
<td>Construction and home improvement</td>
<td>79.2</td>
<td>16.8</td>
<td>4.0</td>
</tr>
<tr>
<td>Investment in education</td>
<td>80.5</td>
<td>13.0</td>
<td>6.5</td>
</tr>
</tbody>
</table>
Community activities | 80.8 | 19.2 | -
Number of children | 84.0 | 16.0 | -
Number of son | 75.0 | 25.0 | -

The constant communication in society gives men the advantages that women have not been, to help them consolidate power over the resources of the family as well as their position with women. Women avail no opportunities to participate in social activities (so busy, afraid, are not allowed), hence, women often rely on the opinion of the husband to choose and adhere to their decisions.

The ability to participate in decisions in family matters of men or women related to the production or reproduction is an expression of their position. In other words, the right to express their opinion and to be heard is an important measure to realize gender equality in the family.

4. Vietnamese language - Position of San Chi women

There are many reasons to conclude that the voice and the status of minority women in general and San Chi women in particular depends on their ability to know Vietnamese language. Literacy or inability to communicate in Vietnamese is a difficult constraint mentioned to most of that ethnic group. Due to economic hardship in families led to the parents to decide whether the son or daughter will go to school, in this case the daughter often has to quit school for the reason that:

"Girls do not need to learn a lot, and probably do not need go to school; in the case of difficult family, she should stay at home to help her parents, then getting married, giving birth, that's all. Every family is the same here.” (In-depth interview, San Chi man, 40 years old, farmer).

Whatever the reason for the restrictions on the ability to speak Vietnamese has affected the confidence and ability of San Chi women to participate in the community activities, community meetings and trainings. Illiteracy rate is found mostly in the married women group, aged 25-60. Literacy ratio on Vietnamese language is mainly concentrated in the group of students (12-25 years old).

"I am afraid to speak Vietnamese because my Vietnamese is not good and I know nothing to speak. If my husband goes to meetings, I just go and listen only.” (In-depth interviews, San Chi woman, 35 years old, farmer)

<table>
<thead>
<tr>
<th>Ability to use Vietnamese</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can communicate in Vietnamese</td>
<td>81.8</td>
<td>18.2</td>
</tr>
<tr>
<td>Inability to communicate in Vietnamese</td>
<td>16.7</td>
<td>83.3</td>
</tr>
</tbody>
</table>

As can be seen, the limitations of language have a direct effect to the practical needs and strategic needs of San Chi women, giving significant effect on the quality of family life, the health of children and future generations.

“Last time I went for medical check-up, I suffered from heart attack and stomach pain, however, the doctor did not understand me. I was upset on not knowing how to say this properly, so I gave up and came back home”. (In-depth interview, San Chi woman, 54 years old, farmer).

Because of unfamiliarity to Vietnamese language, San Chi women faced difficulty in expressing their needs to others, learning and capacity building of themselves, making them inferior and afraid to communicate with people, that led to less opportunity to access to services and social resources. Men have the right to study,
socialize much, so using Vietnamese fluently. They have opportunity to get the right decision, and right to participate in local programs and activities, so men get more benefits. Women often go to markets, seek medical care at Commune Health Stations, but rarely participate in village meetings, while men usually go to far-from-home markets, and frequently attend to various local gatherings to exchange ideas, or even just to drink alcohol.

**Conclusion**

The current status of gender inequality in the San Chi family is the result of a series of inequality in society: it is from the notion that men's labor is more valuable than women's labor whereas women's work is greater than men's work in number and time, restrictions in access and control of family assets and social resources; lack of discretion for the important works in the house. The poor voice of the women is the result of poor education which become a part of their living habits.

(1) The division of labor in family held by men. The most prominent men in the family (household) assign work (production and reproduction) for family members. In the family, the nature of work is not only at the heavy-light level (depending on health) but also consider the space factor. The men usually perform social works in society, while the women do most of the household work for the family members.

(2) Men act as head accounted to over 90% of households in the survey area. The San Chi under patriarchal family and in terms of customary law stated that men always act as head of the households, and then of course all authority, including asset ownership of the family belong to them. Although the law recognizes the equality between women and men in matters of property ownership, but it is only on paper. In fact in local practice, all assets are mainly due to men’s names, including loan documents / mortgage.

(3) Voice of San Chi women in the home is the power to decide - the level of confidence for the work of the family. However, in most households, men are still the person who has the final decision. Because the society recognizes them as heads of households, who make decisions related to the existence of the family, including the production work (business oriented, change the structure of plants / livestock, purchasing agricultural supplies ...) and family reproduction (number of children, number of son).

(4) More than 80% of women are not able to communicate in Vietnamese. Language barriers create self-deprecating among women. The communication problems of this group of women result to make them appear not visible in the community. There are many reasons for this situation, namely: poor economic conditions and difficult life so most women failed to go to school or dropout, that resulted to their inability to communicate using Vietnamese language.
INTER DISTRICT DISPARITIES IN MEGHALAYA: A HUMAN DEVELOPMENT APPROACH

Purusottam Nayak and Santanu Ray

ABSTRACT

The present paper is an attempt to measure and highlight the magnitude and the problems of unbalanced human development in the state of Meghalaya using primary data. The study reveals widespread variations in human development across all the seven districts and disparities between rural and urban areas and between male and female groups of population within the state. There exists a significant level of disparity both in income consumption and in non-income attainments over the districts. The inequality in economic attainment happens to be very high. However, both measures of variation and inequality index suggest that few non-income indicators such as intensity of formal education and infant mortality rate have disparities over economic indicators which are indeed a cause of considerable concern. In addition, economic inequality is much higher than the overall HDI inequality. With an evidence of a huge shortfall in HDI the existing level of variation and disabilities calls for a need to redesign the public policies that directly affect the welfare of the people.

Keywords: human development index, educational index, health index, income index, consumption index, disparities, Bourguignon Inequality Index, North East India, Meghalaya.

I. Introduction

Meghalaya is one of the seven north-eastern states that have shown an unimpressive performance during the 1980s and 1990s in terms of both economic and human development. In addition, the regional dimensions of development in the state are also disturbing. A significant level of disparities exists in levels of income and features of human development amongst the districts/regions. However, to attain a decent level of human development in the state as a whole the backward districts need special attention. For that one should have a complete picture of inter district disparities in different components of human development. This study based on data of a UGC Major Research Project undertaken by Nayak and Thomas attempts to identify the nature and level of disparities amongst the districts/regions [1]. By identifying the deficiencies and disparities we can provide a useful basis for reorienting priorities and public actions towards the goal of evolving a people-centered development planning for Meghalaya.

After introducing the topic we present the features of the state from secondary sources. Then we work out the Human Development Index (HDI) for the state as a whole with district/regional level indices followed by some statistical measures of disparities that exist in Meghalaya. Finally, the paper is concluded with key findings and policy recommendations.

II. State Profile

1.1 General Features: Meghalaya is one of the smallest States in India. It is predominantly a tribal, matrilineal and hilly State bordering Bangladesh having a geographical area of 22,429 sq kms covering 0.7 per cent of the total area of the country. It is mainly the homeland of the three major ethnic groups, namely, the Khasi, the Jaintia and the Garo. About 45 per cent of the total population belongs to Khasi, 32.5 per cent Garo and the rest 22.5 per cent are from various communities. The state has 7 districts that are quite different from each other in various respects. In terms of area, West Khasi Hills is the biggest district with about 23 per cent of total geographical area while South Garo Hills is the smallest (8.5%). East Khasi Hills is the most populous district. Highest density is recorded in East Khasi Hills (292) whereas West Khasi Hills (73) is sparsely populated. Sex ratio in the state is 986 as against national average (940) with a wide range of variation from the highest in East Khasi Hills (1008) and Jaintia Hills (1008) to the lowest in South Garo Hills (942). The state registers
poor urbanization rate (19.6) as compared to the national average (27.78) with high degree of variation across districts.

1.2 Human development indicators: Seconday information regarding the indicators that are often taken as determinants of human development include per capita net district domestic product, literacy rate, number of primary and middle schools per lakh population, number of beds in government hospitals and that of doctors and nurses available for every lakh population. In early 1990s, East Khasi Hills had highest per capita income (Rs.8943) and East Garo Hills with the lowest (Rs.5148). In 2007-08 the relative income scenario of the state changed marginally. East Khasi Hills retained its position (Rs.31202) while the smallest district of the state – South Garo Hills emerged as the second richest district (Rs.28749). Similarly, little improvement in per capita income by East Garo Hills changed their position in cooperative settings - West Khasi Hills demoted to the status of poorest district. However, in both the years the list of richest and poorest three districts remained unchanged and the ratio of the income levels between richest and poorest districts did not change significantly. The ratio, that in a sense denotes the level of income disparity, roughly deteriorated from 1.74 in 1993-93 to 1.83 in 1999-00. The state did not lag (74.4 per cent) behind the national average (74.04) in literacy and it varied from about 84.7 per cent in East Khasi Hills to 61.6 per cent in Jaintia Hills. But the gap between male and female literacy rates in the state was impressively low at 4.1 per cent against the disturbing differences of about 16.7 per cent at the national level. The educational infrastructure, captured by the number of primary and secondary schools revealed no clear association between number of schools and literacy rate. In terms of health infrastructure East Khasi Hills determined the state average as all other districts fell below the state average.

II. HDI in Meghalaya

The new development paradigm intends to shift the attention away from the single indicator of per capita income to other attainments of decent human life such as education, health, participation in decision making etc that people have reasons to value for enhancing their overall well-being. Therefore, it was felt necessary to incorporate these attainments in the measurement of development [Human Development Index (HDI)] by UNDP in its HDR 1990 [2]. Despite several limitations HDI gained unprecedented popularity over the years due to its simplicity and plural attention. Planning Commission, Govt. of India, however, departed slightly from UNDP methodology in preparing its report [3]. However, the departure is less in terms of conceptualization and more in the selection of indicators. However, it is more pragmatic – especially in the context of India.

2.1. Data, methodology and indicators: The primary data used in this paper covered all the seven districts of the State. Data pertained to seventeen development blocks of the state selected at random out of 39 blocks taking five villages from each block. The sample constituted all together 1020 households to capture the level of wellbeing in different parts of the state. To compute the level of human development in the present study we adopted the guideline provided by the Planning Commission as adopted by Nayak and Thomas.

2.2. District wise human development: The State as a whole has scored HDI value in our study as low as 0.404 which in any standard falls in the category of low human development group (Table 1). Hence, the state has a shortfall of about 60 per cent. The value has marginally improved from the score of 0.365; assigned in National Human Development Report 2001 to Meghalaya during 1991 and crosses national average of 0.381 of 1991. The smallest district of the state – South Garo Hills has obtained the highest HDI value 0.544 which happens to be the only district in entire Meghalaya that crosses the benchmark of medium level of human development. West Khasi Hills has scored the lowest value 0.336. The best performer registers a huge shortfall of over 45 per cent while the poorest district has a shortfall of over 66 per cent. For other five
districts the shortfall in HDI ranges between 45-66 per cent which can simply be described as alarming not only in global context – it seems disturbing even in national perspective.

The contribution of three human development attainments to determine the value of the composite index is depicted in the Figure 1. In all the seven districts educational attainment is the highest contributor to determine the level of HDI. Except in Jaintia Hills, the economic index contributes next to education and health attainment in all districts show a huge shortfall which needs to be addressed immediately.

<table>
<thead>
<tr>
<th>District/State</th>
<th>Economic</th>
<th>Educational</th>
<th>Health</th>
<th>HDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Khasi Hills</td>
<td>0.453 (2)</td>
<td>0.552 (6)</td>
<td>0.319 (2)</td>
<td>0.441 (2)</td>
</tr>
<tr>
<td>West Khasi Hills</td>
<td>0.252 (6)</td>
<td>0.560 (5)</td>
<td>0.196 (6)</td>
<td>0.336 (7)</td>
</tr>
<tr>
<td>Ri-Bhoi</td>
<td>0.353 (3)</td>
<td>0.570 (4)</td>
<td>0.263 (4)</td>
<td>0.395 (4)</td>
</tr>
<tr>
<td>Jaintia Hills</td>
<td>0.194 (7)</td>
<td>0.427 (7)</td>
<td>0.412 (1)</td>
<td>0.344 (6)</td>
</tr>
<tr>
<td>East Garo Hills</td>
<td>0.269 (5)</td>
<td>0.657 (3)</td>
<td>0.228 (5)</td>
<td>0.385 (5)</td>
</tr>
<tr>
<td>West Garo Hills</td>
<td>0.299 (4)</td>
<td>0.790 (2)</td>
<td>0.150 (7)</td>
<td>0.413 (3)</td>
</tr>
<tr>
<td>South Garo Hills</td>
<td>0.513 (1)</td>
<td>0.834 (1)</td>
<td>0.284 (3)</td>
<td>0.544 (1)</td>
</tr>
<tr>
<td>Meghalaya</td>
<td>0.334</td>
<td>0.615</td>
<td>0.262</td>
<td>0.404</td>
</tr>
</tbody>
</table>

Table 1. HDI for Meghalaya.

2.3. Region wise human development: In order to gain an idea of regional dimension of human development scenario in Meghalaya we computed the regional HDI which are population weighted average of the district level HDI values. It is evident that no region in Meghalaya could touch the benchmark value (0.5) of HDI (Table 2). Garo region topped the list with impressive educational and poorest health attainment. Khasi region topped in economic attainment and ranked second in other two attainments. Though Jaintia region topped in health attainment its poor performances in other two attainments placed the region in the last position in overall HDI value.
Table 2. Regional HDI.

2.4. Linkages between components of HDI: The distinguishing feature of Planning Commission formulation of computing HDI is that inequality adjusted per capita real consumption expenditure (Rs./month) has been taken as economic attainment instead of per capita income, commonly used in UNDP formulation. This particular departure was governed partially by the conceptual requirement of having an indicator which is a direct and better measure of economic well-being for the population [4]. There occurs a significant hike in the magnitude of economic attainment for every district resulting in a moderate increase in overall HDI values, however, nominal change of positions in comparative settings when income, instead of consumption expenditure, is used. To differentiate the same index obtained from different economic indicators we refer the composite index as HDI* when the same is constructed on the basis of income. This additional computation helped us to compare the level of human development of Meghalaya with other states in the preceding section.

It is evident from Figure 2 that the value of economic attainment for the state as a whole was increased by over 51 per cent with a maximum increase in Jaintia Hills District of about 128 per cent as against least increase observed in West Garo Hills (12 per cent). The result of these increases in economic indicator has been able to hike the overall composite index of the state by about 17 per cent. Figure 3 reveals that the biggest difference between HDI* and HDI was carried out in West Khasi Hills (28 per cent), followed by Jaintia Hills (24 per cent).

Table 3 reports the Spearman’s coefficient of rank correlation between different indices and examines their level of significance. It shows that Income* is positively and significantly correlated with Consumption Expenditure, Health, HDI and HDI* as well, however, Consumption Expenditure with Education, HDI and HDI*. While Education has positive and significant correlations with both HDI and HDI* - Health does now have significant association with other indicators except Income*. The negative
correlation between Education and Income* and between Health and Education are not statistically significant.

III. Inter-district disparities

3.1 Disparities in human development:
The magnitude of disparities in indicators and in corresponding composite index (HDI) is reported in Table 4 where population-weighted sample means \( \text{Mean}(x_i) = \sum_{j=1}^{7} p_j x_{ij} \) where \( p_j \) is population share of \( j^{th} \) district such that \( \sum p_j = 1 \); \( x_{ij} \) is the actual value of \( i^{th} \) component for \( j^{th} \) district, standard deviations \( SD_j = \left( \sum_{j=1}^{7} p_j \left( x_{ij} - \text{Mean}(x_i) \right)^2 \right)^{1/2} \), coefficient of variations \( CV = \frac{SD}{X_i} \times 100 \) and Bourguignon Inequality Index \( BII_j = \ln \left( \frac{\sum_{j=1}^{7} p_{j} x_{ij}}{\prod_{j=1}^{7} x_{ij} p_{j}} \right) \) is computed [5]. BII is given by the natural logarithm of the ratio between the populations weighted Arithmetic Mean and Geometric Mean of the index. The advantage of BII is that it is the only population weighted additively decomposable inequality measure that satisfies Pigou-Dalton condition and in fact same as Theil’s population weighted inequality index.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Inequality Measures</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>P/C Income (Rs./month)</td>
<td>691.07</td>
<td>144.13</td>
</tr>
<tr>
<td>P/C Consumption (Rs./month)*</td>
<td>521.92</td>
<td>83.49</td>
</tr>
<tr>
<td>Literacy Rate</td>
<td>71.57</td>
<td>8.5</td>
</tr>
<tr>
<td>Intensity of Formal Education</td>
<td>3.925</td>
<td>1.28</td>
</tr>
<tr>
<td>Infant Mortality Rate</td>
<td>76</td>
<td>29.37</td>
</tr>
<tr>
<td>HDI</td>
<td>0.404</td>
<td>0.049</td>
</tr>
</tbody>
</table>

*Inequality adjusted.

Table 4. Inequality measures of indices

Source: Computed from data of Nayak and Thomas (2007). Note: SD- Standard Deviation; CV- Coefficient of variation; BII- Bourguignon Inequality Index.

Table 5. Gender disparities in Meghalaya

Table 4 reveals that income inequality index (0.0217) is much higher than consumption expenditure index (0.0125). Since following Planning Commission formulation we used the latter indicator for constructing our composite index; HDI inequality index (0.0075) remains moderate. Two indicators for educational attainment show a very different level of disparities: inequality index for literacy rate (0.0076) is significantly less than that of intensity of formal education (0.0496). Inequality index of infant mortality rate has been the highest among all indicators. The measure of variation suggests altogether a similar picture. The variation in income is as high as about 21 per cent against 16 per cent in consumption expenditure. Again,
variations in intensity of formal education (32.61 per cent) and infant mortality rate (38.64) are concernedly higher as compared to other social indicators.

### 3.2 Disparities between genders

Human Development is a new paradigm that is motivated by a concern for human dignity. Such a perspective of development underscores the role of freedoms to shape the life of people – both women and men. India is counted among those countries of the world that are struggling to achieve certain degree of equality between women and men. To obtain an idea of sex disparities in the unique matrilineal state in the country we have made an exercise. As economic attainment (income*/consumption expenditure) could not be separated for men and women this discussion is limited within the non-income component of HDI, commonly referred in the literature as HDI\textsubscript{non-income}. Table 5 indicates that in the state as a whole the sex disparity is negative implying a disparity in favor of women.

On the other hand, in West Garo Hills women lag most, followed by East Garo, East Khasi and South Garo Hills.

### IV. Conclusion

In this paper we measured the inter district disparities in Meghalaya in terms of human development indicators. There exists a significant level of disparity both in income consumption and in non-income attainments over the districts. The inequality in economic attainment (income as well as consumption expenditure) happens to be very high. However, both measures of variation and inequality index suggest that few non-income indicators viz. intensity of formal education and infant mortality rate have disparities over economic indicators which are indeed a cause of considerable concern. In addition, economic inequality is much higher than overall HDI inequality. With a huge shortfall in HDI the existing level of variation and disabilities imply clearly that there is a need to redesign the public policies that directly affect the welfare of the people.

However, the picture varies significantly over districts. All three Garo Hills Districts and East Khasi Hills Districts show an opposite scenario of the state average. Women in these districts are lagging behind their male counterpart.

The magnitude of gender-disparity in Meghalaya in both directions is depicted in Figure 4 which reveals that in Jaintia Hills, women are enjoying highest opportunities in terms of education and health attainment over men, followed by Ri-Bhoi.

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**REFERENCES**

HEALTH CARE FOR MOTHERS AND CHILDREN OF ETHNIC MINORITY IN YEN BAI PROVINCE

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Dr. Hac Van Vinh
College of Medicine and Pharmacy, Thai Nguyen University

ABSTRACT

The authors used cross-sectional method of combined quantitative and qualitative research. The following results were obtained from 400 ethnic mothers included Tay in Luc Yen, Thai people in Nghia Lo, Hmong and Dao in Mu Kang Chai in Van Yen, Yen Bai province: (1) The rate of home births: 53.5%, the highest of which is the Mong people –Mu Kang Chai (98.9%); (2) the Percentage of home births with health worker: 23% ; the midwives: 32.8%, others support: 44.3%; (3) complete pregnant checked mothers : 31.1%, tetanus vaccination: 79%, newborns are early breastfed: 80.4%, have correct dietary supplement feeding. 67.9%, correct weaning: 67.9%, children are fully vaccinated: 96.9%, malnutrition of children <5 years old is 30.2%, the highest rate among Mong(35,3%); (4) Proportion of couples applied contraceptives: 68.5%, the highest is the Dao, in which 58.1% use oral contraceptives, 20.9% use drugs, 4,6% use condom; (5) Average marrying age is 19.5, with age 20.7 who gave birth to the the first child; (6) Early birth rate: 60.4%) highest in Dao (82.1%), multiple birth rates: 42.2% highest in H’mong (64.5%); (7) Some traditions affecting children and mother health care such as: birth at home by midwives and family support; Sitting to lay, lay next to the kitchen door (The Mong); After laying mothers are not allowed to eat fish, vegetables and less nutritious food (the Tay, Thai); When pregnant, women still do heavy work (the Hmong, Dao); In marriage, there is still the old custom as the brother married with his aunt’s child (Mong); and after delivery both mother and infants are bathed immediately with medicinal water (Dao).

The authors’recommendations: Strengthening communication and organizing better and better materanl and child care programs, particularly the program of malnutrion prevention to help the ethnic minorities to abandon the outdated habits which are not good for maternal and child care.

Keywords: Maternal and child care, ethnic minorities.
1. **Rationale.** Yen Bai is one of the poorest provinces in the northern mountainous region with a poverty rate of households accounted for 29% [9]. The maternal and child care in Yen Bai has been done relatively well, as indicated in the basic health indicators which achieved only the average figures for the whole country. However, the ethnic minority (EM) in remote areas mainly inhabited by the Tay, Thai, H'mong, Dao, ... the index of maternal and child care was very low. Yen Bai ethnic minority with a high proportion of the population, concentrated in Luc Yen district, Thai black people are concentrated in the fields of Muong Lo, Nghia Lo town, the Mong mainly live at Mu Kang Chai and the red Dao live in Van Yen with the ethnic minority mainly living in upland, farming and forestry. The economic condition, culture and society of ethnic minorities in Yen Bai has been developing slowly due to the existence of many traditions and outdated practices affecting public health which is maternal and child care [2], [5], [7], [8], [9]. So what is the situation of maternal and child care of ethnic minorities in Yen Bai province now? And what factors are affecting this work? A study was therefore conducted with the following objectives:

1) Assess the situation of maternal and child care of minority ethnic people as Tay, Thai, H'mong, Dao in Yen Bai Province in 2011.

2) Describe some of the customs and practices that affect people's maternal and child care Tay, Thai, H'mong, Dao in Yen Bai.

2. **Respondents and Methods**

2.1. **Respondents:** Tay, Thai, Mong, Dao mothers having children under 5 years old and households in research locations (ethnic minority mothers are native and live in the research locations for 3 generations or more).

2.2. **Location:** Tay people in Lam Thuong commune, Muong Lai commune, Luc Yen district, Thai people in Nghia An and Hanh Son commune, Nghia Lo town, Mong people in Che Cu Nha and Mo De commune, Mu Kang Chai district, Dao people in Xuan Tam and Mo Vang commune, Van Yen district, Yen Bai province.

2.3. **Research methodology**

2.3.1. **Research design:** Descriptive, cross-sectional study, combined qualitative and quantitative research.

2.3.2. **Sample size and sampling**

*Sample size of mothers*

We apply the formula:

\[ n = \frac{Z^2 (1 - \alpha/2) p (1 - p)}{d^2} \]  

Application of the epidemiology formula to cross-sectional survey with \( p = 0.5 \) – the rate of ethnic minority mothers having adequate pregnancy check in the survey of Tran Thi Trung Chien and indicator [1]; \( d \) is estimated to be 0.05, the result calculated is 384, minimum sample size is 400, survey conducted 100 mothers of each ethnic group.

*Sampling Techniques:*

Intentionally choosing Lam Thuong and Muong Lai commune, Luc Yen district for the survey because the percentage of Tay people here is the highest in the district (100%), choosing Nghia An and Hanh Son commune, Nghia Lo town for the survey because the percentage of Thai people here is the highest in the district (>90%), selecting Che Cu Nha and Mo De commune, Mu Kang Chai province for the survey because the percentage of Mong people here is high (100%), and selecting Xuan Tam and Mo Vang commune, Van Yen district, it was considered that the percentage of Dao people is the highest in the district (approximately 90%).
In each commune, 50 mothers having children under five years old were randomly selected, based on sample distance.

2.3.3. Sample size for qualitative research

In each commune, in-depth interview was conducted with 01 health worker, 01 community leader, 2 village patriarches, 2 heads of family/heads of a clan.

Group discussion: 2 discussions with 10 people each: 1 group representing the healthcare and community leaders, 1 group representing ethnic minority mothers, who take care under 5 years old children.

2.3.4. Research indicators: Indicators of mother healthcare before, during and after childbirth; Indicators of child healthcare such as breastfeeding, immunization, and malnutrition.

2.3.5. Data collection method: Direct interview to mothers with children under 5 years old using the designed questionnaire, weighed children under 5 to evaluate nutritional condition, and conducted an in-depth interview and group discussion with related object group.

2.3.6. Method of data processing: Using EPIINFO 6.04 software.

3. Research results and discussion

Table 3.1. The situation of health care for ethnic minority women

<table>
<thead>
<tr>
<th>Minority</th>
<th>Index</th>
<th>General</th>
<th>Tay</th>
<th>Thai</th>
<th>Mong</th>
<th>Dao</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Births at home</td>
<td>53.5</td>
<td>6.3</td>
<td>61.1</td>
<td>98.9</td>
<td>47.6</td>
<td>&gt; 0.05</td>
</tr>
<tr>
<td></td>
<td>Births at health care center</td>
<td>46.5</td>
<td>93.7</td>
<td>38.9</td>
<td>1.1</td>
<td>52.4</td>
<td>&gt; 0.05</td>
</tr>
<tr>
<td></td>
<td>Births at home supported by:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Health officer</td>
<td>23.0</td>
<td>33.3</td>
<td>8.7</td>
<td>0.5</td>
<td>49.3</td>
<td>&gt; 0.05</td>
</tr>
<tr>
<td></td>
<td>Midwives</td>
<td>32.8</td>
<td>66.7</td>
<td>53.1</td>
<td>1.1</td>
<td>10.1</td>
<td>&gt; 0.05</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>44.3</td>
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<td>38.2</td>
<td>98.4</td>
<td>40.6</td>
<td>&gt; 0.05</td>
</tr>
<tr>
<td></td>
<td>Full care treatment</td>
<td>37.1</td>
<td>97.2</td>
<td>62.5</td>
<td>24.4</td>
<td>61.4</td>
<td>&gt; 0.05</td>
</tr>
<tr>
<td></td>
<td>Tetanus injection</td>
<td>79.0</td>
<td>97.2</td>
<td>77.6</td>
<td>48.8</td>
<td>92.4</td>
<td>&gt; 0.05</td>
</tr>
<tr>
<td></td>
<td>Total mothers</td>
<td>400</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 3.1 shows the situation of health care for mothers of ethnic minority in Yen Bai: Percentage of births at home quite high (53.5%), which is the highest in Mong - Mu Kang Chai (98.9%), lowest in the Tay - Luc Yen (6.7%). The rate of home births in low-level health workers (23%), the highest Dao - Van Yen (49.3%), lowest in Mong (0.5%). The birth rate was therefore quite high (32.8%), the highest was the Tay (67%). The birth rate conducted by other person was therefore quite high (44.3%), and Mong is the highest (98.4%). The percentage of ethnic minority women are less adequate antenatal care (31.1%), the highest Tay (97.2%), lowest in Mong (24.4%). The percentage of ethnic minority mothers who were vaccinated against tetanus is relatively high (79%), the highest Tay (98.6%). However, the results of maternal and child care of ethnic minorities in Yen Bai better than ethnic minorities in northern mountains in the study of Tran Thi Trung Chien, Dam Khai Hoan, Hoang Khai Lap and a number of other researchers [1], [3], [6] is probably a result of the country’s overall development, including health care for ethnic people in Yen Bai province [9].
Table 3.2. The situation of health care for ethnic minority children

<table>
<thead>
<tr>
<th>Minority</th>
<th>General</th>
<th>Tay</th>
<th>Thai</th>
<th>Mong</th>
<th>Dao</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breastfed infants</td>
<td>80.4</td>
<td>98.6</td>
<td>77.6</td>
<td>86.1</td>
<td>59.3</td>
</tr>
<tr>
<td>Solid food</td>
<td>67.9</td>
<td>83.9</td>
<td>48.8</td>
<td>69.7</td>
<td>69.0</td>
</tr>
<tr>
<td>Weaned children: &lt; 12 months</td>
<td>10.5</td>
<td>23.7</td>
<td>1.4</td>
<td>4.5</td>
<td>12.3</td>
</tr>
<tr>
<td>From 12 - 18 months</td>
<td>48.0</td>
<td>29.3</td>
<td>63.0</td>
<td>45.5</td>
<td>54.5</td>
</tr>
<tr>
<td>&gt; 18 months</td>
<td>41.5</td>
<td>47.0</td>
<td>35.6</td>
<td>50.0</td>
<td>33.2</td>
</tr>
<tr>
<td>Number of children were fully immunized</td>
<td>96.9</td>
<td>95.8</td>
<td>100.0</td>
<td>94.6</td>
<td>97.3</td>
</tr>
<tr>
<td>Number of children with tuberculosis scars</td>
<td>91.5</td>
<td>93.0</td>
<td>99.3</td>
<td>77.6</td>
<td>95.9</td>
</tr>
<tr>
<td>The number of malnourished children weight / age (underweight)</td>
<td>30.2</td>
<td>28.6</td>
<td>27.5</td>
<td>35.3</td>
<td>29.2</td>
</tr>
<tr>
<td>Total children</td>
<td>400</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 3.2 shows the health status of ethnic minority children in Yen Bai: Percentage of breastfed infants is high (80.4%), the highest is obtained by Tay (98.6%) and the lowest is Dao (59.3%). The prevalence of eating solid food is high (67.9%), the highest is Tay (83.9%), Thai is lowest (48.8%). In terms of percentage of children who are properly weaned (> 18 months) was lower (67.9%), Mong is the highest (50.0%), Tay (47%) and the lowest is the Dao (33.2%). The rate of wean early (<12 months) Tay highest (23.3%), lowest Thai (1.4%) and Mong (4.5%). The percentage of children who are fully immunized is high (96.9%), Thai is the highest (100%), Mong is the lowest (94.6%). The prevalence of tuberculosis scar is quite high (91.5%). The rate of malnutrition in children <5 years old Yen Bai ethnic minorities remains high (30.2%), Mong is the highest (35.3%), and Thai is lowest (28.6%).

Results of health maternal and child care in ethnic minorities, Yen Bai shows better than the Tay in Bac Son, Thai in Son La and Mong in Ha Giang in research Dam Khai Hoan and some other studies probably mainly due to results renewal of the country. On the other hand, the region is due in Yen Bai minority of today's economic situation sociocultural especially good health more than before [3], [7] is probably the result of the general development of the country in terms of the people's health care.

Table 3.3. Status of application of contraceptive methods by married couples EM

<table>
<thead>
<tr>
<th>Minority</th>
<th>General</th>
<th>Tay</th>
<th>Thai</th>
<th>Mong</th>
<th>Dao</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mothers who used contraceptives</td>
<td>68.5</td>
<td>67.6</td>
<td>68.3</td>
<td>59.7</td>
<td>78.3</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>How: Place the ring</td>
<td>58.1</td>
<td>74.9</td>
<td>65.5</td>
<td>52.2</td>
<td>39.8</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Contraceptive pill</td>
<td>20.9</td>
<td>11.6</td>
<td>24.3</td>
<td>3.5</td>
<td>44.0</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Condom</td>
<td>4.6</td>
<td>3.6</td>
<td>3.3</td>
<td>3.5</td>
<td>8.0</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Female sterilization</td>
<td>2.3</td>
<td>0.7</td>
<td>0</td>
<td>0</td>
<td>8.3</td>
<td></td>
</tr>
<tr>
<td>Male sterilization</td>
<td>2.4</td>
<td>5.8</td>
<td>3.6</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Other methods</td>
<td>1.7</td>
<td>3.3</td>
<td>3.0</td>
<td>0.5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Mothers not using contraceptives</td>
<td>31.5</td>
<td>32.4</td>
<td>31.7</td>
<td>40.3</td>
<td>21.7</td>
<td></td>
</tr>
<tr>
<td>Reasons for not using contraceptives:</td>
<td>38.9</td>
<td>62.5</td>
<td>97.0</td>
<td>0</td>
<td>&lt;0.05</td>
<td></td>
</tr>
</tbody>
</table>
Table 3.3 shows the situation of applying contraception (contraceptive) of ethnic minorities in Yen Bai: The proportion of couples using contraceptives is high (68.5%), the highest is the Dao (78.3%), using the method of placing a ring is still the first choice of the minority (58.1%), followed by the use of contraceptive pill (20.9%), and the use of condom accounted for only 4.6%.

<table>
<thead>
<tr>
<th>Index</th>
<th>General</th>
<th>Tay</th>
<th>Thai</th>
<th>Mong</th>
<th>Dao</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average age of menstruation</td>
<td>14.9 ± 3.1</td>
<td>15.4 ± 3.6</td>
<td>15.2 ± 3.3</td>
<td>14.2 ± 2.5</td>
<td>14.6 ± 2.9</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Average age to get married</td>
<td>19.5 ± 2.5</td>
<td>20.4 ± 2.9</td>
<td>20.8 ± 3.2</td>
<td>18.4 ± 2.3</td>
<td>18.5±2.5</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Age of mothers who gave the first child</td>
<td>20.7 ± 3.9</td>
<td>21.6 ± 4.1</td>
<td>21.2 ± 3.1</td>
<td>19.2 ± 3.8</td>
<td>20.8 ± 3.2</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Women who gave birth early &lt;22 years</td>
<td>60.4</td>
<td>59.6</td>
<td>45.5</td>
<td>54.2</td>
<td>82.1</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Women who gave more than 2 children</td>
<td>42.2</td>
<td>25.6</td>
<td>34.5</td>
<td>64.5</td>
<td>44.3</td>
<td>&lt;0.05</td>
</tr>
</tbody>
</table>

Table 3.4 shows the implementation of family planning programs in the Yen Bai ethnic minority: the average age of menstruation of girls is at 15; the average marrying age is 19.5; age of women who gave the first child was 20.7 years old. The percentage of ethnic minority mothers preterm (<22) is quite high (60.4%), Dao is the highest (82.1%), Thai’s lowest (45.5%). The percentage of ethnic minority mothers gave birth (> 2 children) high (42.2%), the Mong is the highest (64.5%), lowest in the Tày (25.6%). The results of the study are comparable to the findings of Tran Thi Trung Chien and Dam Khai Hoan in mountainous and ethnic minorities in [1], [3].

3.2. Some customs and traditions affecting the health care of mothers and children of ethnic minority

After the interview and group discussion with participants, we obtained information about the customs and traditions as follows:

Tày: At present, most Tay mothers in Luc Yen give birth at local medical clinics. Mothers have one or two month postpartum rest and have a diet with lots of chicken and pork, but no fish and few vegetables...

“Women after childbirth are taken care more carefully. They can rest at home for about one month without doing anything and they have a nutritious diet with sticky rice, chicken, pork. They have to avoid eating fish and can eat green vegetables after 10 days. But they can eat only sauropus androgynus (rau ngot) because they’re afraid that it’s difficult for the baby’s umbilical cord to fall off…” (According to Hoang thi H, village 7 – Luc Yen).
During confinement time, mothers have to avoid eating many kinds of food but they eat fresh and clean food. When going out, they have to carry a knife cover to fight evil spirits” (A mother in Ban Muoi village).

“After childbirth, women have to rest at home for about two months. They go to work after childbirth time. They are not allowed to eat fish. They have to stay in a sealed chamber to avoid winds...” (Thang Thi C, village11).

Thai Peoples

In general, there are few backward customs in the healthcare of mothers and children in Nghia Lo town because of frequent communication about Family Health. The most popular backward custom is giving birth at home. Midwives assisting women in childbirth often don’t use clean delivery kits. Many women after giving birth have a diet without necessary nutrients or have to go to work after a short time...

“Giving birth at home, late breastfeeding, early complementary feeding and early weaning... (Luong Van H – Village head, Hanh Son village).

“Women after childbirth have to be on a diet. Newly born babies should avoid seeing strangers. Buffalo meat and banana flowers aren’t allowed to be brought into the house. Women after childbirth have to go to work early (one month)...”(Hoang Van Q – Village patriarch – Nghia An commune).

“Thai women get married at early age, so they are not educated; some households even make ceremonial offerings when a baby is born...(Ha Van L - Village patriarch, Nghia An commune).

Mong Peoples

The healthcare of mothers and children: Mong pregnant women have to work hard and their main diet is rice and chilli salt. When they are pregnant, they are often shy and involuntary to go for a prenatal check-up. They often give birth at home near the stove, and sit during the childbirth time. Only their husband, mother or midwives assist the women during the childbirth time. It’s Mong’s tradition not to go to medical clinics. After 3-5 days of childbirth, women can go to work as usual with the child on their backs. There is no special diet after giving birth. After giving birth, women eat a small children boiled with Artemisia vulgaris (ngai cuu) and opium. Children don’t wear pants when they are small. In winter, they use the heating system to keep warm and have no warm clothes, hat, scarf, or shoes. Mong children are breastfed for 18-24 months or longer, sometimes 2 children are breastfed at the same time. Children above 6 months old are fed with crushed rice

Marriages: Mong people often get married at an early age, previously 14-15 year-old men get married with 18-19 year-old women. Mong people can marry with each other as long as they have different last names. Therefore, marriages within a family bloodline are popular. Specifically, cousins with different last name can marry with each other...

According to Ms. Sung Thi M – Population and Family Planning Center: “Mong people often get married at an early age (Mong women usually get married at the age of 14-18). Mong people can marry with those who have different last names. Therefore, marriages within family bloodline are very popular, cousin marriages is a typical example”.

According to Mr. Th – Leader of district health center: “Because they want to have many children, they often have babies continuously, and they won’t use any contraceptive methods unless they are forced to do. However, after having contraceptive coils fitted, many women go to other medical clinics to remove them because the coils cause pain and they cannot work...”

And according to Ms. Giang Thi M – Chairman of commune women association: “Mong women are reluctant to go for a prenatal check-up or give birth at a medical clinic because they don’t want to be seen by other people...”
* Dao peoples

Custom of giving birth: Red Dao women are often shy, so they don’t go for prenatal check-up. Most Dao women give birth at home with mother-in-law or midwife’s assistance. After the childbirth, mother and baby have a bath with medical plants in one month. They often use a kind of bamboo to cut the umbilical cord and use thread to tie baby’s belly-button.

In terms of feeding babies: Dao people wean their babies late, the babies are often breastfed until their mothers are pregnant with the next child.

“In the village, women often give birth at home with family member’s assistance (mother or sister). After giving birth, women have to avoid many foods such as buffalo meat, beef, fish, horse meet and vegetables (only eat sauropus androgynus (rau ngọt). Most children are vaccinated; a few families don’t have their children vaccinated in time because they are afraid that their children get hurt. In most families, children are fed with few meals and weaned early when they are 13-16 months old. When children have got diarrhea, they aren’t allowed to eat fish and fat” (Mr. A - Khe Chung 3 village - Xuan Tam commune)

Some women are cared. They don’t have to work hard when they are pregnant or raising small children. Pregnant women have periodic health check-up. Children are cared by families and communities. Besides, there remain some bad customs. For example, women who are pregnant or feeding babies aren’t allowed to eat many kinds of food.” (Triệu Tôn Nh - Trưởng thôn Khe Lép 2 - Xuân Tâm)

“The research results above in Yen Bai also match with the research on the relation between customs and health of Tay people – Lang Son, Thai people – Son La, Mong people – Ha Giang [3], [4]

Conclusion

1) The situations of the healthcare for ethnic minority mothers and children in Yen Bai province are as follows:

The healthcare for mothers: The rate of giving birth at home is relatively high (53.5%), Mong people – Mu Kang Chai have the highest rate (98.9%). The rate of giving birth at home with health workers’ assistance is low (23%), Mong people have the lowest rate (0.5%). The rate of giving birth with midwives’ assistance is quite high (32.8%). The rate of giving birth with other people’s assistance is also high (44.3%), Mong people have the highest rate (98.4%). The rate of ethnic minority mothers having adequate prenatal check-up is low (31.1%). The rate of ethnic minority mothers having tetanus injection is relatively high (79%).

The healthcare for children: The rate of infants being breastfed early is high (80.4%). The rate of children having proper complementary feeding is pretty high (67.9%), highest is among Tay people (83.9%), lowest is among Thai people (48.8%). The rate of children being weaned correctly (>18 months) is low (67.9%). The rate of children being vaccinated is high (96.9%). The rate of malnutrition among children under 5 years old in ethnic minorities in Yen Bai province is relatively high (30.2%), Mong people have the highest rate (35.3%).
The percentage of ethnic minority couples using contraceptive methods is high (68.5%), Dao people have the highest percentage (78.3%), coils fitting is the most popular method of ethnic minority people (58.1%), second popular method is using birth control pills (20.9%), using condoms only accounts for 4.6%.

The implementation of Population and Family Planning program: The average menstruation age of ethnic minority girls is about 15; average age to get married is 19.5; age to have first baby is 20.7. The rate of ethnic minority mothers giving birth at early ages (<22) is pretty high (60.4%), Dao people have the highest rate (82.1%). The rate of ethnic minority mothers having many children (>2 children) is high (42.2%), Mong people have the highest rate (64.5%).

2) Some customs affecting the healthcare for mothers and children such as:

Tay people (Luc Yen): Most mothers give birth at local medical clinics. In 1 or two months. Mothers have one or two month postpartum rest and have a diet with lots of chicken and pork, but no fish and few vegetables...

Thai people: There are few backward customs of mother and child healthcare in Nghia Lo commune. The most popular custom is giving birth at home. Midwives assisting women in childbirth often don’t use clean delivery kits. Many women after giving birth have a diet without necessary nutrients or have to go to work...

Mong people: During pregnant time, Mong mothers in Mu Cang Chai have to work very hard, the diet is rice and chilli salt. They don’t go for prenatal check-up. Women often give birth at home, near the stove. They sit to give birth with the assistance of their husband, mother or midwives. Mong babies are breastfed in a long time from 18 to 24 months or longer, even two children are breastfed at the same time. When children are over 6 months old, they are not fed with complementary foods. When children can eat food, they are fed with crushed rice. In terms of marriage, marriages within family bloodline are very popular, specifically cousin marriages are relatively common.

Dao people: Dao women are often shy, so they don’t go for prenatal check-up. Most Dao women give birth at home with mother-in-law or midwife’s assistance. After the childbirth, mother and baby have a bath with medical plants in one month. They often use a kind of bamboo to cut the umbilical cord and use thread to tie baby’s belly-button. Dao women often wean their babies late, usually until they are pregnant with the next child.

**Recommendations**

1) Enhancing communication and better organizing mother and child healthcare programs, especially the malnutrition prevention program.

2) Enhancing communication to help ethnic minority people abandon backward customs which are not good for mothers and children’s health.

**REFERENCES**


5. Luong Van Hom (2011), *Research on health, disease, the risk factors of the Mong in the two districts in Mu Kang Chai, Tram Tau, Yen Bai province and solutions*, Thesis in public health care 2, College of Medicine, Thai Nguyen University.


The Chittagong Hill Tract (CHT) area covers 13,390 square kilometers; most is highland and only 3% is plain land. The CHT is divided into three Districts and 25 Upazilas (Sub-districts). The population is about 1.4 million, of which more than fifty percent belong to 13 different tribal groups of the area. There are 4,599 paras (villages) in the CHT and each of these consists of 20-100 families. The average income is only US $ 367 per annum compared to the national average US $ 923. The area usually suffers by safe drinking water scarcity, inadequate education facilities, bad communication, poverty and many other social and racial problems. This paper has been developed on the basis of evaluations of the project that took place in 2000 and 2012. The development efforts were provided through para centers. The evaluation used primary and secondary sources of data including Focus Group Discussion (FGD) and case study. Most of the respondents send their children to the para centers with great interest and attendance of the children was also found satisfactory in all sample centers. Extension of project duration; bringing the whole hill districts under the project interventions; involving the local council in project works right now and gradually sharing the cost of project with local council and; keeping effective coordination with Nation Building Departments (NBDs) at the upazila (sub district) and district levels for getting their supports and services were the vital issues for the sustainability of the project works. Expand the program into non-intervention areas; include new activities such as training on Income Generating Activities (IGAs) through creating wider scope for micro-credit; conduct training for para workers, especially on preparation of community action plans for water and sanitation and knowledge on first aid, etc. were the recommendations of the evaluation.

Key Words: ICDP, Para center, Para Worker, Pre-schooling, NBDs, etc.
1. Introduction

The Chittagong Hill Tract (CHT) region consists of three districts namely Khagrachari, Rangamati, and Bandarban with a total area of 13,294 sq. km and 1.4 million population of which more than 50% are tribal. The hilly nature of the topography and presence of 13 different ethnic minority tribal groups make the Hill Tracts different in many ways from the rest of the country. The area usually suffered by drinking water scarcity, inadequate education facilities, bad communication, poverty and many other social and racial problems. The averages income is only US $ 367 per annum [1] compare to national average US $ 923 [2]. For that reason Government of Bangladesh has accorded high priority on the economic and social development of the Hill Tracts Region. Chittagong Hill Tract Development Board (CHTDB), created in 1976, is the major government agency for local planning and development in the region. CHTDB is implementing a special project namely “Integrated Community Development Project (ICDP)” for the betterment of mother and children of the distress family in the Hill Tracts with assistance from UNICEF. This project came into function on experimental basis in the year 1980. There are a total of 4,599 paras in the CHT and each of these consists of 20-100 families. In the period of 1980-82 it covers only three mouzas (synonymous with the village) [3] and able to cover 11 mouzas by the year 1985. The project activities were expanded to 25 mouzas during 1985-90 and later on to 75 mouzas during 1990-95. Inspired from success of the project, UNICEF and government of Bangladesh agreed to extend the project in all the 373 mouzas of the region the three hill districts by the year 2000. Between 1997 and 2010, ICDP constructed a total of 2520 para centers [1] to provide a range of services including organization of early childhood development sessions for pre-school children, health and hygiene education activities to promote immunization, anemia prevention, use of safe drinking water and sanitation, hand washing and other community development activities.

The major activities of the project include construction of Community Centers (Para Centers); pre-school, grade I & II learning; health and sanitation education and income generation programme for poor people. This “Para Centers” is the focal point of all activities of the project. The “Para Workers”, majority of who are ethnic minority Tribal Women, are entrusted with the responsibilities of pre-school learning, creating social awareness, development works on primary health care, family planning and sanitation promotion are the areas where para workers provide their supports and services to the population of their locality. This paper has been developed on the basis of evaluations of this project conducted in 2000 and 2012.

1.1 Objectives

The evaluation aimed to know the types of activities and initiative adopted at the para centers, work performed by para workers and their performance level along with over all attitude of the para community about the para centers as well as ICDP. The specific objectives the study were the followings;

a. To assess the functioning level of para centers;

b. To determine the functioning level para workers;

c. To identify the community perception to ICD project especially to the para centers and para workers; and

d. To examine the sustainability issues of the project works

1.2 Scope of the Study

The issues covered in the study are mentioned as follows;

- Household coverage by the para centers in the locality;
- Community feelings about the para centers (whether they need the para centers);
- Types of activities initiated at the para centers;
- Types of activities performed by the para workers (pre-schooling, social motivation and linkage establishment);
- Community feelings about the “para workers” (by men, women & local leaders);
- Level of using of para centers by the community;
- Appropriateness of input supply and their rationale uses;
- Women/specially the feelings of mother about the motivational works of the para workers;
- Future need of the para centers for its sustainability.

1.3 Methods

1.3.1 Sampling Techniques: A list of all the para centers in three hill districts: Khagrachari, Rangamati and Bandarban was supplied separately by the project personnel. On the basis of working performance, the para centers were categorized as ‘A’ (good), ‘B’ (moderate) and ‘C’ (poor) by the project personnel. With this separate list of each district a common list was prepared according to A, B and C categories irrespective of district. After preparation of the list it was found that A category centers consisted of 547, B consisted of 705 and C consisted of 429. From each category, 10 para centers were selected randomly using Statistical Random Table and ultimately 30 para centers selected from all the para centers. After selecting the para centers from each category it was found that 14, 6 and 10 para centers were drawn from Khagrachari, Rangamati and Bandarban districts respectively.

1.3.2 Preparation of Checklist and Questionnaire: Three types of checklist were developed like-(i) FDG with Community of Para center; (ii) FGD with mothers of children attending para centers; and (iii) FDG with children attending para center. Four types of questionnaires were developed in like(i) Questionnaire on household community survey; (ii) Opinion based questionnaire for key information; and (iii) Questionnaire on project management aspect for project personnel.

1.3.3 Selection of Respondents: The following categories of respondents were selected for interview;
- Local inhabitants of the selected 30 para centers.
- Public representative of the three hill districts including Chairman of the Regional Council of Chittagong Hill Districts.
- Traditional Kings of the hill areas.
- Concerned district, upazila and field officials of three hill districts
- Para workers of all the selected para centers.
- Selected project personnel including Project Director of ICDP.

Household Community Survey, Para Worker’s Interview and Interview with Key Informants and Project Personnel were carried following prefixed schedules [4].

2. Results and discussions

2.1 General Information about the Selected Para Centers and Respondents

All information was collected on the basis of earlier categorization of the para centers, i.e. category A, B and C respectively. But study findings showed on significant differences among the three categories of para centers by most indicators. So findings of the study are highlighted as a whole and in few cases are shown separately where significant differences were observed.

2.1.1 General Information about the Para Centers

i) Land Space Occupied: Integrated Community Development Project (ICDP) fixed a criterion to have at least 10 decimals of land for establishing a para center. This criterion was not strictly adhered to when establishing each of the para center due to various reasons. It was
found that most of the para centers had 10 decimals of land and the average area of 30 selected para centers 9.10 decimals. ii) **Location:** ICDP personnel advised the community to select a suitable location for para center so that the children of each and every community household could attend the centers easily for pre-schooling. Catchment area maps of the 30 para centers indicated that 53% (16) para centers were located at the center and 47% (14) located at the periphery of the community.

iii) **Materials in the Para Centers:** ICDP project supplied some Information, Education and Communication (IEC) materials to each of the para center (i.e. poster). It was found that some of the para workers maintained IEC materials properly. But the majority of the IEC materials were not maintained properly in the para center. Among the selected 30 centers, it was found that in 14 centers (47%), IEC materials were maintained in good condition, in 10 centers (33%) were in moderate condition and in 6 centers (20%) it was in poor condition.

**2.1.3 General Information about the Para Workers:** Information on age, sex, and education about the para workers were collected. Results are attached in Table-1.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Age (years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 20</td>
<td>7</td>
<td>23</td>
</tr>
<tr>
<td>21-30</td>
<td>21</td>
<td>70</td>
</tr>
<tr>
<td>30+</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
<tr>
<td>b. Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Female</td>
<td>27</td>
<td>90</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
<tr>
<td>c. Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to Class V</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>VI-X</td>
<td>19</td>
<td>64</td>
</tr>
<tr>
<td>SSC (Secondary School Certificate/ 10 years)</td>
<td>9</td>
<td>30</td>
</tr>
<tr>
<td>Above SSC</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Survey data

The education of para workers is one of the most important indicators for achieving the quality of education of children. Two points were identified for not having competent para worker and these were: a. Non-availability of qualified para workers in or around the community and b. Donation of land for para centers could not exactly match with the most potential candidate to be selected as para workers in a few cases (It was found that donor of the land had some influences on the selection of para workers as well).

**2.2 Functioning of Para Centers and Para Workers**

**2.2.1 Family Coverage:** Within the ICDP project the para workers have to cover at least 25 families in the community for each para center. It was found that among 30 selected para centers, 16 (53%) covered up to 25 families, 11 (37) covered 26-30 families and rest 3 (10%) covered more than 30 families.

**2.2.2 Children under Para Centers:** Each of the para centers had grouped the children on the basis of age as 0-1 years, 4-6 years and >6-10 years respectively. The project wanted to highlight such groups for EPI coverage and pre-schooling activities. The selected 30 para centers were dealing with around 36 children each.

**2.2.3 Functions of Para Centers:** The Para Centers were mainly used for pre-schooling of children. It was also utilized as a common platform for providing different development interventions to the local community by GOs and NGOs. Para workers mainly conduct pre-schooling activity for the children and carried out motivational activities on different aspects of social life (primary health care, use of safe water and sanitary latrine, need for breast feeding of the children, etc.) at the community level.

**2.2.4 Enrollment of Children in Para Centers for Pre-schooling:** The most important function of the para center is the pre-schooling of the children from the local community. After pre-schooling the children at the para center, they are supposed to be admitted to the nearest primary school. The para workers enrolled the
children and categorized them into three groups as-pre-schooling (4-6 yrs.), Grade-I (6+8 years) and Grade II (8+ - 10 Years). It was found that in all the selected 30 para centers, the average number of enrolled children was the highest in pre-schooling group and the lowest in Grade-II group.

2.2.5 Attendance of Children in Para Centers: It was found that most of the para centers fixed the time at 7 am to 9 am for pre-schooling. It was found that on average 75 percent of the children regularly attended the center for pre-schooling.

2.2.6 Perception about Education: Most of the children felt very happy in getting education at the para centers. Children of 28 para centers mentioned that they felt ‘good’ about receiving education at the para centers (93%). Children of 2 para centers opined that they felt ‘Moderate’ about receiving education at para centers (7%).

Quality of Education provided at the Para Centers:

The evaluation team tried to examine the quality of education provided at the para centers by dividing children into two different age groups and developing three and four different indicators. The quality of education was assessed in terms of ‘good’, ‘moderate’ and ‘poor’ grading.

a) Group-I (4-6 years): In this case three indicators were used and these were counting, alphabet reading and picture/colour identification.

i) Counting Capability: Children of 5 para centers (17%) were graded as ‘good’ in regard to counting. Children of 19 (63%) para centers were grade ‘moderate’ for the same. Similarly children of 6 (20%) para centers graded ‘Poor’ in this respect.

ii) Alphabet Reading Capability: Children of the age group were graded ‘good’ in 4 centers (13%), ‘moderate’ in 17 (57%) centers and ‘poor’ in 9 Centers (30%) for their alphabet reading capability.

iii) Picture/Colour Identification: None of the children of the para centers were graded ‘good’ for their capability of picture/colour identification. Children of 18 Para centers (60%) were graded ‘moderate’ and 12 para centers (40%) were graded as ‘poor’ for their capability of picture/colour identification.

b) Group-II (6+10 yrs.): In this case four indicators were used and these were word building capacity, translation capacity, rhyme/drawing capability and knowledge on poster.

i) Word Building Capability with Alphabet: Children of 11% (3), 31% (8) and 58% (15) para centers were graded ‘good’, ‘moderate’ and ‘poor’ respectively for their capability of word building with alphabet.

ii) Translation Capability of Word: Children of 4% (1), 27% (7) and 69% (18) para centers were graded ‘good’, ‘moderate’ and ‘poor’ respectively for their capability of translation of word. Only one para center under Category-B was identified as ‘good’ in this regard (4%).

iii) Rhyme/Drawing Capability: Children of 8% (2), 65% (17) and 27% (7) para centers were graded ‘good’, ‘moderate’ and ‘poor’ respectively for their ability to rhyme and draw. Only 2 para centers under Category-B were graded ‘good’ in this regard.

iv) Knowledge on Posters: Children of 8% (2), 46% (12) and 46% (12) were graded as ‘good’, ‘moderate’ and ‘poor’ respectively for their knowledge on posters.

2.2.7 Enrollment of Children to Primary Schools: It was found that para workers enrolled 192 children in the nearest primary schools at the start of 1999. Para workers informed that only 5 of those children were dropped out from school. Reasons of dropping out children were shifting agricultural practices of their parents and poverty.

2.2.8 Appropriateness of different Supplies: Only two books were supplied to each of the para centers. The given book was not generally available in the local market. Supply
of playing materials was also not adequate. The supply of tennis ball was found to be inappropriate because the ball generally lost to nearby jungle around the para centers. So, it is better supply football instead of tennis ball and the children were also found to be in favour of football.

2.2.9 Motivational Activities and Level of Knowledge of Para Workers: Para workers generally perform motivational activities in the areas of primary health care and family planning in their respective community to increase their awareness on these issues. To carry out effective motivational activities it is necessary to know the respective issues properly. For that reason the extent of knowledge of para workers was assessed and graded accordingly as ‘poor’ ‘moderate’ and ‘satisfactory’. The following 10 issues were covered in this respect as they are the main areas to their motivational works.

a. Immunization: Para workers of 5 (17%), 20 (66%) and 5 (17%) were found as poor, moderate and satisfactory respectively for their knowledge on immunization.

b. Sanitation: Knowledge of para workers on sanitation especially consequences which might arise for not using hygienic latrine, was assessed and graded as poor 8 (22%), moderate 17 (59%) and satisfactory 5 (17%).

c. Safe Drinking Water: Causes of water pollution, diseases spread through use of polluted water, process of purification of available water before drinking, etc. were asked to para workers in assessing their knowledge in this regard. Para workers of 8 (27%), 17 (57%) and 5 (17%) were found as poor, moderate and satisfactory respectively for their knowledge on safe drinking water.

d. Breast Feeding: Para workers of 6 (20%), 19 (63%) and 5 (17%) centers were graded as poor, moderate and satisfactory respectively for their knowledge on breast feeding.

e. Use of Colostrums: Para workers of 8 (27%), 14 (46%) and 8 (27%) were graded as poor, moderate and satisfactory respectively for their knowledge about the use of colostrums.

f. Iodized Salt: para workers of 3 (10%), 21 (70%) and 6 (20%) were found as ‘poor’, ‘satisfactory’ and ‘excellent’ respectively for their knowledge about iodized salt.

g. Diarrhoea: Para workers of 2 (7%), 19 (63%) and 9 (30%) were found as poor, moderate and satisfactory respectively for their knowledge on preventive measure against diarrhoea, use of saline, preparation of saline, saline drinking time and method, etc..

h. Prevention of Malaria: Malaria is one of the major causes of death in the hill districts. An estimate shows that malaria causes about 67 percent of the total death of population in Naikhangchari upazila of Bandarban district. Knowledge of para workers regarding the importance of using mosquito nets, especially mothers and children was assessed as poor (10%), moderate (73%) and satisfactory (17%) for their knowledge in this issue.

i. Complicated Pregnancy: Some of the para workers were able to identify complicated pregnancy and with the help of Health Assistants they send patients to nearly hospitals. Para workers of 8 (27%), 19 (63%) and 3 (10%) were identified as poor, moderate and satisfactory respectively for their knowledge about complicated pregnancy.

j. Family Planning: Para workers of 5 (17%), 22 (73%) and 3 (10%) were graded as poor, moderate and satisfactory for their knowledge about family planning.

k. Feeling about the Para Centers: Both the mother and community groups identified the para center as an essential center for children education [4].

2.2.10 Nature of Benefits Received by the Community: When asked about the activities of the para center they mentioned about a number of activities. Among the different activities of the centers, they marked pre-schooling education of children as the most important one.
### Table 2: Nature of Benefits Received by the Community from Para Centers and Para Workers

<table>
<thead>
<tr>
<th>No.</th>
<th>Feeling from the Community</th>
<th>Responses level</th>
<th>Feeling from the mothers group</th>
<th>Responses level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Providing scope for children pre-school learning</td>
<td>Very high</td>
<td>Very much essential for children education</td>
<td>Very high</td>
</tr>
<tr>
<td>2</td>
<td>Good work done and it is necessary</td>
<td>Very high</td>
<td>Doing good works and is essential for the para</td>
<td>Very high</td>
</tr>
<tr>
<td>3</td>
<td>Enhance the enrollment of children in primary school</td>
<td>High</td>
<td>Enhance knowledge about primary health care</td>
<td>High</td>
</tr>
<tr>
<td>4</td>
<td>Center is necessary for the community</td>
<td>High</td>
<td>Provide scope for easy immunization of the children</td>
<td>High</td>
</tr>
</tbody>
</table>

Source: Survey data

**Feeling About the Para Workers:** Para workers in the locality generally performed a number of social awareness building motivation works including his/her basic work of teaching of the children for two hours daily.

**2.3. Co-operation from the Community**

The local community was found to cooperate the para workers in a number of ways in all the areas. The following paragraph highlighted some of the major areas of cooperation.

**2.3.1 Formation of Para Management Committee (PMC):** In most of the para centers a 5 members Management Committee (PMC) was formed in different times. But the number of meeting conducted by PMC was found not yet adequate in most of the para centers. A few para centers conducted required number of meeting after formation of the PMC.

**2.3.2 Kind of Support Provided:** Assistance provided by the community included labour supports during construction on para centers and their maintenance; sending their children to the center and gave them time during motivational work of the para workers. Majority of the para workers (97%) opined that they got assistance during construction of para centers and maintenance of them later on. Para workers of 21 (70%) expressed that they got cooperation from the community in case sending their children at the para centers. Para workers of 18 (60%) informed that they got cooperation from community when they visited the families within their respective paras.

**2.3.3 Other Uses of Para Centers:** Other uses of para centers mainly confined to use the center as EPI center including Vitamin ‘A’ week, for village *salish* (village level court for solving disputes at the village), other meeting, marriage/cultural function, religious discussion, use by family planning worker, use as youth club, etc. [4].

**2.4 Linkages of ICD Project with Nation Building Departments**

Integrated Community Development Project has adopted measures to maintain linkage with different officials as well as with NBDs through Co-ordination Committee at various management levels. At the top level there is a Central Co-ordination Committee (CCC) through which policy level linkage is being established with different top-level officials. At the middle level through the District Co-ordination Committee (DCC), a close linkage is being established with district level NBDs as well as with officials and through Upazila Co-ordination Committee (UCC) an effective linkages being developed with Upazila level NBDs. This Co-ordination Committee is very important for smooth running of the project. Currently it has been found that none of the Co-ordination committees’ meeting had taken place regularly. It is a key requirement for the project to organize Coordination Committee meeting regularly for building effective linkages with concerned officials and
different nation building department in smooth implementation of the project activities.

**2.6 Sustainability of Para Centers**

The topography, ecology and social system existed in the three hill districts are significantly different from the rest of the country. The economic condition of the general mass population is also existed at a low level. On the other hand, it is very difficult to implement development activities in this region for several reasons i.e., difficult communication, language barrier, low level of literacy, existence of different superstition among the local inhabitants with co-existence of other social and cultural problems, etc. Political unrest for several years in the past also impeded development initiative of the government department and NGOs greatly.

All public representatives in the region including Chairman of the Regional Hill District Council expressed their satisfaction about the para center activities and emphasized the need for its future continuity.

All the government officials opined to involve local council agencies in future project implementation for sustainability of the project. Chairman of Regional Council and Chairmen of all District Councils also opined positively in future continuation of the project and hope to bear its responsibility with moderate support from government in future.

The cost benefit analysis of the ICD project shows that presently capital and operating cost of the project are not so much high compared to the extent of benefit received by the community. It is a remarkable achievement in regards to educational improvement of the children, social awareness development among the local inhabitants about immunization, sanitation, safe water use, primary health care, etc. with such low investment and in difficult situation.

The local community, public representative at the community level, i.e. Chairman, headman and Union Parishad (UP) members/Karbari, felt that it is very much needed to continue the programme in the locality for overall development. But they opined that they were not financially sound enough to bear the cost of running the programme independently at this stage and requested to provide further government support for another 5 years. Institutionalization of project works under government normal development works of NBDs would help in getting sustainability of the project works in future [4]

The local community is not capable to bear cost of the project right now. So, it is necessary to bear the cost from the project and to involve local council offices in bearing the operating cost at least partially.

Further expansion of project area also needs required number of project staff for proper monitoring and supervision. It needs to increase at least the number of project organizers for smooth operation of the project activity in the extended areas.

Para workers to be carefully selected considering her/his education level and teaching capability.

It also needs to supply more education materials for the children to the para center. It is difficult to provide good education without books and improved physical set up.

The project has been well accepted and appreciated by the people of CHT due to its contribution in enhancing their living standard through creating awareness about health and hygiene, nutritional needs, educing illiteracy, etc. The community also wants the project to continue. This indicates high probability of the project sustainability from demand side. However, while the community people want the project to continue, it is highly unlikely that it will sustain without outside assistance. While the demand side meets the prerequisite for the sustenance of the project, ensuring the supply side needs to be considered by the relevant authority [1]

**3. Conclusion and recommendations**

**3.1 Conclusion**
The concept of “Para Center” of ICD project was well appreciated by all level of people i.e. from grass root level community to Chairman of the Regional Hill district Council. During visit of para centers, it was surprisingly observed that even most of the illiterate para community realized the necessity and importance of pre-schooling activities of para center as well as motivational activities of para workers. By this time some of the para community has been highly motivated regarding primary health care and sanitation which seems great achievement of ICDP. The site selection of many of the para centers and para workers were not done properly which might need improvement in achieving the project objective.

The quantity of education provided needs to be developed and also materials supplied in the para centers were found insufficient, specially the books and observed the crucial necessity of supplying required number of books. Present level of supervision was not up to the mark and need to improve supervision and monitoring aspect in most of cases. It is evident from the findings of the evaluation that extension of project duration for another 5 years turn; bringing the whole hill districts under the project interventions; involving the local council in project works right now and gradually sharing the cost of project with local council and; keeping effective coordination with Nation Building Departments (NBDs) at the upazila and district levels for getting their supports and services are the vital issues considered for the sustainability of the project works.

3.2 Recommendations

The following recommendations are put forwarded for active consideration by the project authority and other concerned personnel, policy planner for better functioning of the project activity.

3.2.1 Functions of Para centers

a. Due attention to be given in establish the para centers at the central part of the local community for easy access of children to the center.

b. Only two books were supplied in each of the para centers from the project. Sufficient number of books (at least 10 in each center) should be supplied for proper learning of the children.

c. There is a chronic problem of drinking water scarcity in the remote hill areas. It needs to supply at least one Tube Well or Ring Well to each of the para center for ensuring pure drinking water to the minor children. Sanitary latrine should also be supplied/installed near the para center so that the children can use the latrine, which will ultimately motivate the children to establish hygienic sanitary latrine to their residence.

d. The para center can also be utilized in imparting adult education to the local community in improving adult literacy level in the region.

e. Establishment of water harvesting unit on experimental basis might be another good option in better performance of para center in future.

3.2.2 Functions of Para Workers

a. Para workers in several cases were found suitable to run pre-schooling activities properly. So, para worker selection criteria should need to fix at least SSC (equivalent to class 10) level instead of Class VIII to maintain minimum quality level. In case of non-availability of candidate having SSC qualification, the capability of Para Workers can be improved through imparting training.

b. Para workers in several cases were found not well aware of their motivational activities. It needs to organize regular training and refresher courses at regular interval. In this regard initiative may be taken to organize training courses including training on different IGAs and preparation of Action Plan for them in some reputed training centers/instituted of the country.

3.2.3 Overall Project Management

a. The project is gradually expanding its area of operation through establishment of new para center. But number of PO post is not
increasing and they have to cover more than 30 para centers. But considering the communication facilities it is very difficult for their part to monitor all the para centers of their jurisdiction. In this regard the post of PO need to be increased with allotted of maximum 25 para centers for each PO as their area of operation for efficient field supervision.

b. The Project Director needs to given autonomy in day to day operation of the project activities. He also should have a certain level of financial power.

c. The project activities should link with local council and ensuring the supports and services of NBDs for future sustainability.

REFERENCES
TRAINING MINORITY GROUPS WITH LOW LITERACY

John Collins, Independent Researcher
Australia

This paper highlights the major difficulties encountered and lessons learned in changing attitudes and practices related to the use of farm chemicals.

Much of the fresh fruit and vegetables consumed in Australia is produced by recent immigrant farmers from non English-speaking backgrounds. These farmers are often illiterate in their mother tongue and very often illiterate in the English language. They thus have difficulty understanding Australian laws and regulations and understanding product labels describing safe use of farm and domestic chemicals such as pesticides and cleaning agents.

All Australian states and territories have laws and regulations intended to safeguard the health of farmers and consumers of their products, and to limit pollution of the wider environment. Misuse of chemicals can also make a farming enterprise unsustainable by increasing input costs or by rendering farm products unsaleable.

Delivering extension and training services to poorly literate farming groups from a wide variety of cultural and linguistic backgrounds has proved difficult, partly because of resistance to regulation by those groups, but more commonly because of difficulties in establishing meaningful communication with them.

Gaining entry to socially insular groups, identifying and winning over their community leaders, producing understandable and meaningful training resources, dealing with claims of poorly translated documents and selecting appropriate trainers are some of the difficulties discussed. The success or failure of various strategies is assessed.

**Keywords**: social structures, sustainability, training, social insularity, illiteracy, rural extension

Changing attitudes and behaviours in target groups is an essential part of the process of generating economic growth and sustainability. This paper highlights the major difficulties encountered in changing attitudes and practices related to the use of farm chemicals. The case study relates to minority groups living and working in the Sydney Basin of NSW.

Modern Australia has experienced successive waves of immigrants. In the years immediately after 1945 immigrants came from European and Mediterranean countries. During the 1960s and 1970s immigrants from more diverse sources began to arrive.

Some migrants from all sources arrive well educated and financially secure, moving easily into “white collar” occupations. Others are poorly educated and financially destitute. It is with this latter group that the remainder of this paper concerns itself.

Poor, ill-educated migrants typically find their first paid employment in the dirty, dangerous, poorly paid and low status jobs that better established residents shun. New arrivals accept such work as it is often the only work available to them. Many soon seek to move on to what they see as “better” working conditions.

Market gardening (growing vegetables, fruit and flowers) and small scale animal production (for instance, poultry meat and egg production) on small area farms not requiring significant capital investment in machines, land or equipment are often seen as “better” work.

Migrant groups from earlier periods may provide the land for farming. For instance Italian, Greek and Maltese migrants who arrived in the 1950s or 1960s may have worked in waged...
occupations long enough to purchase 1 to 5 hectares on the outskirts of Sydney when land prices were lower. By the 1990s those migrants are getting too old to work their farms so hire labour from among newly arrived groups such as Khmer or Lebanese or Somalian groups. This process has developed over several decades. The result is that the Sydney Basin offers a kaleidoscope of ethnic minorities in the small farming sector. It has been estimated that over 85% of Sydney’s cut flowers and vegetables are produced on Sydney Basin farms managed and worked by people from non-English speaking backgrounds (NESB). Furthermore, it is estimated that more than 65% of NESB market gardeners are first generation immigrants [1].

There are obvious significant differences between circumstances described here and the circumstances of minority hill tribes of Northern Vietnam. Farming populations described in this paper are mostly within an hour of major city markets, do not occupy territories splintered by geomorphological features such as mountain ranges and in all cases are geographically sedentary. On the other hand there are many similarities that may not be immediately obvious:

Multiple ethnicities. Succeeding waves of immigrant groups have contributed to Sydney Basin’s farming workforce. Major groups in rough order of arrival include various Mediterranean cultures (Italian, Greek, Maltese), IndoChinese cultures (Khmer, Vietnamese, Lao), Chinese, Indian sub-continent and Middle Eastern, African and South American.

Poor education levels. Market gardening is usually the preserve of those with limited occupational options.

Social and political isolation. Poor education and the nature of small farm labouring contribute to a lack of connection with wider community, cultural and political groups.

Distrust of formal authorities. Partly because of their inability to read English recent NESB migrants find it difficult to know and understand local laws and commercial and other practices. To a large extent contact with authorities occurs when they have not followed rules they do not understand. In the circumstances there is an incentive to avoid authority wherever possible. Many recent NESB migrants are from political, religious or economic minorities in their countries of origin where they may not have commanded the rights and/or benefits accorded other citizens and this is another reason why they tend to distrust and avoid contact with formal authorities in Australia. As a result Australian authorities find it difficult to identify, communicate with and win the trust of many recent immigrant groups.

All Australian states and territories have introduced laws and regulations managing purchase and/or use of agricultural and veterinary chemicals. Illiteracy among NESB farmer groups constitutes a significant barrier to those farmers understanding the rules and regulations and also the safety information included on product labels. Being new to Australian soil, climatic, plant variety and disease conditions compounds other difficulties – strange plants, strange agronomic conditions, strange pests and diseases and ignorance of appropriate chemicals, application rates, withholding periods, health risks and environmental impacts make for a potent combination of risks.

NESB farmers learn what they know of safe and effective use of chemicals from their neighbours, their language groups (often contacted at marketplaces), marketing agents and from retailers of farm chemicals and other products and equipment. Neighbours and language groups tend to provide reinforcement of current practices, not enlightened advice.

Several studies have recognised the important positive role played by chemical retailers in the lives of NESB farmers [1-4]. Retailers provide seed, fertiliser, equipment and chemicals and often also credit, advice on agronomic skills, marketing tips, and farm occupational health and safety. Retailers are also important nodes in information networks, putting farmers into contact with informed sources of farming information such as agronomists,
entomologists, restaurants, marketing agents and so on. But there are limitations to what even the best intentioned retailer can do in advising on crop pests and diseases.

One difficulty is that NESB farmers frequently grow crops unusual in Australia. With no knowledge of the crop and its potential diseases and pests, advice on what chemical pesticide and the most appropriate usage (dosage, timing, etc) is often impossible. Another difficulty is that retailers have a clear conflict of interest – their livelihood depends on the volume of their sales, while good agronomic advice often argues for reductions in use of chemical pesticides and fertilisers.

Government extension officers have tended to conduct their work by identifying and concentrating their efforts on community opinion leaders, in the belief that by changing practices among this section of the farming community, other farmers will be encouraged to adopt the changes. Such a strategy encounters difficulties in the Sydney Basin.

The first difficulty is that NESB farmers are often suspicious of government officials. In some cases there is a deep seated mistrust of officialdom which derives from the reasons many of the farmers have migrated to Australia. In other cases their lack of experience with local (Australian) customs and practices means they may often unwittingly be on the wrong side of authorities of all kinds, but especially government authorities. Both factors tend to encourage their tendency to “remain below the radar” wherever possible, participating minimally in the social, cultural and political life of their adopted country.

Apart from their common language, most commentators agree that NESB farmer groups do not constitute “communities” in the generally accepted senses of the word. Due to the fact that working hours are long for all family members there may be little social interaction even between neighbouring farmers, their wives and children. In the circumstances, those with ambitions to become leaders of their “communities” find it difficult to establish their credentials, or to deliver advantages and social or political gains.

Where nascent community leaders do manage to emerge, there can be awkwardness in dealing with official Australian organisations. One attempt by an extension organisation to use the good offices of community leaders suffered because the leaders saw in the project a much needed sign of their ability to “get things done” on behalf of their constituents. The “leaders” had formed a grower association of Khmer speakers but had failed to deliver any tangible benefits to its members for more than two years. In their attempt to achieve something of value for their members they were eager to circumvent the normal planning and preparatory phases of the project, designed to improve safe farm chemical use, and urged the organisers to launch the project prematurely. The project proceeded, but without adequate funding, planning and explaining to its intended participants [1].

NESB farmers seeking to establish themselves as community leaders can hinder the work of government extension officers in other ways. In order to arrange funding, resources and other elements of a training program, extension officers need to know likely number of participants, their education levels, the size and nature of their farming operations and so on. NESB farmers attempting to establish themselves as representative leaders among their language groups may be reluctant to divulge this type of information about constituent farmers lest they be seen as “collaborators” with the government to the detriment of the farmers.

Agricultural extension work among NESB farmers faces further difficulties because of the lack of appropriate published resources. Because the number of language groups is large and the number of farmers in each language group relatively small, costs of translating resources in the various languages are very high. Furthermore, it is often difficult for Anglophone extension officers or trainers to determine if the translated material faithfully represents the original English
version of the publication. This author’s experience is that any two translators are likely to disagree on adequacy of translations from English to any other language, and disagreement over phrases of critical importance in messages about farm safety and sustainability can be intense, time consuming and costly.

Finally, finding trainers or extension officers able to win the confidence of NESB groups even from within those groups themselves has proved difficult. Not all farmers of a common language group are of uniform religious, political or social status groups and outsiders often miss the nuances involved.

**Summarizing the difficulties**

Gaining entry to socially insular groups, identifying and winning over their community leaders, producing cost effective, understandable and meaningful training resources, dealing with claims of poorly translated documents and selecting appropriate trainers are some of the difficulties discussed. The success or failure of various strategies is assessed.

It is now fifteen years since regulations introducing compulsory training for users of farm chemicals have been in force in the state of NSW. Efforts to reach and train NESB market gardeners of the Sydney Basin have involved several state and federal government agencies, two universities, a number of Non-Government Organisations (NGOs), and several private (commercial) training companies, among other groups. A large number of published and unpublished investigations and reports have been produced. What lessons can be learned from all this activity for those wishing to reach minority farming groups in order to influence their attitudes and practices?

The first lesson is that reaching poorly educated, socially insular groups lacking clear internal authority structures is not a purely technical problem. Hardin [5] provides a salutary reminder that not all problems are amenable to technical solutions, and some apparently intractable problems require a revolution in the dominant cultural paradigm. Technical agricultural extension solutions cannot simply be mandated or imposed upon communities not yet ready to receive those solutions. General community capacity building is the first step towards engaging unreachable communities.

The second lesson is that community capacity building takes time and relies heavily on nurturing existing connections between insular communities and the wider society. Local retailers of farm equipment and chemicals, marketing agents and a small number of trusted members of wider Sydney society have formed entry points to various language groups. Government, in order to get its way, has had to learn to work through and with these informal gatekeepers. Government has not had the capacity to choose whom it might work with or through. It cannot appoint its favoured change agents.

The third lesson learned is that nascent language group representative organisations cannot simply be co-opted to undertake governments’ biddings. Organisations representative of the NESB farmer language groups were in early stages of establishing their own credibility and missions. For them to simply accept the roles of representatives of wider Australian society’s wishes for their language groups would have damaged their development and their ability to reach both their members and the wider society. “Assistance” offered to community organisations by government overwhelm and confound the intellectual and political ability of those organisations to manage the assistance received, and can lead to loss of legitimacy in the eyes of their erstwhile supporters.

If governments wish to utilise community organisations to achieve governments’ aims and objectives, governments must try to ensure those organisations possess the capacity to help their constituents agree on, articulate and prioritise the problems they face, and the capacity to activate their communities to address those agreed problems. Only at that point will the value of resources available to government be recognised.
by their target communities. Government can’t legislate capacity to community organisations, but governments can refrain from inhibiting its development and can positively assist its development by timely and measured assistance as requested.

Development of community organisation capacity can be inadvertently inhibited by Government if different arms of government appear to work at cross purposes. Different levels of government need to recognise that poorly educated, socially isolated groups do not draw clear distinctions between the roles of different government agencies. “Government” appears as a monolithic entity to the unengaged. No amount of argument or public relations effort by government sources will change this perception. The change must come from within the minority satellite groups. Government cannot legislate or decree this change it can only assist the internal community processes which lead to the change.

Clearly Bradley [5] is correct in her assertion that not only must the target NESB groups change their attitudes and behaviours, but so too must governments if they are to bring about the change they desire in target groups.

In circumstances where members of a group targeted for attitude or practice change fail to differentiate between different arms of government, then officers representing those different arms of government must recognise that their actions can assist or interfere with the capacity of other arms of government to achieve their objectives. This recognition is particularly critical for regulatory and enforcement officials. The manner in which they carry out their work can be particularly important in building trust in government in general, including trust in those officials whose goal is to assist or aid rather than ensure compliance by members of the target group.

**Summing up**

For the past fifteen years several intensive and expensive efforts by a wide variety of agencies have encountered similar problems and have met with similar results among NESB farmers in the Sydney Basin.

In attempting to improve the health, safety and economic and environmental sustainability of farming practices of poorly educated, socially isolated and culturally insulated farming groups lessons learned have included the need for patience, for coordination of effort between government agencies, and for a variety of techniques, some bespoke, to be employed.

The most important lesson however, is that government too must change its attitudes and behaviours if it is effectively to change attitudes and behaviours in minority groups targeted for any aspect of economic development. Rather than imposing change or decreeing that change will occur, government must adopt longer term strategies for encouraging capacity building within target minority groups to allow those groups to better engage with the wider society, including government itself.

The experience of fifteen years of work in the Sydney Basin suggests that until they develop the capacity to engage with wider society minority groups targeted by governments for economic development will not be able to share in progress being experienced in national and global economies.

**REFERENCES**


PRIVATE FOREST FOR ECONOMIC OPPORTUNITY IN MOUNTAINOUS REGION OF NEPAL

Bhola Bhattarai

National Forum for Advocacy, Nepal (NAFAN)

Background

The Master Plan for the Forest Sector (1989 – 2010) has clearly given equal emphasis to both community based and private forest management for their contribution in the development of forest in the country. The Forest Act 1993 and Forest Regulation 1995 has a provision for private forestry. The Act (section 38) states that the owner may develop, conserve and manage the Private Forest and utilize or sell and distribute the products by fixing prices on his/her own will.

Similarly, the Forest Regulation 1993 has provision of Registration of private forests with DFO and under this provision if an owner has to consume any of its products locally one does not need to undergo any formality but for selling outside the village one has to get formal sanctioning process completed prior to logging the timber from registered/non-registered private forests. This long process of formalities for getting clearance and different directives from the concerned ministry has been realized to be the hindrances discouraging people to go for private plantation.

Private forests primarily must facilitate the private sector in the development of forest and forest-based enterprises in the country. In this competitive economic scenario, without active participation of the private sector in the Forestry development activities, the country cannot address its prevailing poverty and sustainable development issues along with releasing the community and national forest from enormous pressure.

In addition to trees and its products, there are number of private forest products, such as NTFPs, Bee keeping, agro-forestry products and its related entrepreneurship, like plywood factory, particle board, paper mill, etc. sawmill, which are equally important for the betterment of the whole forestry enterprise for the overall development of the forestry sector of the country. The agency has, thus, put its focus to bring about all different forestry related private institutions under one umbrella, which will bring solidarity among all to provide additional support into the national GDP through forestry and its related entrepreneur which is still not at all reflected in the country from the private forestry side.

Forest legislations have classified forests into two groups according to the tenure rights. They include

i) National Forest and
ii) Private Forest.

Private forest is a forest which is planted, nurtured or conserved in any private land owned by an individual pursuant to prevailing laws (Forest Act 1993). There are a number of private forests established in Nepal. Under the Forest Act 1993 and Forest Regulation 1995, the private forest owners can register their forests at the concerned District Forest Offices (DFOs) so that they can enjoy the benefits provided by the government policy and regulations. However, the record of private forest registration is not encouraging. To date, 2455 Private Forests covering an area of 2361 hectares have been registered in different District Forest Offices (DoF, 2014).

Private forestry is one of the priority sectors of Master Plan for the Forestry Sector (MSFP) 1998, however, achievements against the targets set by the plan is very insignificant. Private forestry model is not widely recognized and the owner of the private forestry is not enjoying the benefits provisioned by the policy, act and regulations. Though neglected, many reports state
that private forests fulfill almost 50% of the timber demand in the country. With increasing population and infrastructure, the demand of timber has been geometrically increasing. The supply of timber from Government managed and community managed forests has been highly short fall to the domestic demand. This gap has been mostly bridged by the private forests. Though, it is priority sector, the attention from Government Mechanism and Supporting Agencies on Private Forestry has recently been very slim. With the increasing role of forestry beyond the traditional use such as significant roles in climate change adaptation and mitigation, promotion of private forestry has been instrumental. Though this sector has high scope/opportunities from various aspects, this sector is facing significant challenges which need to be pin pointed and addressed timely

**What is private forest?**

Forest is defined and classified in Nepal in order to simplify management of forest. According to Forest Act, 1993, forest means those areas which are fully or partially covered by trees. According to this Act, forest is classified into two types based on their ownership, national forest and private forest. There is a provision of management of national forest by government itself and through various forest user groups e.g. religious forest, leasehold forest, community forest and protected forest. Management of private forest is being done by land owners.

In simple, those plants and trees are called private forest which are planted and grown on registered land in the name of person or any institution. Legally, according to Forest Act, 1993, section 2(k), private forest means that forest which is planted, grown and conserved on private land by any person who has legal rights upon it. National Park and Wildlife Conservation Act 2029 section 3(B) states that those land which located inside the buffer zone will not be affected (Legal Book Management Committee, 2051). Ownership of private forest inside buffer zone is of person him/herself.

**What are the forms of private forest in Nepal?**

Agro-forestry is an idea of establishment and extension of private forest. Types of agro-based/farm-based private forest are as follows:

- Garden,
- Farmland,
- Around the boundary,
- Terrace (Chakla),
- Inside high value agriculture production plot (tea or coffee),
- With fruits and vegetable trees and
- Around fish farm

**What are advantages of private forest?**

Advantages from private forest are as follows:

a) Private forest helps to reduce pressure upon other sources by increasing independency utilizing timber, firewood, fodder, grasses, non timber forest products personally. It also helps in conservation of forest by producing seeds and plants.

b) It helps in the increment of national income and employment by establishment of forest-based industries.

c) Private forest assists in stabilization of soil and maintaining watershed areas.

d) Plants which are planted and grown on private land provide benefits to the society at large.

e) It supports towards conservation of biodiversity and inheritance as well as enhancement of wildlife habitat.

f) Helps to maintain greenery, environment and co-operation between up stream and down stream people.

h) It helps to protect the infrastructure of the country.
Policies

Private forest development directive 2068 has provided some ways to develop private forest and their promotion in changing situation. Herbals and non-wood forest products can be included in private forest, investigative work should be completed within 30 days in the process of registration of private forest. Registration which includes herbals and forest products as a part of private forest can be done in range post, one private forest group can be made out of minimum 7 private forest owners. Network of private forest group is indexed in district level by District Forest Office, in regional level by region itself and in national level by Forest Department.

Private forest owners or groups can form and register co-operative as per co-operative rules and regulations. District Forest Officer will form one technical committee comprising of two members selected by District Forest Region Coordination Committee headed by forest technical equivalent to officer of District Forest Office. The role of such technical committee is for quality control of technical help in private forest; to identify and investigate organization which works for the development of private forest in each district; to determine service cost regarding availability of necessary technical help and to manage others required things. Such technical committee, if feels necessary, can demand help from technical employee of Survey Department.

If private forest owners have to cut down trees from their forests, they have to inform District Forest Officer or Area Forest Officer or Range Post at least a day before with references from concerned Village Development Committee or municipality. If private forest owners have to cut down trees for commercial purpose, they should provide information to the District Forest Office about number, types, volume of trees to be cut. For unregistered private forest, permission should be taken from District Forest Office after having required investigation from Range Post. Private forest owner should not take permission from District Forest Office to use wood and logs of his/her forest located at the same place. To transport out of the district, he/she can do by taking references from VDC or municipality. The value of wood and logs should be approved from Range Post. For the transportation inside the district from unregistered private forest, private forest owner should take permission from the District or Area Forest Office with references from respected Range Post. For the out of district, the same procedure should be followed. For the transportation of approved "Ailani", "Parti" and wood and logs of those species which are not found inside government forest, after making evaluation about costing presented by private forest owner, from check post of the district, one can take away those wood and logs. These directives have not been completely implemented despite of availability of other added and miscellaneous facilities.

The Ministry of Forests and Soil Conservation (MFSC) is ready to formulate Act after getting permission of concepts in order to establish forest product authority which facilitates the system of sales and distribution in a simple and easy way. The MFSC is hopeful for the improvement of quality, value and sales and distribution of wood and logs. (National Planning Commission, 2013)

Strong parts on policy level system of private forest

Rights to independent property in constitution.

Master Plan for the Forestry Sector, 1988 has kept first priority in its programme.

One can establish private forest according to Forest Act:

Registration of 2455 private forests in an area of 2360 hectares;
Increment in plantation;
Availability of wood from private forest;
Availability of logs;
Free distribution of plants;
Forest products of private forest can be sold and transported;
Increment in people's consciousness;
Concept of forest products authority;
Excitement on traders;
Starting of industry establishment;
Membership of World Trade Organization (WTO);
Gradual increment in ability,
Farmers facilitated up to certain level due to income from private forest and
Establishment of private nurseries.

4. Opportunities and challenges

4.1 Opportunities

There are huge opportunities in promoting private forests as it is playing and can potentially play great role to strengthen the national economic growth and securing livelihood of people. Many forestry experts and planners agreed that private forests have bold existence in national economy by providing the highest level of goods and services. The below are the key opportunities identified by the workshop.

Forest act, periodic plans and directives have special provisions to promote the private forests;
There is an opportunity to promote agro-forestry under private forest;
To improve the quality of products, tissue culture technology is available in the country which can be used to produce millions of seedlings;
Under the Ministry of Forests and Soil Conservation, a section for promoting private forestry existed in DFRS and DPR;
Apart from benefits from goods, its ecosystem benefits will be high from where financial incentives could be received. Some benefits include environmental protection, carbon stock enhancement, and biodiversity protection and ecosystem services;
From the economic perspective private forests can highly contribute to income revenue for government;
Alternative energy and generation of small cottage industry are the potentials within the boundary of private forests. User's community can sustain their better livelihood;
Investment opportunity to dedicated investors in this sector and it can give the productive support to stop for inter-district migration and international migration for labour;
Healthy private forests can give the supportive environment to national forest;
It can play crucial role in promoting tourism and
Private forestry could be an effective way to reduce pressure in Churia range.

4.2. Challenges

Though the few provisions on private forestry under laws and some strategies are implemented to promote the private forestry, the challenges are tremendous and still unresolved. During the workshop participants discussed the contemporary hurdles of policies and practices in private forests. The key hurdles highlighted were implementation of policy provision in practice, technical support and promotional incentive from the government. The following are the key challenges of PF.

Weak implementation of laws, guidelines and directives to upscale the private forest;
Though it has great potentiality in national economy, there is no proper accounting, publicity and communication;
Private forests owners have limited silviculture and forest management skill;
Quality and quantity of seedlings have always been issues;
There is a limited financial resource for promotion of private forests. No banks are willing to invest in private forestry;
Private forestry has got low priority in development arena;
Unnecessary burden during registration processes of private forests and after registration no comparative advantage received by the owner;
Private forest is heavily taxed including VAT. There are subsidies in agriculture sector while
importing equipment but in the case of forestry sector, it is not existed;

No promotional program for private forests from government side;

Unless big chunk of land is available, large scale private forestry is not possible. There is no practical provision of leasing land in policy and laws for private forestry. Lease process is not practical;

Taking permission for felling, transportation and sale of private trees is highly complex and bureaucratic. It takes almost two months and similar amount of energy. This is one of the most highlighted issues during the workshop. Government staff always seek additional benefit (without record) out of their work;

There is hurdle in each step of value chain. A number of government institutions are involved in different steps and they are neither fully aware on policies nor have good coordination among them;

Research and development in promoting private forestry and timber enterprise is very limited. New technologies and species are lacking in Nepal as compared to neighboring countries and

Accounting system of private forestry is very weak. There is no concrete data on private forests (registered and unregistered).

6. Conclusion and recommendations

Different policies, laws, regulations and plans have given priority for private forestry but those provisions could not be tapped by private forestry holders and actors on its product value chain due to several reasons. Similarly, It is also identified some policy gaps in promoting private forestry. private forestry could be an effective means for reducing pressure on other forests in one hand and increase income and employment opportunities which increase the contribution to National GDP in other hand. There are number opportunity for promoting private forestry and engaging private sector and if they can be materialized, the bottleneck on private forestry promotion can somehow be minimised. There are number of recommendations for different actors as summarized in the Table 2 below.

<table>
<thead>
<tr>
<th>Table 2: Actor wise recommendation for promoting Private Forestry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actors</td>
</tr>
<tr>
<td>--------------------</td>
</tr>
</tbody>
</table>
| Government/MoFSC   | • Develop policy to provide incentive on machines, quality seedling and regular technical support  
                       • Provide incentive for successful establishment of plantation  
                       • Simplify PF registration, felling, sale and transportation of timber  
                       • Ensure provisions and process in policy, laws and regulations are implemented without delay and change.  
                       • Strictly follow mechanism for reward and punishment to government staff  
                       • Develop and implement provision of leasing government land for private forestry  
                       • Develop a sustainable system for database establishment and update it  
                       • Link REDD+/plan VIVO/PES to private forestry. Contribution from PF to reduce pressure on other forest should be recognised by REDD+ mechanism and accordingly benefits should be provided  
                       • Develop policy to invest majority of revenue collected from PF to local development  
                       • Develop policy to use timber from sustainably managed forests which can be measured through forest certification  
                       • Support for massive plantation in Terai in all lands available (private, public, government and community)  
                       • Promote women in private forestry: policy and practice  
                       • Facilitate and recognize networks of private forestry entrepreneurs |
| Supporting agencies such as Project, NGOs, etc | • Support for capacity building in timber value chain especially to farmers  
                       • Support farmers for PF registration and facilitate for implementation of |
| provision made in Act, Regulations and guidelines.  
| - Facilitate and support for establishing and functioning of networks of PF entrepreneurs  
| - Facilitate to access finance from financial institutions  
| - Support government and farmers for required quality and quantity seedling production  
| - Support to pilot timber certification in PF  
| - Facilitate to increase access to market  
| - Facilitate to provide the carbon certificate for private forest owners. Link them to REDD+ mechanism  
| - Develop extension materials and guideline (technical) for private forestry promotion.  
| - Support to innovative farmers and entrepreneurs who bring new technology for generating resources and efficient processing.  
| - Support for massive plantation in Terai in all lands available (private, public, government and community)  
| - Facilitate for insurance and provide subsidies for insurance  
| - Promote women in private forestry: policy and practice  
| **Private Sector**  
| - Invest for wood efficient and alternative technology including diversification of products  
| - Prepare the database of private forest.  
| - Provide financial loan (MFI)  
| - Develop insurance package for PF  
| - Promote marketing  
| **Private Forestry Entrepreneurs**  
| - Diversify species promoting high value and fast growing species considering to biodiversity conservation.  
| - Modernize technology in resource generation and processing,  
| - Invest for Insurance,  
| - Establish network of PF entrepreneurs and conduct PF business through the network and  
| - Mass scale nursery establishment and plantation.  
| **Legislators/Politicians**  
| - Develop Policy as per the need and aspiration of private forest entrepreneurs and other engaged forest product value chain.  
| **Journalists**  
| - Support for pro-PF publicity. |
Conclusion

Strong parts of policy level management of private forest should be made more effective and extended. Since Nepal is agro based nation and different advantages are being taken from private forest: Logs for energy, construction of houses and income generation. Thus private forest should be made farmer and entrepreneur friendly. Challenges regarding promotion of private forest should be removed. Coordination and cooperation among stakeholders is very important to make common thoughts. What today's necessity is that all should come together to make planning and regular analysis for development and promotion of private forest.

REFERENCES


SUSTAINABLE POVERTY REDUCTION MODEL FOR ETHNIC MINORITY IN BA BE DISTRICT, BAC KAN PROVINCE THROUGH THE IMPLEMENTATION OF PRODUCTION OF POTATOES IN PARTNERSHIP BETWEEN COMPANIES AND FARMERS

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BSc. Dang Thi Anh Tho

Ba Be Division of Agriculture and Rural Development, Bac Kan

1. Rationale

Ba Be is a district in the northwest of Bac Kan province which is bordered by Pac Nam district to the north and northeast, Na Hang district (Tuyen Quang) to the west, Cho Don district to the southwest, Bach Thong district to the south, and Ngan Son district to the east. The district capital lies at Cho Ra – a township on the national highway 279, which is 50 km far from Bac Kan town to the northeast. Ba Be has 15 communes and 1 township, and covers an area of 684.12 km² in which agricultural land area of 6,766.24 ha, (accounting for 9.9% of the total area). The main activities of the locals are agriculture and forestry. 61.35% of the total population is not poor, 16.34% belong to group of the near poor, and 22.09% are poor.

Ethnicity: Tay (57.75%), Dao (24.45%), Mong (6.51%), Nung (5.15%), Kinh (5.59%), Hoa – ethnic Chinese (1%), and San Chay and San Diu remain minor ethnic. Population: 49,761.

Ba Be is one of the two poorest districts of Bac Kan province. There exist both objective and subjective obstacles for agricultural production. They include cultivation on terraced fields and slopping soil without concentration, poor transportation, low intellectual standard, and limited access to high technology and science, etc

In the annual agricultural production of the district (4,917.59 ha), rice occupies the largest cultivated land (1,632.63 ha), followed by corn (1,428.50 ha), cassava (891.49 ha), and edible canna (786.47 ha). The other crops consist of soy bean, vegetables and sweet potato.

In recent years, potato had been highly cultivated. However, the outdated farming methods in small scale and the use of seedling from unclear sources have resulted to poor productivity and quality. Moreover, products could not be consumed or just put up for sale at low price, which contributes very little to poverty reduction.

Since 2012, Soil and Fertilizers Research Center and Department of Agriculture and Rural Development of Ba Be, Bac Kan have cooperated to establish a model of implementation of production of potatoes in partnership between companies and farmers. Thanks to this model, farmers have been provided seedlings, fertilizers and pesticide of high quality. Furthermore, they have been trained about the modern farming methods of growing and harvesting potatoes. All of their potatoes have been bought by companies at least at the minimum price as contracted. The remarkable results include the increase by 30-40% in productivity and that by 20-30% in economic efficiency. Especially, farmers can enlarge their production scale and their potatoes are guaranteed to be consumed, raising their income significantly. Thus, potatoes can be a suitable crop for stable poverty reduction.

Therefore, the Model of Sustainable Poverty Reduction for Ethnic Minority in Ba Be District, Bac Kan Province through the Implementation of Production of Potatoes in partnership between Companies and Farmers should be popularized in many localities, making great contributions to effective and stable poverty reduction.

2. Location and content

2.1. Location

The model was implemented in 6 communes of Ba Be District, Bac Kan province, namely Ha Thieu, Dia Linh, YenDuong, Chu Huong, Cao Tri and My Phuong.
A visit to the potato plantation model in Ha Thieu commune

2.2 Content

Have the contract signed between companies and farmers

Train farming methods of growing and harvesting potatoes

Establish the model of potato production

3. Results

3.1. Contract between companies and farmers

Consumption of products is the decisive factor in establishing scale of production for farmers. Hence, supported by the People’s Committee of Ba Be District with 100% of seedling cost, Soil and Fertilizers Research Center and Department of Agriculture and Rural Development of Ba Be connected some centers and communes to sign the take-off agreement. They were:

- Center of Application and Development of Science for Agriculture and Environment of Thai Binh
- Cooperative of Services and Agriculture Bang An – Bac Ninh

Based on the contract, the center and cooperative would provide potato seedling, fertilizers and pesticide of high quality. The Soil and Fertilizers Research Center and Department of Agriculture and Rural Development of Ba Be would be the two units that will be responsible in providing the farming methods, harvest and training for farmers. Leaders of communes and hamlets would be in charge of implementation. Once harvested, 100% of products would be purchased right away.

3.2. Method of drilling and on field meeting

Results of method of drilling

Before and while implementing the model on the field, training classes for such participants as local staff, staff of steering committee and farmers were organized. Some organizations like Women’s Union, Farmers’ Union, Youth Union and other farmers who did not participate in the model but wished to follow the training also attended the classes. The main content of the training concentrated on issues of agricultural production and addressed farmers and representatives’ questions in details about:

- The methods of producing, storing and using good potato seedlings;
- The methods of soil processing and applying fertilizer (mineral manure, organic fertilizer, micro fertilizer);
- The methods of growing and preventing pests and diseases on potatoes;
- The methods of harvesting and storing potatoes.

In total 10 training classes have been organized in 6 communes with 425 turns of participants.

Besides training classes as planned, every planting season, meetings between the steering committee and farmers were regularly held in all communes to discuss cultivating methods at different developing stages of potatoes. At the end of each harvest, there were also meetings to draw appropriate lessons in intensive farming.

Thanks to the method of drilling, more than 400 turns of farmers raised their awareness of potato production to achieve high economic efficiency and adopted progressive cultivating
methods in intensive farming in their localities. In general, participants indicated their willingness to apply new advancement in farming methods.

* Results of on field meetings

- Two (2) on field meetings were organized in 2 communes of Cao Tri and Ha Hieu to discuss and evaluate the initial results of the model. There were 118 turns of participants including staff of the steering board, representatives from Department of Agriculture of Ba Be, representatives of communes and farmers participating in the model.

On field meetings revealed that most of the participating farmers were enthusiastic and eager and also highly appreciated the methods given in the model. It helped the participating farmers produce potatoes in an effective, scientific and sustainable way. It also enabled the farmers to increase productivity, enhanced economic efficiency and transformed the farming practices of the region.

Field meetings and the implementation as the whole process were conducted to assess the effectiveness of the method of drilling and the model makers calculated potato productivity of the three (3) groups of farmers in the region:

Group I included farmers who did not participate in the program, training classes and on field meetings. Group II included those who did not participate in the program but attended all training classes. Group III included those who participated in the program and attended all training classes as well.

The statistics of potato productivity is presented in the table below.

### Table 1: Effectiveness of participation in training and model construction on potato productivity

<table>
<thead>
<tr>
<th></th>
<th>Year 2012</th>
<th>Increase compared to CG (%)</th>
<th>Year 2013</th>
<th>Increase compared to CG (%)</th>
<th>Average</th>
<th>Increase compared to CG (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group I (control group - CG)</td>
<td>82.6</td>
<td>-</td>
<td>87.3</td>
<td>-</td>
<td>85.0</td>
<td>-</td>
</tr>
<tr>
<td>Group II</td>
<td>95.5</td>
<td>15.6</td>
<td>96.2</td>
<td>10.2</td>
<td>95.9</td>
<td>12.8</td>
</tr>
<tr>
<td>Group III</td>
<td>115.7</td>
<td>40.1</td>
<td>120.5</td>
<td>38.0</td>
<td>118.1</td>
<td>38.9</td>
</tr>
</tbody>
</table>

It can be seen that the participation in training classes had noticeable effects on the farmers. Useful knowledge in classes was applied in potato production, which leads to the fact that their productivity outnumbered that of the controlled group by 12.8%. For participants of the model who followed the training classes, their potato productivity increased by 38.9% compared to the controlled group.

### 3. Model construction of potato production

3.1. Scale of the model

<table>
<thead>
<tr>
<th>Communes</th>
<th>Area (ha)</th>
<th>Number of Participating Households</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year 2012</td>
<td>Year 2013</td>
</tr>
<tr>
<td>Ha Hieu</td>
<td>4.2</td>
<td>9.0</td>
</tr>
<tr>
<td>Dia Linh</td>
<td>13.8</td>
<td>24.0</td>
</tr>
<tr>
<td>Yen Duong</td>
<td>6.0</td>
<td>9.0</td>
</tr>
<tr>
<td>Chu Huong</td>
<td>7.0</td>
<td>8.0</td>
</tr>
<tr>
<td>Cao Tri</td>
<td>-</td>
<td>7.5</td>
</tr>
<tr>
<td>My Phuong</td>
<td>-</td>
<td>5.0</td>
</tr>
<tr>
<td>Total</td>
<td>30.0</td>
<td>62.5</td>
</tr>
</tbody>
</table>
In two (2) years, the model was implemented in 92.5 ha in 6 communes of Ba Be with the participation of 736 households. The scale in 2013 was larger than that in 2012 due to the addition of two communes, Cao Tri and My Phuong.

3.2. Potato productivity

Table 03: Potato productivity

<table>
<thead>
<tr>
<th>Year</th>
<th>Cultivation following old farming habits (quintal/ha)</th>
<th>Cultivation following the model (quintal/ha)</th>
<th>Increase compared to productivity (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 2012</td>
<td>82.6</td>
<td>115.7</td>
<td>40.1</td>
</tr>
<tr>
<td>Year 2013</td>
<td>87.3</td>
<td>120.5</td>
<td>38.0</td>
</tr>
<tr>
<td>Average</td>
<td>85.0</td>
<td>118.1</td>
<td>38.9</td>
</tr>
</tbody>
</table>

(Source: Ba Be Division of Agriculture and Rural Development)

As indicated in Table 03, following the outdated farming practices with Chinese seedling purchased from unknown sources (market, for example), the farmers could have the average productivity of 85.0 quintal/ha. In contrast, German seedling of Solara, which is of genuine source, and appropriate farming methods would result in the increase by 118.1 quintal/ha (38.9% of increase of compared to the productivity of the old cultivation habits). The results have proved the significant role of science and technology in effective potato farming.

4. Socioeconomic efficiency

4.1. Economic efficiency

Deciding directly their life, economic efficiency is the farmers’ fundamental concern. It is difficult for farmers to cope with low economic efficiency, despite high productivity. Therefore, economic efficiency was calculated to compare the model application of micro products and old farming methods. Below are the results:

Table 04: Economic efficiency of potatoes

<table>
<thead>
<tr>
<th></th>
<th>Total income (A) (million VND)</th>
<th>Total outlay (B) (million VND)</th>
<th>Profit (million VND) (A – B)</th>
<th>Increase in profit of the model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Following the model</td>
<td>Not following the model</td>
<td>Following the model</td>
<td>Not following the model</td>
</tr>
<tr>
<td>Year 2012</td>
<td>69.420</td>
<td>45.430</td>
<td>34.249</td>
<td>18.320</td>
</tr>
<tr>
<td>Year 2013</td>
<td>72.300</td>
<td>48.015</td>
<td>34.249</td>
<td>18.320</td>
</tr>
<tr>
<td>Average</td>
<td>70.860</td>
<td>46.723</td>
<td>34.249</td>
<td>18.320</td>
</tr>
</tbody>
</table>

Note: Price of potatoes produced in the model: 6,000 VND/ kg

Price of potatoes produced outside the model: 5,500 VND/ kg
It is obvious as shown on the table that economic efficiency of the production of new seedling (Solara) following the model farming methods resulted in 28.402 million VND/ha; whereas old habits of cultivation of Chinese seedling brought farmers only 12.455 million VND/ha. While the model enabled the economic efficiency to increase by 12.455 million VND/ha, or 28.9%.

4.2. Efficiency in production, extension and consumption of the model

<table>
<thead>
<tr>
<th>Year</th>
<th>Types of seedling</th>
<th>Sources of seedling</th>
<th>Area (ha)</th>
<th>Productivity (ton/ha)</th>
<th>Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before implementing the model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>Chinese</td>
<td>Local market</td>
<td>2.8</td>
<td>8-10</td>
<td>Purchased in the region</td>
</tr>
<tr>
<td>2011</td>
<td>Chinese</td>
<td>Local market</td>
<td>3.2</td>
<td>8-10</td>
<td>Purchased in the region</td>
</tr>
<tr>
<td>After implementing the model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>Solara: 30 ha</td>
<td>Companies (Solara), Local market (Chinese)</td>
<td>35.0</td>
<td>10 - 12</td>
<td>Purchased by companies: 30 ha</td>
</tr>
<tr>
<td>2013</td>
<td>Solara</td>
<td>Companies</td>
<td>62.5</td>
<td>12-13</td>
<td>Purchased by companies (100% of products)</td>
</tr>
<tr>
<td>2014 (projected)</td>
<td>Solara</td>
<td>Companies</td>
<td>100 - 110</td>
<td>-</td>
<td>Purchased by companies (100% of products)</td>
</tr>
</tbody>
</table>

(Source: Department of Agriculture and Rural Development of Ba Be)

Before the implementation of the model (years 2010 and 2011), the total area for potato production was not noticeable (2.8 – 3.2 ha). Potatoes were grown in small scale from seedling of poor quality and mainly for family consumption or local needs. However, since the practice of the model in 2012, the area surged quickly, reaching 62.5 ha in 2013 and was projected to cover 100 – 110 ha in 2014. Besides, the productivity also increased from 8 – 10 tons to 10 -13 tons/ha. More importantly, 100% of the products have satisfied the standard and were consumed right after harvest. It can be said that after more than 2 years of implementing the model, there have been significant changes in scale, purpose, methods and consumption of potatoes.

4.3. Social efficiency

The 2-year model has improved the farmers’ perspectives about agricultural production in general and particularly potato production. This has also enabled the farmers to access scientific advances in crop growing.

The success of the model has made important contribution to increase the local farmers’ income, creating favorable conditions for poverty reduction and gradual stability in famers’ life.

The model construction and the training as well have raised the local farmers’ awareness when adopting scientific advances in farming. Their beliefs on scientific advances and policies of the Party and Government were also enhanced.

5. Recommendations

Model of Sustainable Poverty Reduction for Ethnic Minority in Ba Be District, Bac Kan Province through the Implementation of Potato Production in Partnership Between Companies and Farmers should be replicated in other localities as it has brought practical benefits for farmers, contributing to poverty reduction, improving the living standards of farmers of ethnic minorities in general and for those of Ba Be in particular.
1. Introduction

Geography is a crucial element for the country’s growth development. Empirical evidence distinctively indicates that in the past the prosperous and wealthy area often was a port or riverside plain since it is convenient for trading, in particular, the ease of seaborne transport across the countries. For riverside plain, it is suitable for agriculture due to the proximity to the water resources which is a necessary factor. On the other hand, Mountainous Regions have more difficulty than mentioned areas, especially for trading engagement or exchange of goods. Therefore, Mountainous Regions have not become a prime area for growth expansion and further development to be urban and a capital city of the country but are ignored without good care. The problem of encroaching forest to possess the natural resources consequently arises. The natural resources are not effectively utilized and optimized. Hence, almost all of the inhabitants so called, “Ethnic Minority in Mountainous Regions” in that area have to face the poverty situation as from the old days they have been recognized as abandoned crowd.

The hill tribe’s poverty problem is currently raised as an issue to be resolved. One resolution approach I want to suggest is to build channels of market access for Ethnic Minority in Mountainous Regions, which will be presented in recommended strategies section. The scope of “market” here means goods and service market, markets for factor input (labor, capital, and land) and financial market (access to source of fund, return on saving).

A successful example of Mountainous Thai development is Doi Tung Development Project which the United Nations Office on Drugs and Crime (UNOCD) had acclaimed it as an alternative development model for long-lasting living. The project was founded in 1988 on Doi Tung in Chiang Rai province, blanketing approximately 93,515 Rai with 6 different types of tribesmen who in the past were living in severe hardship. Besides, there are still other royal projects such as the rice terrace for a decrease in forest utilization as well as required knowledge transfer with area development, namely water resource development and management, water distribution system construction for agricultural fields, fundamental production factor improvement like water, soil, and seed, etc. (Mae Fah Luang Foundation under Royal Patronage, 2010)

Thus, the major Mountainous Regions development mainly relies on the resolution for poverty of the Ethnic Minority by aiming for an income escalation and by supporting the linkage channel for the Ethnic Minority in Mountainous Regions for key market accessibility.

2. Situation of Poverty amongst Mountainous Thais

An important fact reflects the situation of poverty in the past. Chiang Mai University disclosed the survey result of poverty situation in typical highland in 2004 for initiating the Highland agricultural development roadmap. It was found that typically a farmer’s average annual income was 31,126 THB/household which was lower than a half of northern farmers’ average income - 69,373 THB/household/year (Chiang Mai University, 2004). Meanwhile, the income per Thai household in 2004 was 179,556 THB/household/year (National Statistical Office, 2004) and income per Thai agricultural household was 105,802 THB/household/year.
The core reason for highland poverty is originated by the minimal amount of goods produced by farmers and high cost of production; whereas the price of agricultural products is quite low (Thailand Development Research Institute, 2001) and highly volatile. In addition, most farmers are not highly educated and inexperienced in occupation (Udom, 1987). Earning an income is mainly for supporting their family due to a large family size. (Office of the National Economics and Social Development Board, 2001).

The problems have widely branched out to human trafficking, HIV/AIDS and drugs owing to drug smuggling along the border. For instance, the production of opium, heroin, ATS or amphetamine and ICE is yet operated on the Myanmar border; whereas on the Laos border, opium, amphetamine pills, and other illegal substances are also produced (Minority Of Thailand, 2004).

Correspondingly, it is noticeable that the typical livelihood of Mountainous Thais adopts the context that discourages the motivation for self and society development - one of the poverty causes leading to considerable consequences such as nutrition deficiency, high fertility where Mountainous Thais’ fertility rate nearly doubles as compared to Lowland Thais.

Furthermore, the problems that should be sorted out or are not tackled by the governmental sector are the rights to access the basic governmental services since most Mountainous Thais do not hold the ID card and house registration. They are holding a status as stateless person, banned from politics and are chased up by law enforcement officials with the reason that Mountainous Thais are not Thai nationals but regarded as refugees from neighboring countries such as Myanmar, Laos, and China, etc., who will be settling down and producing offspring in Thailand.

Agricultural problems of Mountainous Thais include the unavailability of land ownership, the deterioration of natural resource caused by shifting cultivation as Mountainous Thais do not possess a land ownership so conservation is not intended and the quality of soil gradually becomes worsened. Based on the aerial photograph of the Royal Thai Survey Department in B.E. 2547, it is found that the project land of roughly 23,844 Rai shows the circumstance of shifting cultivation and abandoned farm, followed by the smog problem in the North (Bank of Thailand, 2007). The land was often burned and re-cropped. If deteriorated, the farming land – for monoculture - will be renewed. The major cause is emerged from Mountainous Thais’ inadequate knowledge in agriculture and natural resource conservation. At present, a large amount of herbicide and chemical fertilizer are used for some plants. The implication is farmers encounter higher production cost and debt obligation.

The most likely and worrying problem is the continuing process of transferring the farmers’ surplus value to the economic power group such as land owner, capital owner and merchants in the market. Farmers have to bear risks from natural disaster related-damaged crops, higher borrowing rate from financier as opposed to bank’s rate, passing the tax obligation to farmers by middlemen, and pressuring the purchasing price of goods produced by farmers. (Jira, 2003).

The main obstacle for Ethnic Minority Poverty Reduction in Mountainous Regions in market accessibility is the inconvenient and distant shipment route. This creates a time-consuming shipment. Inadequate market information is also an issue, for example, unawareness of market needs and marketing channels. Farmers have fewer marketing channels and insufficient opportunity to generate income outside agricultural sector.

Over the past, the source of major income of Ethnic Minority in Mountainous Thais was derived from farming; particularly growing opium and husbandry. However, the current commonly grown plants are cabbage family,
tomato, chili, flowering plant, winter fruit and coffee (Highland Research and Development Institute, 2014). The economic opportunity in Mountainous Regions involves low labor cost or low wage, sound climate which suits for farming – especially high value plants, and right climate for tourism.

3. Analysis Framework

In this paper, conceptual framework used as a solution and development approach which is applicable for both individual and societal level is the principle of “Arayanization”, meaning the development process for a complete aryanized or civilized society which can be implemented in 3 phases (Chareonwongsak, 2012)

Phase 1 Patiwatn (Reconstruction) is solving out the existing problems to resume the normal state or utilizable state as usual (evolve from minus (-) to become zero (0)). For example, develop the degraded tourist attractions to provide the regular service for tourists, remove the poverty out from the country, eliminate corruption from the civil service system and politics, wipe out the polluted water from rivers, get rid of the education problem with quality standardization and phase out the farmer problem, etc.

Phase 2 Apiwatn (Reformation) is to better advance the society or to diversify the existing satisfactory state to even more satisfactory (evolve from zero (0) to become positive (+)). This is a visionary development with desirable target. Best practices in the world are applied with identified Benchmark to map out the strategic framework and implementation plan to achieve the goal, for instance, not only to revitalize the tourist attractions but also to set the target to be the outstanding world-class tourist attractions. People in society not merely step up from away from the poverty line but gain the same quality of life as those in developed society, In particular, the education area where students granted subject matter scholarship are required to return to their hometown for development for development work and to build the business network for society, etc.

Final phase Thammapiwatn (Remoralization) is to advance the society sustainably and completely by employing the morality, integrity, and goodness as indicators (evolve from positive (+) to become multiplication (X)). Since satisfactory things or efficient things with good quality sometimes bring comforts to human, they may not always be the right and good thing to pursue. Therefore, the peak phase of development is necessary to drive people toward a wholesome society. People in society stick to the philosophy of Araya -individualization for living by realizing the genuine goodness, beauty and truth. For societal level, the philosophy of Araya society – the attainment of freedom, equality and fraternity – should be adhered to.

4. Recommended Strategies

For practical implementation, to be able to achieve the objectives for Mountainous Regions development, it’s essential to formulate the strategies particularly on manpower and optimized resource utilization. As a result, the strategies are recommended and categorized by the framework of “Arayanization” process as following:

Patiwatn (Arayanization)
1) Revitalize the deteriorated natural environment continuously up to re-beautify the nature by providing knowledge on natural resource conservation and revitalization to be utilizable again. In particular, conserving the soil surface and forest. For example, crop rotation, pest destruction method without impact on natural environment, etc.

2) Initiate a participation of the Ethnic Minority in Mountainous Regions in revitalizing natural environment by promoting the resource accessibility through allocating the land rights to create a sense of ownership, leading to self-owned land conservation.

3) Campaign for an involvement from every sector in raising income of the Ethnic Minority in Mountainous Regions. These are, for example, providing the information on the market-demanded product and marketing channels, providing knowledge about processing the goods to create added-value and reduce the impact from low product price due to oversupply,
providing knowledge about the method of product quality control so that the quality of each product category can be examined, and developing a channel to access the source of fund.

Apiwatn (Revolution)

1) Promote a group aggregation to enhance the trade bargaining power, for example, an aggregation in the form of cooperative of the Ethnic Minority in Mountainous Regions.

2) Develop the area to become the tourist attraction for the Mountainous Thais- an approach to build a market within the Mountainous Regions in the patterns of field trip such as integrated farming, sale of freshly produced natural food, sale of handicrafts and any products that reflect the unique identity of specific Ethnic Minority in Mountainous Regions.

3) Promote an access to international goods market such as providing information on demand for exported goods, starting from neighboring countries in ASEAN, providing knowledge in product quality development based on international standard, and integrating the transportation infrastructure across the nations, etc.

4) Promote the key products based on the area strength such as growing the right plants for the climate and area which would immensely help raise the income for Ethnic Minority in Mountainous Regions due to high comparative advantage on cost competitiveness from low wage and raw materials which mostly are natural. Brand the product by advertising and public relations as well as organizing various campaigns to promote awareness and repeat the brand identity.

5) Produce the innovative product by creating the motivation for innovation and new product development through the hill tribe’s Intellectual Property protection for innovative product, providing the knowledge about Intellectual Property law and support on promoting the hill tribe’s innovative product to be well known widely.

6) Develop channels for managing different kinds of risk – production and finance, namely, managing risk caused by natural disaster such as flood, drought, and the low market price, creating a mechanism for controlling the production quantity at the right level to refrain from oversupply problem, and an access to crop insurance, etc.

Thammapiwatn (Remoralization)

1) Utilize the technology at appropriate level to retain the employment level by balancing out between labor resources and applying the machinery or technology to substitute the labor force. Initially, the labor intensiveness should be focused due to a multitude of labor abundance. Simultaneously, labor development on skills for operating machineries and technologies which would help increase the productivity and product quality further is required.

2) Encourage our children to return and develop the area, for example, instilling a sense of loving hometown, granting scholarships to return for hometown development by allowing the District Agriculture to act as an intermediate facilitator, and connecting the network for social enterprises.

3) Prepare demographic, economic, social, resource utilization and environmental data to be applied to future planning – economic management, labor force planning, birth control, etc.

5. Conclusion
Guidelines to handle the Minority Poverty Reduction in Mountainous Regions through the development of Linking to Markets should be systematically aligned and integrated in both short and long horizon. The government sector should not employ the “One size fits all” policy but promote a self-problem solving. These guidelines are to eliminate the economic and social structure that do not benefit the Ethnic Minority in Mountainous Regions Development by starting from comprehending the way of living of the Ethnic Minority, recognizing the problem and real cause occurred in different areas. It was found that there are problems in the resource ownership that does not help in gaining the participation from the Ethnic Minority in Mountainous Regions and the accountability for the loss caused by resource utilization. Also, market information is not accessible, marketing strategies are unavailable, and the shipment infrastructure towards country’s key markets is not ready. Lastly, this paper has recommended strategies to strengthen and advance several development aspects of the Ethnic Minority in Mountainous Regions

References
SUPPORTING SMALL SCALE FARMERS IN MOC CHAU, SON LA, VIET NAM TO PRODUCE AND MARKET COUNTER SEASONAL VEGETABLES IN COMPLIANCE WITH VIETGAP

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1Northern Mountainous Agriculture and Forestry Science Institute (NOMAFSI)  
2Applied Horticulture Research Centre  
3Fresh Studio  
4Ha Noi University of Agriculture

ABSTRACT

Safe temperate vegetables on the off-seasonal period are a remarkable high demand in Hanoi’s market due to limited supply in this season (vegetables from China are suspect on quality and great far distance from Da Lat). While Moc Chau is one of the highland in the Northern part with the potential of growing off-season vegetables due to the temperate climate and short distance away from Hanoi (4 hours by car). These favourable conditions allow Moc Chau develop to a safe and quality off-seasonal vegetable production region, which can supply to major cities in the North. In order to take Moc Chau’s advantages, since 2011, a counter seasonal vegetable project in Moc Chau, funded by ACIAR (Australian Centre for International Agriculture Research), is being implemented with NOMAFSI (Northern Mountainous Agriculture and Forestry Science Institute) in the role of coordinating organization. Participants to the project implementation are Applied Horticulture Research Centre, Fresh Studio and Ha Noi University of Agriculture (HUA)

During a three year period, the project has organized 3 farmers groups in three villages of three different communes with total of 43 members producing safe vegetables on about 20 ha total. Under the project’s support, these groups have obtained safe vegetable certificates issued by DARD-Son La which enabled these groups to market their vegetables direct to supermarkets and other safe vegetable retailers in Hanoi.

Numerous variety trials have been performed in order to identify high yielding varieties that meet customer demands during the off season. In addition, the project has assisted the farmer groups making linkages with potential buyers, organizing farmer information exchange meetings, visits of potential buyers to the farmers in Moc Chau, and visits of the farmers to the market.

In 2013, the total vegetable volume of the three farmer groups reached 230 tons of various kinds of vegetables that were delivered direct to supermarkets in Hanoi such as Fivimart, Metro Cash & Carry, and Biggreen. Supported by the positive response from the market, the project is closely cooperating with local authorities in Son La and Moc Chau to develop a certification trademark for safe vegetables from Moc Chau and expand the safe vegetable production areas to other villages in Moc Chau.
I. Introduction

Moc Chau is an extremely Southern district of Son La province, situated on the traffic life-line-Highway 6 of the Northwestern Vietnam. The district’s center is 120 km far from Son La Town in the Southeast, 199 km far from Ha Noi in the Northwest. Moc Chau Plateau Sub-zone: it is one of two big plateaux of Son-La and a typical limestone plateau of Vietnam, located at an average altitude of over 1,000 m above the sea level. Its topography is quite even and flat, commonly in form of bowl-upturned hills.

The climatic conditions are cool (average temperature is 19°C, day/night temperature amplitude is about 8°C, average monthly rainfall is 144 mm, average air humidity is about 87%), appropriate for the production of most vegetables around most of the year.

The counter-seasonal vegetable (CSV) project, therefore, aims to improve the livelihoods of ethnic minorities and others in Moc Chau by pilot testing, analyzing and supporting model vegetable supply chains of safe, high-quality off-seasonal vegetables into modern retail markets in Hanoi.

II. Main approaches of the counter-seasonal vegetable (CSV) project and its findings

2.1. Evaluation of physical conditions in Moc Chau area

Physical conditions include natural, social and economic related to vegetable development were studied through conducting surveys and informal interviews of key informants to understand the advantages/opportunities and constraints of the project sites by HUA (Hanoi University of Agriculture), NOMAFSI and Fresh Studio have carried out collaborate this task.
Table 1: Variation of climate in Moc Chau during 1995-2010

<table>
<thead>
<tr>
<th>Month</th>
<th>Temperature (°C)</th>
<th>Humidity (%)</th>
<th>Rainfall (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Max</td>
<td>Min</td>
<td>Average</td>
</tr>
<tr>
<td>Jan.</td>
<td>26.5</td>
<td>3.53</td>
<td>12.49</td>
</tr>
<tr>
<td>Feb.</td>
<td>28.7</td>
<td>5.4</td>
<td>15.07</td>
</tr>
<tr>
<td>March</td>
<td>31.5</td>
<td>7.6</td>
<td>17.69</td>
</tr>
<tr>
<td>April</td>
<td>32.6</td>
<td>12.2</td>
<td>20.55</td>
</tr>
<tr>
<td>May</td>
<td>32.2</td>
<td>14.8</td>
<td>21.99</td>
</tr>
<tr>
<td>June</td>
<td>31.1</td>
<td>18.6</td>
<td>23.69</td>
</tr>
<tr>
<td>July</td>
<td>31.0</td>
<td>18.9</td>
<td>23.48</td>
</tr>
<tr>
<td>August</td>
<td>30.3</td>
<td>18.3</td>
<td>22.87</td>
</tr>
<tr>
<td>Sept.</td>
<td>29.4</td>
<td>15.0</td>
<td>21.77</td>
</tr>
<tr>
<td>Oct.</td>
<td>28.4</td>
<td>12.3</td>
<td>19.50</td>
</tr>
<tr>
<td>Nov.</td>
<td>27.3</td>
<td>8.9</td>
<td>16.15</td>
</tr>
<tr>
<td>Dec.</td>
<td>25.0</td>
<td>4.5</td>
<td>13.89</td>
</tr>
<tr>
<td>Average</td>
<td>29.48</td>
<td>11.7</td>
<td>19.09</td>
</tr>
</tbody>
</table>

Source: Station of Meteorology and Hydrography in Moc Chau

As seen in the above table, the maximum temperature is above 32°C in April but maximum mean temperature is only 23°C in June. The minimum temperature was above 3.5°C in January while minimum mean temperature is above 12°C in the same month. Average monthly temperatures range from above 12°C to 23.7°C is suitable for production of almost all vegetables.

In comparison to other areas (Table 2), Moc Chau has great advantages in term of temperatures, to develop off-season vegetable production to provide to Hanoi markets during the off-season (from April – October).

Table 2: Average monthly temperatures in different areas of Vietnam (in °C)

<table>
<thead>
<tr>
<th>Sourcing area</th>
<th>Altitude (m)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red River Delta *</td>
<td>8</td>
<td>16</td>
<td>17</td>
<td>20</td>
<td>24</td>
<td>27</td>
<td>29</td>
<td>29</td>
<td>28</td>
<td>27</td>
<td>25</td>
<td>21</td>
<td>18</td>
</tr>
<tr>
<td>Moc Chau</td>
<td>1,000</td>
<td>14</td>
<td>15</td>
<td>19</td>
<td>22</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>23</td>
<td>21</td>
<td>17</td>
<td>14</td>
</tr>
<tr>
<td>Dalat</td>
<td>1,600</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>20</td>
<td>20</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>18</td>
<td>17</td>
</tr>
</tbody>
</table>

Sources: Fresh Studio and NOMAFSI presentation during midterm review, March 2014

In addition, Moc Chau possesses lots of strengths and diversities in social economic conditions, and these bring the area special opportunities for agricultural production development, especially vegetables production for Hanoi markets and surrounding areas.
The survey findings demonstrate an actual increase in both area and quantity of vegetables produced in Moc Chau during the last five years (Table 3). This means rapid development in vegetable production in Moc Chau and this also shows great capacity of Moc Chau people to produce commercially vegetables for Ha Noi and other urban markets.

Table 3: Vegetable production in Moc Chau during last five years

<table>
<thead>
<tr>
<th>Parameters</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (ha)</td>
<td>411</td>
<td>441</td>
<td>455</td>
<td>733</td>
<td>1033</td>
</tr>
<tr>
<td>Quantity (ton)</td>
<td>7515</td>
<td>8031</td>
<td>8331</td>
<td>13643</td>
<td>19068</td>
</tr>
</tbody>
</table>

*Source: Moc Chau’s Annual Statistic Book*

### 2.2. Formation of farmers groups

This is one of the first steps for getting the certification for safe vegetables production and to develop the model. Three villages of Moc Chau district have been chosen to develop the model. Currently 3 farmers groups have been formed with total of 43 farmers (table 4).

<table>
<thead>
<tr>
<th>Sourcing area</th>
<th>Village</th>
<th>Group leader</th>
<th>Farmers registered</th>
<th>Farmers active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moc Chau</td>
<td>An Thai</td>
<td>Ms. Tam</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Ta Niet</td>
<td>Mr. Duyen</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Tu Nhien</td>
<td>Ms. Luyen</td>
<td>25</td>
<td>19</td>
</tr>
<tr>
<td><strong>Total farmers</strong></td>
<td></td>
<td></td>
<td><strong>50</strong></td>
<td><strong>43</strong></td>
</tr>
</tbody>
</table>

*Source: Project report, March 2014*

Vegetable land allocation in Moc Chau increased significantly:

*Source: Fresh Studio and NOMAFSI presentation on midterm March review 2014*  

### 2.3. Support to farmers to produce safe vegetables

In order to achieve the certificate for safe vegetable production, issued by Son La DARD,
and latter VietGAP, by National Agriculture Product Quality Control under MARD, the following have been implemented:

Support to farmers to apply technical protocols for safe vegetables production;

Support to farmers to keep production and harvest records which consist of planting record, fertilizer application record, crop protection application record and harvest and delivery record.

This support was provided through visiting of the project staff to each farmer, at least once every 2 weeks to inspect farm, crops, record keeping; collect farm records; handover and discuss farm report and any other issues.

All farmer records are encoded into MonQi database and then, all farmers receive 2-page report of all crops planted and finally, crop reports are also discussed with other farmers during crop meetings organized in each season.

Implement all the steps necessary for getting the certificate for safe vegetables production (including soil and water sample tests, VietGAP trainings ...).

Finally, the safe vegetable certificates have been achieved for all the 3 farmers groups.

2.3.1. Conduction of participatory researches and trial(s)

The project works directly with farmers to participatory implement and evaluate trials aiming to diversify the vegetable varieties and types, improve yield and quality and reduce the cost of vegetables production towards increased benefits for farmers.

Number of trials on vegetable varieties and technical innovations has been implemented in order to find out appropriate solutions for improving yields and quality in production areas.

In total, 06 experiments were implemented in An Thai and Ta Niet in 2011, 21 experiments were implemented in 2012, including also 06 experiments in tunnels, 03 ones in net houses in 3 villages, and 11 experiments in 2013, including 04 varietal and 07 technical experiments. Some suitable varieties of cabbages, tomato, lettuce, cucumber and kohlrabi...have been identified and recommended to farmers. Simple greenhouses with different structures and with good additional values to vegetables production have also been designed and recommended. Those successful findings have been distributed and learned by organizing “field days” along with trial performance in the 3 villages.

Along with these activities, trainings by both in-door and outdoor classes given by project staffs and international experts to farmers on vegetable system diseases and their prevention, making compost, nursery seedlings and basic farming business management through the season.

2.5. Development of market linkages

The project has organized meetings, market information exchange and sides-visits between farmers and Hanoi retailers for starting the linkage between farmers and retailers in Hanoi.

The project has also built skills for farmer’s group leaders in various aspects so that they can link with retailers in Hanoi for selling safe vegetables produced by the farmers. As a result, each farmers group has a representative supplier who collects the vegetable products from their group members and supplies to retailers in Hanoi.

To support these collectors, the project has also conducted experiments and recommended to them the options to improve harvest and post-harvest towards reduced losses during the transportation. Number of research have been done on packaging materials and harvesting time and temperature change right after harvesting and whole process after that to identify the causes of the loss and right harvesting time right before delivering to transport to Hanoi and appropriate package materials which reduce input costs but maximum limit losses. Then, trainings on how to sort and to class the products have been directly instructed to farmers, collectors and suppliers. In addition, feedback sessions are organized in which both farmers and retailers can have opportunities to discuss how to improve the situation.
The linkage between some farmer groups to some retailers in Hanoi has been rather developed, especially between Tu Nhien village and FiviMart, and thus the farmer-collector in this village has bought a truck for transportation vegetables to Hanoi. As a result, volumes supplied by 3 farmer groups during the off season in 2013 are 230 tones.

Each week the project also forecasts the total amount of each vegetable produced by each farmers group to provide to the retailers in Hanoi, and vice versa, provides farmers groups with feedbacks the retailers. This information exchange helps to ensure the production to meet the retailers’ demands.

In addition, the project has conducted Survey consumers of Hanoi retailers to identify demanded products and supply windows in order to form a basis for the logo design and marketing strategy. Most of consumers value quality, freshness, origin, and safe certification which are the main factors to purchase the products.

Identify and analyse alternative marketing channels (global retailers, modern local retailers, specialised/niche retailers, food service and traditional markets) using ongoing Rapid Value Chain Assessment relevant to determining the feasibility of smallholder engagement and equity. Local marketing channels available to Moc Chau farmers was compared after the alternative chain establishments of Metro Cash and Carry, FiviMart and BigGreen retailers in Hanoi.

3. Main impacts

As evaluated participatory by all the stakeholders, both vegetables yield and quality have increased, and the total volume of vegetables supplied to supermarkets in Hanoi have rapidly raised. This greatly contributed to increased income and benefits to farming households.

Furthermore, supply coordination trained and coached farmers how to supply retailers in Hanoi by exchanged the up-to-date information by retailers and farmers through the detailed weekly forecasts, feedback sessions and two side visits. In addition, initiated transition from traditional open field cultivation to net house cultivation, applying different advance technique have gained the higher yielding varieties, diversifying products serving customers and improve the quality. Finally, environment and health have been taken to consideration as the main important objective to achieve during the life of the project and beyond.

Source: Fresh Studio and NOMAFSI presentation on midterm March review 2014

![Diagram of supply chain]
4. Outlook for coming time

Continuation of current activities with focus on farmer/supplier record keeping, Improving packing facilities and VietGAP accreditation. The challenge of how to sustain the supply systems and non-interfering on prices have been facing. Therefore, a consideration for coming strategy is the establishment and development of internal control systems for farmer groups, along with responsibilities of retailers and DARD in controlling for farmer groups with major focus on a Moc Chau certificate trademark “Rau an toan Moc chau” registration. In addition, diversifying types of vegetables with a focus on higher value crops and main season crops is needed and expanding areas applying the successes of existing models is encouraged

1. Sources of Moc Chau district Development.
http://www.sonla.gov.vn/sonla/Vietnam/


5. Moc Chau tourism, advantage and potentials.
http://www.sonla.gov.vn/sonla/Vietnam/

6. Different team and project reports on midterm review in 17-21st, March 2014

REFERENCES
1. Socio-economic and natural characteristics

The Central Highlands encompassing five provinces Kon Tum, Gia Lai, Dak Lak, Dak Nong, and Lam Dong have a total land area of 54,474 square km which is accounted for 16.8% of the whole country’s area. Kon Tum ranks fourth (1,698 sq km) amongst Dak Lak, Gia Lai and Lam Dong. According to the data by General Statistics (1/4/2009), the Central Highland’s population is 5,115,135 people coming from all 54 Vietnamese ethnic groups, the majority of whom are King (64.7%); original ethnic groups are 12, making up 26.6%; and newly coming ones are 40 groups, representing 8.7% of the total population.

The natural characteristics of the Central Highland in general and of Kon Tum province in particular differ greatly from those of other areas due to typical terrain, topography, and climate. Particularly, the area is located in both the north and west of Long Range mountain, so there is a diversity in land, terrain and climate. The average altitude above sea level is about 600 to 800 metres, but many others are very low such as the boundary of Dak Nong shared with Cambodia which is just 200 meters from the sea level, or extremely high (Da Lat city, 1500 meters). There are many endlessly mountains with tops higher than 2,000 metres like Ngoc Linh, Ngoc Niay, Chư Hmu, Cư Yang Sin, Lang Biang. Kon Tum province lies in the west of Long Range with the terrain which is lower from the north to the south and from the east to the west. The terrain is steep, diverse, and plateau and hills intermix in a complex way. Ngoc Linh top in the north is the highest in the region (2,956m). The average height in the north is 800-1,200m, and in the south 300-500m only. It is this characteristics that make possible washout, erosion, landslides, wiping floods and large-margin and unpredictable floods, causing significant damage to production and people's lives.

In terms of climate, due to the segmentation of the Long Range, the Central Highland’s climate is tropical, monsoonal and equatorial. The most striking feature to arise will be Kon Tum climate, determined by the terrain elevation and the Long Range’s windbreak, which forms a typical climate named as highland tropical monsoon climate with two distinct seasons: rainy seasons from May to the end of October and dry season from November to April, the hottest months are March and April. The rain season just occurs in the Eastern Long Range that belong to Kon Plong District, the north of Dak To district and the east of Dak Glei district mainly in November and December. Other months experience small amount of rainfall or drizzle. Big difference in rainfall and streams of water between the two seasons lead to a water redundancy in rainy seasons and droughts and an acute dearth of water in the dry season.

Regarding the economic development, over the past decade, the economy of the Highlands region has achieved positive results with the average growth rate reaching 12.99%/year from 2001 to 2012. The contribution by services contributed 28.2%, construction industry (39.9%) and agriculture (31.9%). The economic structure shows the material production sector is playing an important role in local economic development.

Kon Tum has a high growth rate in the Central Highlands. The provincial average economic growth rose from 11%/year in 2001-2005 to 15.61%/year in 2006-2010. However, the economic structure does not change as positively as those of the whole area of Central Highlands, with the dominant sector being dominant. Specifically, the share of agriculture - forestry - fishery accounted for 42.5%, followed by the services sector (34.5%) and finally industry - construction. It can be said that...
agriculture and fisheries in recent years have contributed greatly to the provincial economic development. During the 2006 – 2010 period, in the agricultural sector whose growth rate reached 7.01%, farming plays an important role, accounting for over 80% of agricultural production. In recent years, the province concentrated in two main groups of plants: food crops such as rice, maize and cash crops such as cassava, sugarcane, rubber, coffee, “bội lơi’... Industry mainly grows in resource extraction industries such as mining water for hydropower development and mining of mineral resources, while the service sector "nonsmoker industry” was leveled off.

Despite the high growth rate in recent years, the province's economic growth in the last period was mainly developed extensively. According to statistics, ICOR indicator of Kon Tum province in the period 2001-2011 is the highest in the region due to excessive investment in the hydropower sector, mining sector... while these sectors which often lack of stability take long time to recuperate capital. In fact, the exploitation and planning of these resources remain problematic over the period such as massive development of industrial crops (coffee, rubber, cassava,...), improper construction of hydropower under movement, causing inconsistent environmental consequences, affecting the sustainable development of the province.

Regarding infrastructure, especially transportation systems, there are limitations and stumbling blocks in irrigation system, adversely affecting the responsibility to climate change. By now, still even 6 communes in the province has not had usable motorways for travelling in 2 seasons to communal centers; many border roads, border patrol have not been given investment; equipment and reserve materials are poor and backward: the monitoring stations and hydro meteorological stations are sparse and few, so forecasts and warnings are sometimes not accurate and timely, especially during flash floods, landslides... Besides which, as pointed out above, because there are many steep terrain and valley, being flood-prone area, it is difficult to build the infrastructure system to improve disaster prevention.

Regarding people’s intellectual level, although the quality of education in recent years has been improving a lot, but because of the provincial inclusion of numerous groups (35), the quality of education is not equal with between advantaged areas and the disadvantaged one, dropout rate at all levels among ethnic minorities, economically difficulty-ridden areas, and remote ones which is much higher than in cities and towns. This also leads to people’s lack of awareness or having no access to information about natural disasters and how to respond to natural disasters and climate change.

Regarding the health care system, protecting, caring and improving of people’s health face a lot of difficulties such as: slow innovation in medical system, which fails to adapt to the market economy development; quality health services’s failures to meet the needs of the people; inadequate organization and preventive health activities; asynchronous investment into infrastructure, backward medical equipment; an severe shortage of medical staff quantity and constraints in quality, and not suitable manpower structure.

Thus, as shown in the above analysis of the natural and socio-economic characteristics, the Central Highlands in general and the province of Kon Tum in particular, especially ethnic minority communities, are vulnerable to natural disasters and climate change.

2. Evolution of disasters and climate change in Kon Tum

Changes in Highland climate in recent years have proven unusual: seasonal change (a change in the start and end of rain season - dry season). Recent weather patterns also tend to increase in intensity, quantity and risk level or in other words it is more extreme. Over the past decade, the most common and severe disasters in the area include flash floods, landslides, droughts and floods.

Flash flood, tube flood, land and rock slides occur rapidly and unexpectedly destroying the basin. Due to steep terrain and a number of valleys, flash floods often appear devastating.
Every year, flash floods have caused lost of lives of many people, destroying property and irrigation works, the roads, causing erosion, washing away millions of cubic meters of fertile land on the districts.

The heat and drought also occur relatively frequent and damaging agriculture and causing crop failures and reduced output, greatly affect people's lives such as the dry season (2004 - 2005), (2010 - 2011) and (2012 to 2013). In 1/2013 the level of water at Dak Bla basin, part of which passed through the city of Kon Tum was the lowest level in the past 37 years. Dak Bla River is the main water supply for domestic and agricultural, industrial consumption in Kon Plong, Kon Ray, Sa Thay districts and Kon Tum city. Therefore, it has caused great damage to agricultural production activities in the province.

The floods have occurred almost every year since 2001. The 2009 flood on Dak Bla River was considered the largest in the past 100 years which occurred in the end of the month 9/2009 due to the influence of the southwest edge of the storm signal number 9. It rained heavily in Kon Tum, particularly in the northern areas where heavy storm passed through, with heavy rainfall (on 300mm), causing flooded rivers and streams to rise rapidly, the flood water level on the rivers and streams raised above the alarm level 3.

Over the past decade, a number of manifestations of climate change have been recorded in the province. Specifically, the annual average temperature and sunny days increased and hot dry season became longer and more severe.

![Figure 1: Annual average temperature line chart in Kon Tum (1979-2010)](image)

Source: Kon Tum Department of Natural Resources and Environment

Meanwhile, the rainy season has lessened; rainfall and rainfall distribution over space and time had changed sharply. The difference between the areas with least rain and most rain in the province during the 1976 - 1994 period was 1200-1300 mm rainfall; in 1995 - 2010 period, 1350-1450 mm rainfall. The rainfall difference was higher in the 1995 - 2010 period than in the 1976-1994. Aside from these factors, the weather in the province was more likely to be more extreme. The dangerous weather phenomena such as thunderstorms, tornadoes, hailstorm appear more often and unpredictable.

3. Impacts of natural disasters on people’s livelihood in KonTum

In this study, we used the sustainable livelihoods framework to examine the impact of natural disasters and climate change on the livelihoods of the people. According to the sustainable livelihoods framework launched by the Department for International Development (DFID), DFID considered "A livelihood which includes capability and assets (both physical properties and social resources) and activities served as a means of living. A livelihood is considered sustainable when it can cope with and recover from shocks and maintain or enhance the capabilities and assets both at present and in the future while not affecting the natural resources". In this study, when considering the impact of natural disasters and climate change in the livelihoods of the people, we evaluate impacts through: 1- impacts on production (agricultural activities, industrial and commercial–service productions); 2- impacts on infrastructure serving the manufacturing activities (roads, water, electricity,
communication systems, the physical conditions necessary for livelihood activities...); and 3-impacts on the lives of the people.

3.1. Impacts on production activities for the local people

Natural disasters have direct and serious impact on employment of people, especially farmers. As pointed out above, the main livelihood of the people in Kon Tum province is agriculture - the sector that depends heavily on weather and climate. Over the past decade, the natural disasters have increased, become unpredictable and caused serious impact on agricultural activities of the local people. In particular, the phenomena of floods, flash floods increased with more frequency and with higher magnitude that had never happened before, causing floods, destruction of crops for arable land crops, and higher level of risk in production. That also affected the land for agricultural use. The total area of agricultural land was sedimentation, erosion is 4,675 hectares (accounting for nearly 1% of the total area of agricultural land in the province), in which the area of rice fields and landslides buried and lost was accounted for nearly a half (2,000 ha). The areas with high risk of flash floods and landslides: The Tu Mo Rong, Mang Ri, Dak Na, Sao Dak, Dak Ha, Te Gasoline, Dak Kan Tu commune of Tu Mo Rong district; Dak Ren, Dak Nen, Mang But, Ngoc Tem of Kon Plong district, etc.

The lasting severe drought directly affected on productivity and output of most major industrial plants of the province such as coffee, rubber, pepper. Specifically, the increased number of hours of sunshine has changed arable crop of farmers. Besides, the increased rainfall and frequency of rain could cause damage and reduce yields (due to erratic rainfall occurs during flowering-fruiting), also posed obstacles for cashew and coffee plants in the process of pollination and fertilization. Also, the increasingly complicated situation of climate change can affect the growth of crops, decline resistance, increase possibility of disease, increase rate of dead tree, and reduce productivity and product quality. The local people need to replace many traditional crops to adapt to local climate conditions and weather.
Aside from the fact that the livestock sector is also affected, the increasing provincial average temperature will alter the reproductive habits of animals increase risks of disease and the ability to spread, cause major damage, reduce livestock productivity. Meanwhile, the increasing rainfall caused flash floods, tube flood, overflowing flood occur on a large scale and more frequently has reduced the livestock area, changed the growth habit of the species, reduced the food for cattle, and reduced the livestock productivity. Likewise, it has increased intensity and frequency of extreme weather events, reduced the number of cattle, and damaged the livestock pens.

Table 1: Collection of toll in planting caused by droughts (to May 2011)

<table>
<thead>
<tr>
<th>No.</th>
<th>Dis., cities</th>
<th>Area of crops in drought land (ha)</th>
<th>Area of loss (ha)</th>
<th>Area of solvable land (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Wet rice</td>
<td>Vegetation and industrial plants</td>
<td>Wet rice</td>
</tr>
<tr>
<td>1</td>
<td>Kon Tum city</td>
<td>552.30</td>
<td>205.60</td>
<td>360.70</td>
</tr>
<tr>
<td>2</td>
<td>Ngoc Hoi dis.</td>
<td>228.72</td>
<td>50.90</td>
<td>164.12</td>
</tr>
<tr>
<td>3</td>
<td>Sa Thay dis.</td>
<td>163.21</td>
<td>92.80</td>
<td>139.61</td>
</tr>
<tr>
<td>4</td>
<td>Dak Glei dis</td>
<td>98.50</td>
<td>0.00</td>
<td>98.50</td>
</tr>
<tr>
<td>5</td>
<td>Kon Ray dis</td>
<td>130.60</td>
<td>37.50</td>
<td>48.86</td>
</tr>
<tr>
<td>6</td>
<td>Dak Ha dis</td>
<td>158.60</td>
<td>561.50</td>
<td>32.20</td>
</tr>
<tr>
<td>7</td>
<td>Tu Mo Rong dis.</td>
<td>10.00</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>Dak To dis.</td>
<td>130.60</td>
<td>79.90</td>
<td>84.00</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>1,472.50</strong></td>
<td><strong>1,028.22</strong></td>
<td><strong>927.95</strong></td>
</tr>
</tbody>
</table>

Source: Kon Tum’s Committee for Flood and Storm Control and Disasters Mitigation

For forestry, natural disasters and climate change in recent years has reduced the forest land, forest structure and forest quality along with increased risk of forest fires. In fact forest land has changed markedly: natural forests are becoming narrowed and forest cover is reduced.

Table 2: Collection of toll of livestock caused by storms in 2009 (unit: one animal)

<table>
<thead>
<tr>
<th>Items in toll</th>
<th>City</th>
<th>Dak Ha Dis</th>
<th>Sa Thay dis</th>
<th>Dak To dis</th>
<th>N. Hoi dis</th>
<th>Dak Glei</th>
<th>Kon Ray distr.</th>
<th>KPlong distr.</th>
<th>TMR distr.</th>
<th>Total toll (province)</th>
<th>Estimated toll (VNDD minions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle</td>
<td>309</td>
<td>47</td>
<td>11</td>
<td>322</td>
<td>18</td>
<td>334</td>
<td>125</td>
<td>60</td>
<td>760</td>
<td>1,986</td>
<td>9,930</td>
</tr>
<tr>
<td>Poultry</td>
<td>8967</td>
<td>0</td>
<td>830</td>
<td>2302</td>
<td>100</td>
<td>0</td>
<td>1555</td>
<td>51</td>
<td>3417</td>
<td>17,222</td>
<td>1,722</td>
</tr>
</tbody>
</table>

Source: Kon Tum’s Committee for Flood and Storm Control and Disasters Mitigation
Table 3: Some criteria for floods in forest in 2006-2010 period

<table>
<thead>
<tr>
<th>Indicators</th>
<th>unit</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest area</td>
<td>Ha</td>
<td>656,821.0</td>
<td>658,668.0</td>
<td>655,906.0</td>
<td>650,297.0</td>
<td>648,800.0</td>
</tr>
<tr>
<td>Forest cover level</td>
<td>%</td>
<td>67.80</td>
<td>67.80</td>
<td>67.30</td>
<td>66.70</td>
<td>66.60</td>
</tr>
<tr>
<td>Area of forest fire</td>
<td>Ha</td>
<td>178.40</td>
<td>249.90</td>
<td>24.03</td>
<td>10.19</td>
<td>171.00</td>
</tr>
<tr>
<td>Area of deforestation</td>
<td>Ha</td>
<td>94.73</td>
<td>60.25</td>
<td>140.45</td>
<td>114.66</td>
<td>101.81</td>
</tr>
</tbody>
</table>

Source: Kon Tum’s Provincial Agriculture and Rural Development Department

With the considerable development of negative change in the direction of fundamental climatic conditions, more dangerous new pest or exotic pests occur which will take a long time and long-conducted study to get treatment measures. The desertification process seriously degrades the quality of forest land. Meanwhile, the reduced moisture may cause the decline of biomass on most types of forests, especially the forest product.

One of the causes of decline in forest area is forest fire. As from 2005 to 2012, there were 251 fires that occurred, causing damage to almost 2500 hectares of forest. The other reason is that ethnic minorities’ deforestation for cultivation tends to increase. The practice of shifting cultivation, shifting migration is still quite attached to them. As of 2005, over 3500 cases of deforestation have occurred and damaged nearly 700 hectares of forest. In fact, deforestation in Kon Tum in particular and in the Central Highlands in general took place long ago. It is worth mentioning here that the current deforestation become more systematic by converting forests into agricultural and forestry fields or switching to the hydropower, irrigation, or trading constructions. A geographical survey shows that baren hills and baren lands are expanding and rising rapidly, contributing to increasing climate change and more natural disaster phenomena such as floods, flash floods, especially in distance areas in which ethnic minorities reside. The decrease in forest area has also changed greatly the forest ecosystem in recent years: disappearance of several rare plant species; declining population of the especially small species. In addition, with the increase in temperature, dry weather has also increased the risk of forest fires. Consequently, the ethnic minority people lose the forest resources and face greater risks of disaster.

Natural disasters and climate change affect largely the livelihood of the people in the field of aquaculture. According to statistics by Kon Tum’s Committee for the Storm and Flood Control and Disaster Mitigation, the storm No. 9 in 2009 has led to landslides and pond breakage. In detail, the areas of ruptured fish-raising pond was 145.7 ha, where 6.67 ha of which is in Kon Tum city, 40.53 ha of which is in Dak Ha, 5 ha in Sa Thay, 32.5 ha in Dak To, 20 ha in Ngoc Hoi, 25.4 ha in Dak Glei, 4.35 ha in Ray Kon; and 10.96 ha in Tu Mo Rong. There were 15,000 tortoises which were washed away, including 10,000 tortoises in Kontum and 5,000 tortoises in Dak Glei district. Apart from landslide created by natural disasters, changes in climate and weather also affect the biological behavior of creatures. For example, increasing temperature will raise the temperature of surface water, leading to aquatic species to move to other deeper location.

The second largest contributor in the province's GDP is trade and services. Basically, this industry will give an impact to two channels: direct and indirect. Facilities of service sector will be directly damaged when the disaster happens. Besides, it is also indirectly affected by the influence of other sectors. For example, when the disaster occurred, agriculture, fisheries, transport, tourism, energy, would be strongly affected, leading to...
difficulties in supply and transport, hence, affecting the activities of trade in services.

Those who work in the industrial sector also suffer from indirect effects of natural disasters and climate change. In terms of quantity, when the inputs of agriculture - forestry and fisheries are damaged by natural disasters, there will be lack of material for industrial manufactures and firms, leading the worker to leave, even lose jobs. In terms of quality, natural disasters and climate change tend to reduce the quality of raw materials, inputs, leading to more uncompetitive, faulty, and substandard products and less sustainable development for firms. In addition, that extreme weather events and natural disasters, occurrence of floods and landslides that increased in recent times can cause damage to industrial infrastructure and pose a risk in spreading the industrial waste into the environment.

For the electricity sector, in case of prolonged dry period, the power loss will occur frequently, affecting local people’s production and life. For example, in 2009 the damage caused by hurricanes in the province for the electricity system was huge: 110 KV Pleiku - Kon Tum posts were heavily damaged, many small hydroelectric projects were destroyed such as Dak Ro Sa, Dak Ne, Dak Pone 2 hydropowers. In Kon Ray district, power supply line for Dak Koi was totally damaged. There were 11 transformers that were damaged, gathering mainly in Kon Tum city, Dak To, Ngoc Hoi and Sa Thay, Kon Ray, districts. The water supply also suffered heavily. As predicted, climate change will vary the water amount in lakes with the total flow/year deficit of 7-20% in 2030 and 2100, causing risk of severe water shortage for local people.

An overall glance at different sectors shows that the tendency of workers shifting from agriculture, forestry and fishery to industries and services is increasingly apparent. This stems mainly from the inefficient production and great endurance from natural disasters and climate change in the agricultural sector while the commercial and industrial services prove much more effective.

Table 4: Number of households by occupation in Central Highland provinces in 2011 (Unit: %)

<table>
<thead>
<tr>
<th>Province</th>
<th>Total (households)</th>
<th>Agriculture, Forestry, and Fishery</th>
<th>Industry and Construction</th>
<th>Service</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Highland</td>
<td>862,681</td>
<td>86,32</td>
<td>2.62</td>
<td>9.94</td>
<td>1.12</td>
</tr>
<tr>
<td>Kon tum</td>
<td>67,045</td>
<td>88.19</td>
<td>2.31</td>
<td>8.06</td>
<td>1.44</td>
</tr>
<tr>
<td>Gia Lai</td>
<td>209,362</td>
<td>88.99</td>
<td>1.94</td>
<td>8.09</td>
<td>0.98</td>
</tr>
<tr>
<td>Dak Lak</td>
<td>304,636</td>
<td>84.94</td>
<td>2.90</td>
<td>11.05</td>
<td>1.11</td>
</tr>
<tr>
<td>Dak Nong</td>
<td>100,064</td>
<td>88.43</td>
<td>1.54</td>
<td>9.30</td>
<td>0.73</td>
</tr>
<tr>
<td>Lam Dong</td>
<td>181,574</td>
<td>83.70</td>
<td>3.62</td>
<td>11.28</td>
<td>1.40</td>
</tr>
</tbody>
</table>

3.2. Infrastructure

Natural disasters and climate change has a direct impact on the infrastructure. Over the past decade, natural disasters and extreme weather events in the province have appeared more often and unpredictable. As indicated, the geographical location of Kon Tum province in particular and the Central Highlands in general is highly likely to suffer from the effects of the disasters, which hampers investment into the local infrastructure, especially by foreign investors. Due to the nature of the terrain, in the

Central Highlands, there are only two forms of transport: road and aviation infrastructure, the former functions as the main form. Also because of high terrain and high vulnerability to weather, the cost of building infrastructure (roads, bridges and other public works) requires a huge amount of budget for regular repair and maintenance, making the infrastructure fail to meet the demand for production and people's lives. Currently, the main business activities of the local population are taking place in only vertical axis routing traffic to concentrated construction investment, whereas the horizontal axis and the inter-district, inter-commune and village remains basic. To date, even 6 communes still do not have serviceable motorways in 2 seasons to town centers, many roads border, the border patrol has not yet been constructed; equipment and reserve materials are poor and backward: the monitoring stations and hydro meteorological stations are sparse and few, so forecasts and warnings are sometimes not accurate and timely, especially during the occurances of flash floods and landslides.

Over recent years, natural disasters and climate change have caused significant damage to the provincial infrastructure system. According to provincial statistics report, the damage to homes and property in the past years was serious, the most serious of which occurred in 2009, when Typhoon No. 9 has destructed severely the transportation routes (Ho Chi Minh Highway, Highway 24, 14c, provincial, district and communal roads route), causing traffic jams and isolating the northern from eastern districts of the province. Inter-district and inter-communal routes were hardly passable.

In total, 4 cemented bridges were broken, 184.2 km of asphalted roads, hundreds of miles of gravel roads, including rural roads were damaged, and the loss of traffic was around 971.575 billion dong. Regarding the national grid system: 221 concrete posts were destroyed, 18.2 km of the wires were cut, 11 transformers were damaged... and some other damages in Ya Ly and Plei Krong hydroelectric plants. On 29th September 2009, the lectrical system in the province was completely lost due to the fall of the big posts in Kon Tum with 110 Kv line (Pleiku and Kon Tum), and the estimated loss was about 100 billion dong. Many small hydropower projects were damaged in Dak Ro Sa, Ne Dak, Dak Po Ne 2..., with estimated losses of about 34 billion dong. Regarding the communication system, on 29-30th September 2009, communication systems in districts were virtually paralyzed with about 3 billion dong of estimated losses.

The cultural works and others such as Relic Warden Kon Tum Prison, Cultural Museum, Chu Mom Ray National Park, Kon Tum sugar mills and many cultural and communal houses were damaged with an estimated loss of about 38.68 billion dong.

Source of water

In general, it can be stated that the surface water resources and groundwater of Kon Tum will strongly affect by changes in weather and climate. The province has many natural lakes, water reservoirs, and hydroelectric lakes for power generation, domestic water supply, and irrigation for aquaculture. The Se San river system (river Dak Psi, Po Ko River, Dak Bla River and Sa Thay river) are the sources of water supply for productive activities for local people. Thus, with the recent findings indicating the rapid decline in annual average rainfall as well as erratic rainfall in the province, there will be a deterioration of surface water, water runoff and additional water to groundwater.
On the other hand, the increased evaporation will exacerbate water balance in the basin, which ultimately will worsen the water shortages for production and daily life, as well as drought. In addition to major surface of water sources, the province still has groundwater as additional water source. However, in case of prolonged drought, vegetation cover would decline (especially forests), then the groundwater will not be supplemented by surface water and rain, and become insufficient and impossible to make use of.

Table 5: Forecast of changes and shortage of total flow for different basin of Se San River by 2030 and 2100

<table>
<thead>
<tr>
<th>Basin</th>
<th>Total flow/ year (10^6 m^3)</th>
<th>Amount of shortage (10^6 m^3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2010</td>
<td>2030</td>
</tr>
<tr>
<td>Dak Psi</td>
<td>1.651,92</td>
<td>1.529,40</td>
</tr>
<tr>
<td>Dak Bla</td>
<td>2.804,53</td>
<td>2.596,76</td>
</tr>
<tr>
<td>Po Ko</td>
<td>2.375,38</td>
<td>2.199,42</td>
</tr>
<tr>
<td>Sa Thay</td>
<td>1.765,82</td>
<td>1.635,12</td>
</tr>
</tbody>
</table>

Source: Report of Response Plan to Climate Change by Kon Tum

So the calculations and predictions on water balance for Se san river system by 2030 and 2100 in comparison with 2010, both show the chance of severe shortage of water, especially in the dry season. This risk is even worse in the context that Kon Tum’s socio-economic development plans by 2020 and vision by 2030 predict a high annual growth rate for socio-economic development with a view to promoting the course of industrialization and modernization under the target of achieving basic industrialization in 2030.

**Irrigation works**

Kon Tum province currently has all 51 irrigation projects (excluding too small buildings, and those under construction and in progress). The majority of irrigation is not used to its maximum designed capacity, such as irrigation works of Dakrongat, Dak Blo. When the disasters become more common and extreme, they will directly give impact in agriculture and livelihood activities of the people. Some impacts such as the break of dam embankments, inundated irrigation works, badly damaged permanent irrigation works, mud-filled canals and channels and flash floods are obstacles for construction (time for new construction, costly prolonged protection and repair and slowed supply of raw materials for the manufacturing sector). During the erstwhile flood in 2009, the total length of dams and embankments that eroded across the province was 19.3 km, the temporarily washed irrigation works were 429, flooded and damaged irrigation works were 176, damaged solid irrigation works were 127 and totally destroyed solid irrigation works are 22, some sections of the banks of rivers, streams were eroded with an estimated damage of approximately 929,679 billion dong.

**3.3. Impacts on local people's life**

The occurrence of higher frequency and more unpredictable natural disasters in recent years has directly affected the lives of the people in the province. In areas where erosion and flash floods occur, especially at the foot of the slopes and foothills, the lives of civilians are in danger. In fact, flash floods have the strongest impact on their lives. When flash floods occur, homes tend to collapse and sweep away; crops and livestock are wiped out, leading to poverty and a lot of difficulty in settling down. In the same way, people's health is seriously affected because diseases may arise in the regions after flash
floods. The domestic waste and microorganisms develop from decomposing leaves, dead
animals, dead and rotten animals, etc. that cause environmental pollution. Water resource in
many parts are contaminated and if there is no treatment, it can cause intestinal diseases like
colera, dysentery, typhoid, etc.

Table 6– Damages caused by natural disaster in 2006-2010

<table>
<thead>
<tr>
<th>No</th>
<th>Items of damages</th>
<th>Unit</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>People</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Killed</td>
<td>person</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>51</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Injured</td>
<td>person</td>
<td></td>
<td></td>
<td></td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Housing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Blown roof and submerged</td>
<td>one</td>
<td>247</td>
<td>244</td>
<td>3</td>
<td>2,851</td>
<td>63</td>
</tr>
<tr>
<td>2</td>
<td>Heavily damaged/ collapsed/ swept-away houses</td>
<td>one</td>
<td>59</td>
<td>33</td>
<td>1</td>
<td>722</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>Collapsed easement</td>
<td>one</td>
<td></td>
<td></td>
<td></td>
<td>349</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Broken concrete posts of grid</td>
<td>one</td>
<td>5</td>
<td>33</td>
<td></td>
<td>235</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>No of damaged classrooms and teacher’s houses.</td>
<td>room</td>
<td>44</td>
<td>39</td>
<td></td>
<td>343</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Blown away roofs and damaged clinical station</td>
<td>room</td>
<td></td>
<td></td>
<td></td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Damaged rice storage</td>
<td>one</td>
<td></td>
<td></td>
<td></td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Number of collapsed room</td>
<td>room</td>
<td></td>
<td></td>
<td></td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Property</td>
<td>Million dong</td>
<td></td>
<td></td>
<td></td>
<td>5,516</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Partly blown away roof</td>
<td>one</td>
<td></td>
<td></td>
<td></td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>In the stage of collapse / fall down</td>
<td>one</td>
<td></td>
<td></td>
<td></td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Blown away roof and damaged schools</td>
<td>construction</td>
<td></td>
<td></td>
<td></td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

Source: Kon Tum’s Committee for Flood and Storm Control and Disasters Mitigation 2010.

Another important impact is education and local children’s accessibility to knowledge. In reality,
frequent occurrences natural disasters impede and affect their acquisition of knowledge, particularly for
those who are children of ethnic minorities. The increase in average air temperature leads to warm
environment that reduced the children’s ability to listen and give attention to study, hence, this situation
will result to psychological stress and fatigue that ultimately reduce the quality of learning.

4. Policies and programs implemented and some suggestions

The policies and programs that implemented by the local authorities aimed at developing sustainable
livelihoods for people under the impact of natural disasters and climate change.

- Programme and Action Plan to implement the Strategy of prevention and mitigation of natural
disasters in the province of Kon Tum period 2008-2020.

- Scheme on raising community awareness and managing community-based disaster risk in the province


**Recommendations to develop livelihoods in the context of natural disasters and climate change**

**- Policies, legislation**

+ Making policies to encourage scientific and technological activities; attract investment, interregional cooperation and international cooperation, and resource mobilization in the field of prevention and mitigation of natural disasters and climate change.

+ Promulgating policies to support the disaster-prone areas.

+ Ensuring disaster risk in some areas.

+ Making Policies to support investment and residential relocation and arrangements in disaster prone areas.

+ Production policy support: providing plant and animal varieties; Investing and exploiting more area of production; providing assistance to recover buried fields to restore production in areas damaged by natural disasters and epidemics;

+ Having policies to resolve domestic and production lands for vocational training/education of rural workers.

+ Integrating programs to enhance the livelihoods of people in the economic development strategy of the province.

**- Raising public awareness**

+ Strengthening advocacy to education for the enhancement of local people’s sense of responsibility, especially the ethnic minority communities towards responses and mitigation of natural disasters and climate change in many ways: the TV program, radio, education in schools, local propaganda.

+ Organizing training programs to improve high performance for managers, specialized staff; organizing and complementing knowledge and experience on production development

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CLIMATE CHANGE ADAPTATION PRACTICES IN AGRICULTURE, FISHERIES AND NATURAL RESOURCES AMONG THE INDIGENOUS PEOPLES IN CAGAYAN VALLEY (REGION 02), NORTHERN PHILIPPINES

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ABSTRACT

The study documented the indigenous peoples’ (IP’s) groups’ knowledge, systems and practices relating to agriculture, fisheries and natural resources management under extreme weather conditions. Data collected through focus-group discussion and in-situ immersion included crops grown, farming systems, fishery and natural resources management and technologies. Seventeen indigenous groups participated in the study.

Of the seventeen IP groups, eleven exhibited moderate to heavy reliance on farm mechanization and the usage of commercial farm inputs. Monocropping predominates with either rice or corn as primary crop. These are those whose communities have been assimilated in the mainstream of socio-economic life of the community due to the provision of road and communications network.

Outstanding adaptation practices include a progressive cooperative organization, a rich collection of medicinal and pesticidal plants and systematic intercropping practices.

Groups characterized by geographic isolation and inaccessibility generally adhere to organic agriculture practices. Those located in mountainous communities have strong potentials for rootcrop production but are saddled with problems of seed capital and poor infrastructure.

All groups are amenable to the usage of environment friendly, climate change mitigating and adaptive agriculture as long as organic farm inputs can equal the efficacy of commercially prepared ones.

Thus, the development of more potent organic farm inputs, and the advocacy of fuel-efficient farm machineries are some of the recommendations advanced.

Keywords: climate change, adaptation practices, indigenous peoples, agriculture, Cagayan Valley

I. Introduction

The Philippines is a culturally diverse country with an estimated 11 to 12 million indigenous peoples (IP’s) belonging to 110 ethno-linguistic groups (NCIP, 2013). (Appendix A & B). They represent 10-15% of the country’s population of 92.34 million in 2010 (NSCB, 2012). They are mainly found in Northern Luzon and Mindanao with some groups in the Visayas (UNDP 2010).

Despite inroads made to their social, cultural, economic, political and technological systems through colonization, many have retained some or all of their own traditions, customs, language and other cultural traits. The diversity and richness of their culture cannot be underestimated. There is a treasure trove of learning that can be derived and applied productively in all facets of life, social, economic and cultural. It is therefore of paramount importance to study and document these before they disappear completely and lose a large part of their “indigenous knowledge, systems and practices (IKSP).”

The displayed resilience of these communities to extreme weather conditions and climate change is one distinct aspect of community life that gains prominence when seen within the context of continuing problems of agriculture and fishery production precipitated by extreme weather conditions.
partly or wholly brought about by climate change.

II. Rationale and Background of the Study

Cagayan Valley (Region 02) is home to 1,039,447 IP’s (about 10% of the national IP population of 11,320,476) belonging to about 24 IP groups scattered in the different provinces of the region relying mainly on agriculture and fishery for their survival and livelihood. (Appendix C). These groups of people are known to survive harsh weather conditions because of their adaptive abilities passed on to them by their ancestors. Due to their direct exposure to climate change impacts such as drought, typhoons and flooding accompanied with heavy rainfall to name a few, their life, their very existence, would depend upon their ability to adapt to the vagaries of nature.

It is thus that when indigenous peoples (IP’s) and communities flourish, it is an indication of self-sufficiency and adaptability. Food self-sufficiency among IP’s living in mostly marginal lands appear ironic if juxtaposed side by side with the general population’s inability to produce their own needs.

It is therefore axiomatic that knowing the indigenous knowledge system, beliefs and practices especially relating to Climate Change Farming and/or Fishing Adaptation Practices will contribute to a better understanding of low-technology, environment friendly, low-cost farming/fishing practices. Best practices can then be brought to the mainstream of Agriculture, Fishery and Natural Resources (AFNR) lore and knowledge.

III. Statement of the Problem

The study revolves around the question of “What are the Climate Change Adaptation Practices in Agriculture, Fisheries and Natural Resources of Indigenous Peoples in Region 02?”. Answering the said question is expected to bring about an increase in the adaptation level of farmers and fishermen of low-technology, user and environment friendly and low cost AFNR management practices.

IV. Objectives

General. The study attempted to document the indigenous groups’ knowledge, systems and practices relating to agriculture, fisheries and natural resources management under extreme weather conditions that will contribute to a better understanding of low-technology, environment friendly and low cost farming and fishing technology. Best practices are then identified and can be brought to the mainstream of AFNR technology through agriculture and fishery extension.

Specific. Focusing on the Indigenous Knowledge, Systems and Practices relating to agriculture, fishery and natural resources, the study tried to document the following variables.

1. Variables relating to Agriculture

On Crops

- Staple crop
- Alternative crops
- Season/s when grown
- Crops grown during extreme weather conditions (flood/drought)
- Crop rotation (what dictates rotation?)
- Other crops (vegetables, rootcrops, nuts, etc.)
- Indigenous edible plants eaten under extreme weather conditions

On Farming System/s

- Farming technology used
- Production management (land preparation, planting, fertilizing, irrigation/water management, weed/pest/ disease control, and management.

- Harvesting practices
- Organic farming
- Farm equipment and mechanization
- Harvest/post-harvest, pre-processing and storage technologies
- Crop calendar
- Weather forecasting
2. Variables relating to Fishery
   ♦ Fishery technology used
   ♦ Patterns of fish catch
   ♦ Variety of fish catch
   ♦ Fishery practices to conserve fish stocks
   ♦ Fishery tools used

3. Variables relating to natural resources
   ♦ Agricultural practice/s relating to Environment (kaingin, swidden farming)
   ♦ Policies/practices/beliefs relating to environmental protection and conservation
   ♦ Medicinal plants and biologicals

4. Best practices – any or all knowledge, tools, practices, beliefs, systems, policies different from mainstream (anecdotal and documentary)

V. Research Impact

The study aims to address the scarcity of scientific knowledge available that could provide the information requirement for policy makers and stakeholders to develop adaptation programs to climate change in the area with particular focus on agriculture, fisheries and natural resources. Data currently available is largely macro in character and developed by regional and national agencies but are not accessible in usable form to the stakeholders. Thus, the need to downscale information to local realities and needs.

The findings are therefore expected to enrich baseline information on climate change adaptation for policy formulation and implementation with particular interest on agriculture and fishery extension and production.

On a practical level, the documentation of climate change farming adaptation practices among IP’s would interest and find relevance to many groups of people. Primarily, agriculturists, fishery experts, farm managers, livestock technicians, or the ordinary farmer and fisherfolk may gain valuable knowledge and insights on how their practices, despite being non high-technology may be more relevant and effective with the realities of climate change from the more commonly accepted farming practices and technologies.

The study may also be of interest to natural scientists who may find relevance on, for example, medicinal plants to the pharmacists, and native weather forecasting beliefs and practices to our climate scientists.

Social scientists such as anthropologists and sociologists may find the study’s results meaningful in documenting rites, beliefs and practices as culture relates to livelihood and in unveiling of their traditions which may find mainstream acceptance once they prove beneficial for adaptation.

VI. Conceptual Framework

The Cagayan Valley Region (Region 02), characterized by its proximity to the Pacific Ocean and China Sea is subject to a wide range of climatic variability from typhoons to monsoon rains as well as droughts that perennially bring destruction to agricultural crops in the region. The frequent occurrence of these calamities brings about destruction of lives and properties not to mention damages to infrastructure—both social and material.
There is a dearth of information that could provide policymakers bases to develop adaptation programs to the wide swing of climate change in the area. It is thus important that knowing the adaptation practices of indigenous groups can generate baseline information that will become useful bases for national decision making, policy planning formulation and implementation. The importance of the IP’s adaptation practices is highlighted within the context of our ignorance provided with the inevitability of floods, drought, and the general change in climate patterns, what practices are followed to prepare for its inimical effects.

The Schematic Diagram that follows illustrates the framework where the study is hinged.

VII. Methodology

The study employed the descriptive survey in collecting both qualitative and quantitative data. Collection of data was done through in-situ survey regarding farming and fishery management practices and focus group discussion with regard to knowledge base and practices, cultural rituals, beliefs and tradition relating to agriculture, fisheries, and natural resources.

To this end, a focus group discussion guide was devised to serve as the data collection instrument. In-situ immersion served to validate data gathered.

VIII. Definition of Terms

Climate Change Adaptation – a term, for the author, connotes the acceptance of the presence of climate change and the concomitant extreme weather conditions that characterize it. Climate change adaptation therefore means that

Climate Change brings about extreme climatic events (ECE) as:
- Tropical storms Monsoon rains and cyclones causing floods or
- Absence of rainfall causing drought

Adaptation practices of IP’s in Agriculture, Fishery & Natural Resources

Bases for Policy and Advocacy in Agricultural Extension and Management

Indigenous Peoples, according to Sec.3(h) of R.A. 8371 refer to a group of people or homogeneous societies identified by self-ascription and ascription by others, who have continuously lived as organized community on communally bounded and defined territory, and who have, under claims of ownership since time immemorial, occupied, possessed and utilized such territories, sharing common bonds of language, customs, traditions and other distinctive cultural traits, or who have, through resistance to political, social and cultural inroads of colonization, non-indigenous religions and cultures, become historically differentiated from the majority of the Filipinos. ICC’s/IP’s shall likewise include peoples who are regarded as indigenous on account of their descent from the populations which inhabited the country, at the time of conquest or colonization, or at the time of inroads of non-indigenous religions and cultures, or the establishment of present state
boundaries, who retain some or all of their own social, economic, cultural and political institutions, but who may have been displaced from their traditional domains or who may have resettled outside their ancestral domains (NCIP, 1998).

IX. Results and Discussion

The section is divided into sub-reports on the different IP groups arranged alphabetically.

1. Agta (Pureg, Sanchez Mira, Cagayan & Valley Cove, Baggao Cagayan)
   - Main Crop: Rice & Gabi (Taro)
   - Alternate Crops: Camote, Cassava, Banana, Ube and Vegetables
   - Other Products: Pineapple, Native Soft Broom, Charcoal, Rattan, Honey
   - Production Level: Subsistence Level
   - Means of Cultivation: Kaingin (Swidden Farming)
   - Farm Technology: Manual/Organic
   - Best Practices re: Crop Diversification, Fallowing of Farms, Organic Pest Management on Farm, Use of Organic Feeds in their Fishery; Usage of Edible and Medicinal Plants from their Forests; Rational Hunting and Fishing Practices, General Characteristics on Climate Change: Minimal usage of fossil fuels, small carbon footprint left from all activities
   - Felt Needs: Need for seeds; plant technology; organic, farming technology, SALT farming, technology for their upland farms; Road Network for the Agtas on Valley Cove

Applai (Nabbotuan, Solana Cagayan)

- Main Crop: Rice
- Alternate Crop: Corn
- Other Crops: Sugarcane, vegetable (bitter gourd)

- Production Level: Surplus Producers but most share harvest with landowners
- Means of Cultivation: Mechanized
- Farm technology: Dependent on Commercial Farm Inputs
- Best Practices re: Crop Diversification, Rational Climate Change Management of Forest Resources
- General Characteristics Heavy Reliance on Fossil Fuel Particularly
- On Climate Change: utilized in Irrigating Farms
- Felt Needs: Improvement in Tenurial Status;
- Alternative Source of Irrigation Water a Groundwater Source is Slowly Being Depleted

3. Ayangan of Namamparan, Diadi, Nueva Vizcaya

- Main Crops: Rice and Corn
- Alternate Crops: Sweet Potatoes (Camote); Ube & Cassava
- Other Products: Vegetables and Citrus
- Production Level: Subsistence Level
- Means of Cultivation: Combination Manual & Mechanized
- Farm Technology: Dependent on Commercial Farm Inputs for the Lowlands and Less for the Uplands
- Best Practices re: Crop rotation and Diversification
- Climate Change Intercropping; Organic farming in the Uplands
- General Characteristics Reliant on Fossil Fuel with Some
- On Climate Change: Organic Farming Practices
Felt Needs: Solution to Crop pest as kiwwet (small eels); all weather roads and bridges; irrigation facilities; seeds of traditional palay varieties; planting materials of rootcrops (ube)

4. Bugkalot of Belance, Dupax del Norte
- **Main Crop/s:** Rice/Corn
- **Alternate Crops:** Rootcrops (Cassava & Taro), Banana
- **Other Products:** Vegetables
- **Production Level:** Rice (Subsistence)
- **Corn (Commercial/Surplus)**
- **Means of Cultivation:** Combination manual & Mechanized
- **Farm technology:** Heavily Dependent on Commercial
- **Farm inputs Best Practices**
- **Climate Change:** Outstanding
- **Collection of Medicinal and Pesticidal Plants**
- **General Characteristics**
- **On Climate Change:** Reliant on Fossil Fuel
- **Felt Needs:** Farm to market Roads

5. Calinga of Alibadabad, San Mariano Isabela
- **Main Crop:** Corn, Cassava, Sugarcane
- **Alternate Crops:** Rice
- **Other Products:** Cassava Flakes; Banana; vegetables
- **Production Level:** Palay (Subsistence)
- **Corn, Sugarcane and Cassava (Commercial)**
- **Means of Cultivation:** Combination Manual & Mechanized
- **Farm technology:** Dependent on Commercial Farm Inputs
- **Best practices re:** Intercropping; Crop diversification
- **Climate change**

General Characteristics
On climate Change: Reliant on Fossil Fuel
Felt Needs: Irrigation; Completion of Major Bridge
Connecting their Area from Town Center

6. Gaddang of Bagabag, Nueva Vizcaya
- **Main Crop:** Rice
- **Alternate Crops:** Corn, Rootcrops, Vegetables & Fruit Trees
- **Other Crops:** An Extensive Variety of Fruits
- **Production Level:** Rice (Surplus)
- **Corn (Surplus)**
- **Means of Cultivation:** Mechanized
- **Farm technology:** Dependent on Commercial Farm Inputs
- **Best practices re:** Intercropping; Crop diversification; Livestock & Poultry raising; Usage of Medicinal Plants
- **Climate change:** Highly Reliant on Fossil Fuel

7. Ibalois of Salinas, Bambang, Nueva Vizcaya
- **Main Crop:** Rice
- **Alternate Crops:** Corn & Vegetables (Tomatoes, Sweet Peas, String beans and cucumber)
- **Other Products:** Rootcrops, kalamansi
- **Production Level:** Rice (Surplus)
- **Corn (Surplus)**
- **Means of Cultivation:** Mechanized
Farm technology: Highly dependent on Commercial Farm Inputs

Best Practices re:

Climate change: Crop Diversification & Intercropping

General Characteristics

On Climate Change: Intensive Usage of Fossil Fuel

Felt Needs: Springwater development, Seedling Production for Reforestation

8. Ibanag of San Vicente, San Pablo Isabela

Main Crop: Yellow Corn
Alternate Crops: Rice
Other Products: Firewood
Production Level: Corn (Surplus)
Rice (Below Subsistence)

Means of Cultivation: Combination Manual & Mechanized

Farm Technology: Dependent of Commercial Farm Inputs

Best Practices re: Crop Diversification

Climate Change

General Characteristics Average Dependency on Fossil Fuel

On Climate Change:

Felt Needs: Improvement in Tenurial Status;
Irrigation Facilities; Road maintenance;
Need for crop Seeds and Thresher

9. Ibanat of Babuyan Claro, Calayan Cagayan

Main Crop: Rice
Alternate Crops: Some Corn & Rootcrops
Other Products: Vegetables

Production Level: Rice (Subsistence Level);
Rootcrops(Surplus)
Means of Cultivation: Manual

Farm technology: Palay Farming (Usage of Commercial Fertilizers, Pesticides & Herbicides)
Rootcrops( Organic)

Best Practices re:

Climate Change: Preservation of Natural Resources (Forest and Fishing Grounds)

General Characteristics

On Climate Change: Minimal Fossil Fuel Burned

Felt Needs: A Pier/Jetty, More Efficient Transportation Facilities, Medical Service, Electricity, Cold Storage for Fish, Refrigerated Fishing Boat, facilities and Technology

10. Isinai of Domang, Dupax del Sur

Main Crop: Rice
Alternate Crops: Some Corn & Rootcrops
Other Products: Vegetables

Production Level: Rice (Commercial/Surplus)

Means of Cultivation: Largely Mechanized

Farm technology: Heavily Dependent on Commercial Farm Inputs

Best Practices re:

Climate Change: Usage of Organic Fertilizer; Reforestation;

Garbage Segregation; Smoke Free policy

In the Municipality; Crop Diversification;
Usage of Native Plants for Farm Pest Control & the Usage of Medicinal plants

General Characteristics
On Climate Change: Heavy Reliance on Fossil Fuel

Felt Need: Desilting of Clogged Riverway Causing Periodic Flooding

11. Itawes of Penablanca, Cagayan
Main Crops: Rice/Corn
Alternate Crop: Vegetables & Rootcrops
Other Products: Fruits
Production Level: Rice & Corn (Surplus/Commercial)

Means of Cultivation: Mechanized
Farm technology: Heavily Dependent on Commercial Farm Inputs

Best Practices re:
Climate Change: Crop Diversification; livestock & poultry Raising

General Characteristics
On Climate Change: Highly Reliant on Fossil Fuel

Felt Needs: Organic farming Technology

12. Ivatan of Uyugan, Batanes
Main Crop: Rootcrops (Camote, Yam, Spiny yam, & Taro)
Alternate Crops: Rice, Corn, Garlic & Vegetables
Other Products: Fish
Production Level: Camote (Surplus); Rice (Deficit)

Means of Cultivation: Predominantly Manual
Farm Technology: Organic
Best Practices re:
Climate Change: Crop Diversity; Preservation of native varieties of rootcrops; Multi-cropping; Preservation of fruit and vegetable species; usage of organic fertilizer; Soil Fallowing; Native Erosion Control techniques; Intercropping; Rain Collectors in Pasture Land

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On Climate Change: Minimal Usage of Fossil Fuels on Agricultural Activities

Felt Needs: Refrigerated Fishing Boats, Facilities and Technology

13. ’t’wak of Buyasyas, Nueva Vizcaya
Main Crop: Sweet Peas (Chicharo)
Alternate Crops: Rice, Tomatoes, Baguio Beans
Other Products: Fruits, Brooms
Production Level: Vegetables (Commercial), Rice (Below Subsistence)

Means of Cultivation: Predominantly Manual
Farm Technology: Combination Organic and Using Commercial Farm inputs
Best Practices re:
Climate Change: Crop Diversity; Preservation of native varieties of rootcrops; Multi-cropping; Preservation of fruit and vegetable species; usage of organic fertilizer; Soil Fallowing; Native Erosion Control techniques; Intercropping; Rain Collectors in Pasture Land

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On Climate Change: Because of its isolation

Felt Needs: Irrigation pipes to harness fully springs in area; Improvement of impassable roads during rainy season

14. Kalanguya/Ikalahan of Ambaguio, Nueva Vizcaya
Main Crop: Vegetables (Red Pepper, Eggplant, Sayote, Tomatoes, Cabbage, Squash, Sweet Peas, Beans and Carrots)
Alternate Crop: Palay, Corn, Rootcrops
Other Crops: Ginger, Peanut
Production Level: Vegetable (Commercial) Palay (Subsistence to Deficit)
Mean of Cultivation: Kaingin (Swidden Farming), Manual
Farm technology: Largely Organic
Best Practices re:
Climate Change: Organic farming

General Characteristics on Climate Change:
Although largely practicing organic farming, has largely denuded their forests through kaingin

Felt Needs: Provision of Better Infrastructure (Roads) in the Area

15. Kankanaey of Abut Quezon, Isabela
Main Crop: Rice
Alternate Crop: Corn
Other Products: Sugarcane, Vegetable
Production Level: Rice (Commercial/ Surplus)
Means of Cultivation: Largely Mechanized
Farm Technology: Heavily Dependent on Commercial Farm Inputs
Best Practices re:
Climate Change: Cooperativism; Usage of Green Technologies like a Building Employing a Water Harvesting Technology; Reforestation
General Characteristics
On Climate Change: Heavily reliant on Fossil Fuels
Felt Need: Periodic Refresher Training on New farm Technologies

16. Malaueg of Masi, Rizal Cagayan
Main Crop: Corn (Yellow & White)
Alternate Crops: Rice, Beans & Banana
Other Products: Rootcrops (camote, taro, yam) & Vegetables
Production Level: Corn (Surplus/ Commercial)
Rice (Subsistence)

Means of Cultivation: Predominanty Manual Using their Farm Animals
Farm Technology: Rice & Corn
Production – Usage of Commercial Farm Inputs
Best Practices: re
Climate Change: Crop Diversification & intercropping
General Characteristics
On Climate Change: Average Usage of Fossil Fuel in Agricultural Activities
Felt Needs: Need for all weather roads and bridges, Need for palay, corn and vegetable seeds, Electricity (solar or micro-hydro)

17. Yogad of Annafunan, Echague Isabela
Main Crop: Corn
Alternate Crops: Rice
Other Products: Rattan/Rattan Furniture
Production Level: Corn (Surplus/Commercial)
Rice (Below Subsistence)
Means of Cultivation: Combination Manual & Mechanized
Farm Technology: Heavy Usage of Commercial Farm Inputs
Best Practices: re
Climate Change: Crop Diversification
General Characteristics: Heavy Usage of fossil fuels on Climate Change:
Felt Needs: Activation of irrigation service in the area

X. Recommendations
On the basis of these findings, the following are possible policy directions to improve the climate change adaptation and mitigation practices of our farmer-IP’s in
particular, and of the Filipino farmer in general.

I. On Agriculture

1. Embark on a major expansion and development of organic farming, with a parallel approach to improve non-organic farming;
2. A strategy should be developed for the large scale expansion and development of organic food and farming, including technical support and market development, system of accreditation and inspection and price support facility;
3. Stronger advocacy projects on organic farming focusing in particular on benefits derived from increasing soil carbon;
4. Strengthen marketing channels of organic agricultural produce;
5. Introduce financial or other incentives to farmers directly proportional to the level of organic farming practiced;
6. Strengthen R & D efforts toward the production of farm inputs (e.g., fertilizer, pesticides, herbicides) with less carbon footprints (i.e., organic or hybrid) with efficacy rating equivalent to or approximating those of commercial type of farm inputs;
7. The introduction and active advocacy of farm machineries that are fuel efficient;
8. Provision of technical and material assistance to starting producers of rootcrops in vast, upland areas;
9. R & D on the processing of rootcrops and other rice alternatives to improve their palatability and taste to approximate or equal rice and other staples;
10. Encourage the wider usage of composting, green manures, deep-rooting plants, inter-cropping, varietal mixtures, using food industry and municipal organic waste matter;
11. Revitalization of backyard gardening as it serves to supplement the nutritional requirements and income of farming communities;
12. Identify crops that can be intercropped and areas where they can be suitably grown especially in farm areas;
13. The re-introduction of old palay varieties that are more resistant to drought for planting in rainfed-upland areas;

II. On Fisheries

14. Enable island communities to rationally exploit their fishery resources by providing the facilities and know-how on deep sea fishing instead of being depleted by foreign fishermen;
15. Provision of infrastructure to improve the productivity of farming and fishing communities (e.g., roads, bridges, farm-to-market roads, a jetty or a mini-pier);

III. On Natural Resources

16. Stricter imposition of total log ban in areas where “kaingin” or “swidden” farming continues;
17. Provision of alternative livelihood opportunities for impoverished farming families;

IV. For Further Studies

18. The testing of clinical efficacy of a wide variety of medicinal plants found in the IP’s communities, and
19. The organic farming practices of isolated communities without any access to commercial farm inputs

Appendix A. Population of IP’s and their Regional Distribution
Appendix B. Ethnolinguistic Groups in the Philippines

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<thead>
<tr>
<th>Region</th>
<th>Population</th>
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<td>1,252,962</td>
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<td>1,039,447</td>
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<td>Region II</td>
<td>1,014,955</td>
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<td>Region III</td>
<td>230,270</td>
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<td>Region IV</td>
<td>714,527</td>
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<tr>
<td>Region V</td>
<td>185,488</td>
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<td>Region VI and VII</td>
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<td>Region IX</td>
<td>993,232</td>
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<td>Region X</td>
<td>1,509,436</td>
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<td>Region XI</td>
<td>1,882,622</td>
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<td>Region XII</td>
<td>1,447,972</td>
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<td>Region XIII</td>
<td>874,456</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>11,320,476</strong></td>
</tr>
</tbody>
</table>

Region VI and VII: 175,109

Region IX: 993,232

Region X: 1,509,436

Region XI: 1,882,622

Region XII: 1,447,972

Region XIII: 874,456

Region I: 1,039,447

Region II: 1,014,955

Region III: 230,270

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Region V: 185,488

Region IX: 993,232

Region X: 1,509,436

Region XI: 1,882,622

Region XII: 1,447,972

Region XIII: 874,456

**Total**: 11,320,476

### Ethnolinguistic Groups

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<th>Number</th>
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REFERENCES


INDIGENOUS KNOWLEDGE AND CLIMATE CHANGE ADAPTATION AMONG ETHNIC MINORITY GROUPS IN NORTHERN MOUNTAINOUS REGION OF VIET NAM

Tran Van Dien⁶, Ho Ngoc Son⁷, Luu Thi Thu Giang⁷

ABSTRACT

Climate change poses a significant threat to sustainable development and poverty reduction for ethnic minority groups in the northern mountainous region of Viet Nam. Therefore, it is essential to find solutions for effective adaptation to climate change. Indigenous knowledge in agricultural production plays an important role in the development of a sustainable and adaptive agriculture. Traditional and local knowledge are essential principles for local communities to cope with climate variability and change in the northern mountainous region of Vietnam. Local people possess detailed knowledge of their environment built up from personal observation and experience and from shared experience among community members. However, indigenous knowledge is not adequately recognized in the current climate change adaptation policy. The objective of this study is to reinforce the importance of indigenous knowledge in climate adaptation in general and in agricultural production in particular. The study results show that indigenous knowledge and local experience are very diverse and exist in many forms such as using local crop varieties and animal breeds, changing planting date and time to suit changing weather, and using local experience in observing and forecasting weather extremes to avoid loss in agricultural production. However, it is important to realize that climate change is likely to have critically changed the relevance of at least some of the traditional knowledge of indigenous people. Therefore, the combination of traditional knowledge and scientific knowledge is very important in the context of climate change.

Key word: climate change, adaptation, indigenous knowledge, agriculture.

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⁶ Thai Nguyen University of Agriculture and Forestry
⁷ CARE International in Viet Nam
1. Introduction

Vietnam is one of the most vulnerable countries to climate change in the world [4]. The National Target Program on Responding to Climate Change (2008) recognizes that the northern mountainous regions are at high risk of natural hazards and disasters, and climate change impacts [6]. The northern mountainous region is the home of more than 12 million people, belong to more than 30 ethnic groups. Ethnic minority groups in Vietnam in general and in northern mountainous region in particular are among the most vulnerable groups to climate change. The poverty rates in the northern mountainous region where most ethnic minority groups live are very high, for example, in 2012 the poverty rate in north east is 17.5%, in the north west is 28.5%. Climate change poses a significant threat to the achievement of Millennium Development Goals, of which are poverty reduction, and access to government services such as education and health care. A recent study conducted by CARE International in Viet Nam (2010) showed that natural disasters and weather extreme events have caused heavy loss to agricultural production in Bac Kan province, one of the poorest provinces in the northern mountainous region [3]. Therefore, successful adaptation to climate change is very important to ensure the sustainable poverty reduction among ethnic minority groups in the northern mountainous region of Viet Nam.

Studies have also found that ethnic minority people in the northern mountainous region of Viet Nam have possessed a diversity of local and indigenous knowledge in agricultural production, resource management which have helped them well adapt to local environmental change [9, 8, 5]. Indigenous knowledge is a valuable knowledge of a particular local community in a particular area [1]. Compared with ‘modern’ scientific knowledge, indigenous knowledge has a advantage of better adaptation to local environment where indigenous knowledge has been developed, tested and grown [2, 7]. Indigenous knowledge is a product of local observations, testing and learning over years by local communities. Therefore, indigenous knowledge plays an important role in climate adaptation for local communities. In this paper, we highlight the importance of indigenous knowledge in climate change adaptation among ethnic minority groups in the northern mountainous region of Viet Nam.

2. Research methods

Empirical data for this study was gathered primarily in 15 mountain villages of Bac Kan, Phu Tho and Yen Bai province in the northern mountainous region. The northern mountainous region is the home of more than 12 million people, belong to more than 30 ethnic groups. Data were collected in the field from June to August 2013. A range of techniques was employed in order to generate information, to triangulate insights and to build up an accurate, detailed picture of indigenous knowledge use in climate change adaptation. The techniques used included interviews, focus groups and community workshops, and field observation; as well as insights from local and regional decision-makers, resource managers, scientists, published and unpublished literature, and other available sources of information. The total number of people visited at home or in the field was 240. Selected study areas represent different eco-regions of northern mountainous region of Vietnam. Selected ethnic minority groups in this study represent different cultures, farming systems, thus different levels of vulnerability and adaptation capacity. While the Tay, Thai and Muong live at low elevations, near the main roads and the commune centres, the Dao and Hmong live far from the main roads.

3. Results and discussion

3.1. The use of indigenous varieties

Some local varieties of the Tay people

1) ‘Tiêu’ green bean (Tay name: Thúa Tây) and ‘Mộc’ green bean

General characteristics: Seeds are smaller than hybrid beans, plant height is about 80cm and it takes 45 days to give first seed harvest.
Adaptative characteristics: This local crop has a good resistance capacity to insects and disease. In addition, ‘Tieu’ green beans are very drought tolerant.

2) ‘Red’ peanut (Tay name: Thúa Đin Deng).

General characteristics: Nuts are smaller and taste better than the hybrid varieties. Local people can store the seeds for the next crop. The growing season is from February to August, harvest season is from May to November.

Adaptative characteristics: Red peanut of Tay people are very drought tolerant. It can be inter-cropped with maize in dry soil fields.

3) Sticky rice ‘Đít Den’ (Tay name: Nua cuốn đăm)

General characteristics: Plant height is 1-1.1 m. Seeds are round-shaped. It is usually grown in June and harvested in November.

Adaptative characteristics: This local crop requires less fertiliser and water than other rice varieties. It also have good resistance capacity to disease.

4) Sticky rice ‘Nếp cái Hoa Vàng’ (Tày name: Nua lương)

General characteristics: Plant height is about 1,1-1,2m. Cone is smaller than the hybrid one. Seeds are yellowish white. This crop is grown mainly in the hills. Growing season is from June to July, harvested in October-November.

Adaptative characteristics: This local crop is very drought tolerant. For example, in drought time, while other crops might be affected but this local maize is still able to produce normal seeds.

5) Sticky maize (Tày name: Bắp nua)

General characteristics: Plant height is about 1,6-1,7 m. Cone is smaller than the hybrid ones, seeds are yellowish white. It is suitable for growing in the hills, dry fields and one crop rice fields. Growing season from March to June.

Adaptative characteristics: This local crop is very dry tolerant, and requires a little fertiliser.

6) ‘Tày’ banana

General characteristics: This ‘Tày’ banana has been grown by Tay people in Cho Moi for about 80 years. Plant is taller and bigger than common banana.

Adaptative characteristics: This banana variety is suitable in many soils (in the uphills, near streams, in dry fields). It is very drought tolerant and has good capacity to maintain moisture in the soils.

Some local varieties of the Dao people

1) Local maize (Dao name: Mẹ pèng)

General characteristics: Plant height is about 1.8-2m. Cone is shorter than the hybrid one. Seeds are yellowish white. This crop is grown mainly in the hills. Growing season is from June to July, harvested in October-November.

Adaptative characteristics: This crop is very drought tolerant. For example, in drought time, while other crops might be affected but this local maize is still able to produce normal seeds.

2) ‘Smooth’ green bean (Dao name: Tộc meng)

General characteristics: Stems are small but quite hard. Seeds are smaller and harder than common green beans. Grown in June and produced 3 bean harvests per season. Adaptative characteristics: This bean varieaty is drought tolerant. It is a legume plant so can enrich the soils. It is a very potential crop for growing in one-crop rice fields which lack water in Winter season.

3) Sticky pumpkin (Dao name: Nhun Buột)

General characteristics: It is a climbing plant. Usually grown in upland fields or in the home gardens. Fruits are yellowish green, in thin sphere-shaped, and weighted 2-3 kg per fruit. It tastes very good and thus has high market demand.
Adaptative characteristics: This pumpkin is drought tolerant. Very suitable for growing in dry fields in the Winter season.

4) Yellow sticky rice (Dao name: Biào Buột Viàng)

General characteristics: This rice is grown in the hills (slash and burn cultivation). Stems are hard, and plant height is about 1.1 – 1.2 m.

Adaptative characteristics: This crop is very drought tolerant. In drought time, the productivity is only reduced about 30% while other rices might be totally lost. In addition, this rice is also disease tolerant. Stems are quite hard thus rarely damaged by winds.

Some local varieties of the Hmong people

1) Hilly rice: (Hmông name: Mè sua)

General characteristics: High stem, big panicles, and redish seeds. Grown in June and harvested in November.

Adaptative characteristics: This crop variety has a big and long primary root. Thus, it could draw more water and tolerate drought very well. This crop is also easy grown in different soils. It has a very good capacity to resist disease.

2) White local maize (Hmông name Po cừ đơ)

General characteristics: Plant height is about 1.7m. Stem is big and strong. Cone has both black and white seeds, with ratio is 50:50. Productivity is equal is the hybrid one but growing time is longer (7 months).

Adaptative characteristics: Roots are developed from the stem 30 cm above ground thus resisting the wind very well. This crop is also very cold tolerant thus very suitable for cold areas such as Tram Tau district, Yen Bai province.

3) Sticky maize (Hmông name: Po cừ lậu)

General characteristics: This crop has high stem, soft seeds. Seeds can be used for human meals. Usually grown in lowland fields, but can be grown in the well-moistured upland fields. The growing time is 5 months.

Adaptative characteristics: This maize variety is cold and wet resistant. For example, in lasting wet soils, hybrid maize could die but this local maize still grows very well, even roots grow better.

Study found that the Hmong, Dao and Tay still use many local crops. However, Thai and Muong do not use any local crops such as rice and maize, although they still use some local vegetable such as pumpkin, spinach or some animals such as chicken or pig. The reasons for not using local crops were blamed for low productivity, and often suitable for upland fields. In fact, Thai and Muong people live near main roads and commune centres thus they often cultivate paddy rice, and have more diverse livelihoods.

3.2. Local experience and knowledge of weather forecasts

In general, ethnic minority people in the northern mountainous region of Viet Nam still possess a rich experience in observing and forecasting weather and use them for planning to avoid loss from natural disasters. For example, the Tay people in Bac Kan province observe the growing of the earth mushroom and know when the rain is coming. In addition, local people could observe animal behaviour to forecast the weather and extreme events. For example, if at the beginning of the year, the wasps, which often build their hive in the top branches, build their hives at lower bushes, it is very likely that year will have severe storms. In addition to experience in observing and forecasting weather, the Tay people in Bac Kan have experience in growing crops based on their local seasonal calendar. For example, the Tay people often use the sign of flowering of the local Melia tree to grow green beans, when the tree start producing buds it is a time to grow maize and other beans.

The Dao people have experience in observing stream crab to forecast weather. For example, if the crabs get out of the streams and
climb up the hill, it is very likely that the flood is coming. Similarly, if they see moss in the stream floating, the rain is coming in about 5 days.

The Hmong people have experience in observing stream nails. For example, if they see nails climb up the stone, the rain and flood are coming. According to the Thai, the year when local mango giving many fruits often have severe rain storms, and the storms often come when the fruits are ripen (June and July). According to the Muong, if the wasps build their hives at lower bushes, that year has severe storms.

In the northern mountainous region of Viet Nam, the access to weather information and forecast is still limited. Therefore, the use of local experience in observing and forecasting weather and used it for production planning is very effective in many cases. The local climate and weather vary thus local experience is important for timely response. However, it is important to realize that climate change is likely to have critically changed the relevance of at least some of the traditional knowledge of indigenous people. Therefore, the combination of traditional knowledge and scientific knowledge is very important in the context of climate change.

4. Conclusion

Climate risks have had profound impacts on lives of ethnic minority groups in the northern mountainous region of Viet Nam. Local communities have responded in many ways. Among adaptation measures, the use of indigenous knowledge such as local crops, experience in weather forecasts for early warnings, and the crop cultivation has proven to be very effective in some contexts. Local crops have demonstrated the adapted capacity to local weather and environment such as drought, cold weather, low inputs and easy cultivation. These advantages of local crops and animal breeds are very important in the context of climate change. Climate change is projected to increase the intensity and maybe frequency of drought, flood and cold snaps. The study found that Tay, Dao and Hmong people still use more local crops which are highly adapted to drought and cold weather than Thai and Muong people. It might be because Dao and Hmong people live at higher elevation, far from the road and commune centre, their livelihood rely more on agriculture, especially upland cultivation, while the Muong and Thai people live at the bottom of the hill, near the road and commune centre and cultivate mainly paddy rice. For Tay people, the results are mixed, for example, the communities living near the main road and having more off-farm income sources, have less experience with local crops and cultivation methods. Some Tay people whose livelihood rely heavily on upland agriculture still possess a vast body of local knowledge related to crops and cultivation methods.

However, it is important to realize that traditional coping and adaptation strategies can prepare communities only for some perceived risks, not necessarily for the uncertain and possibly different risks brought by climate change. Climate change is likely to have critically changed the relevance of at least some of the traditional knowledge of indigenous people [7]. Therefore, the combination of traditional knowledge and scientific knowledge is very important in the context of climate change. The government can increase the adaptive capacity for ethnic minority groups by increasing their access to weather information and early warning forecasts.

REFERENCES


Vietnam: vulnerability and capacity to adapt to effects of climate change


SOME PROBLEMS OF ENVIRONMENTAL PROTECTION, TOWARDS SUSTAINABLE DEVELOPMENT IN NORTHERN MOUNTAINOUS PROVINCES TODAY

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The northern mountains region consists of fifteen provinces: Lai Chau, Dien Bien, Son La, Hoa Binh (northwest area), Ha Giang, Cao Bang, Lao Cai, Bac Kan, Lang Son, Tuyen Quang, Yen Bai, Thai Nguyen, Phu Tho, Bac Giang, Quang Ninh (northeast area), and northeast and northwest areas and some western districts of Thanh Hoa and Nghe An province. The total natural area of the region is about 109,245 km², accounting for 33 percent of the country’s total area.

Up to ¾ of the region is mountainous. Its terrain is high and dissected with steep and peaked mountains. Northern mountains region has tropical moonsoon climatic conditions. Due to the dissected terrain, there are different sub-climates. In winter, it is the coldest region in the country. The soil isn’t fertile. Of all natural soil, agriculture soil makes up 12.92%. Currently, there are 3,500 mines of 80 different types of minerals, including 250 mines and 30 types of minerals which have been exploited in the region. There are many beauty spots here, which allows tourism development.

Northern mountains region is inhabited by more than 40 ethnic groups, 63% of which are ethnic minorities with approximately 14.542 million people, accounting for 13.5% of the country’s total population. This region has the lowest population density (approximately 105 people/km², in Muong Te district, Lai Chau province, it is 16 people/km², in particular).

GDP growth in 2011 in the region was 10.33%; GDP per capital was 15.432 million dong, an increase of 3.04 million dong in comparison with that in 2010. State budget revenues from the region reached 15.498 billion dong, increasing 32.54%. There are 43 poor households in the whole region, according to the government Decision 30º/2008. Poor household rate in 2011 (acording to Criteria 2011-2015) of the whole region was 29.3%, decreasing 1.59% in comparison with that in 2010. Education and technical expertise level of minority workers in the northern mountains region is low, which is only suitable for the self-sufficient production method. Although, goods manufacture has developed, technical and scientific advancements are still new to local residents. The reasons include the lack of investment funds, low education level, terrain conditions, and unfavorable climate for the economic development of goods.

Joining the development trend of the country, northern mountainous provinces have many advantages to develop agro-forestry (afforestation and forestry jobs), eco-tourism, origin tourism, trade gate tourism, the mining industry and small hydropower industry ... Therefore, in the past years, northern mountainous provinces have carried out many poverty reduction projects, programs and policies to exploit the local potentials and strength, under the direct leadership of the central government and the support of people nationwide and friends around the world. Each locality, with the province’s budget, also has specific and proper policies. Many provinces (with authorities) have granted the license for mining and processing minerals of mines with small and medium reserves; planned and developed small and medium hydropower projects; developed tourism, developed manufacture and processing of agricultural and forest products and material production. Socio-
economic development policies have basically changed the local people’s spiritual and material lives. However, at the same time, they bring about natural environmental consequences which are water, land, air pollution, biodiversity decline, repeatedly occurred environmental problems, culture oblivion...The reasons include too much focus and appreciation on economic growth, population growth, old cultivation habits, outdated living habits, hydropower construction, rampant exploitation, and deforestation...

1. Current situation of natural environment in northern mountainous provinces

1. 1. Forest resources are degraded

Northern mountains region plays an important role in the development strategy of overall national society, economy and national defense. In particular, forest plays a key part in protecting the border, watershed and national key projects and developing industrial material areas to meet the demand of processing and exporting forest products, creating jobs, reducing poverty, stabilizing population for ethnic minority groups in northern mountains region.

The total forest area of the region is 5,612,045 hectare, making up 51.7% (accounting for 42.67% of the country’s total forest area); forest cover percentage is 51.7% (39.5% of the country’s total). Natural forest area is 4,474,004 hectare, accounting for 41.3%; planted area is 1,138,041 hectare, accounting for 10.5%; bare land area is 2,529,764 hectare, accounting for 23.3%. In northern mountainous provinces, natural forests make up a large proportion, planted forests make up a small proportion. National forests are mainly poor forests and recovery forests (average reserve of 40-70 m³/hectare). Currently, there is some area of medium and rich forests (average volume of 80-150 m³/hectare), mostly located in the nature reserve and there is some area of protective forests, but it’s highly distributed and scattered; production forests are mainly poor and exhausted forests. Forests are planted with low productivity and they are mainly dispersed. Only in some low provinces which are material areas for paper mills (Bai Bang, An Hoa), with favorable transportation, the reforest is centralized with high productivity.

The area of burned forests has increased significantly (in 2004: 117.9 ha, in 2010: 3,120.2 ha). The area of destroyed forests in 2010 is 211.5 ha. Deforestation is mainly due to the production development. Especially, during the past years, hydropower industry and mineral mining in provinces have risen, leading to yearly deforestation because of economic development purposes.

Forests are degraded, mainly watershed and protective forests, causing many environmental problems such as erosion, land runoff, landslides, flood, drought, biodiversity degradation and poor environmental sanitation.

1. 2. Land resources decreases and are polluted

Deforestation for shifting cultivation, illegal or rampant mineral mining, rock blasting, and poor use of chemical fertilizers, plant protection chemicals and pesticides...through many generations have made land degrade seriously. In many areas of the northern mountains, land is uncultivable and desertification is increasing, leaving barren land and bare hills. Besides, land erosion is becoming serious in mountainous and highland areas. These areas, in addition to suffering direct consequences of forest coverage devastation, have high terrain. The terrain is dissected strongly with steep slopes of 25-30°, leading to soil being washed away and being incultivable.

There are two main types of land pollution: Pollution caused by chemicals that famers use chemical fertilizers and pesticides for agriculture production and pollution caused by stores of plant protection chemicals and refuse from industrial chemical production facilities and mining areas and industrial areas...

Cao Bang is a province which has many kinds of minerals. There are many businesses
mining minerals in different scales, which disrupts the rock and land structure. Due to rock blasting and the dissolving and washing of components in ores and rock, physical properties and chemical composition of the water around mines have changed. Besides, industrial waste, domestic waste and hospital waste have made the land arid. Deforestation for shifting cultivation, illegal logging and mining still occurs in provinces, leading to land washout, impoverishment and structure disruption.

In Quang Ninh province, environmental pollution and land resource degradation tend to increase due to the socio-economic development and unusual movements of leveling natural hills and forest hills, vegetation to build economic and technical infrastructure have increased the risk of erosion and washout. Wildfire, deforestation and illegal mining still occur in some places such as Hoanh Bo, Uong Bi, Cam Pha, due to natural disasters such as flood, storms, landslides in Binh Lieu, Ba Che, Tien Yen district. The use of chemical fertilizers and plant protection chemicals in agriculture has caused land pollution and poor agricultural land quality (8). According to the statistics of Ha Giang province, by the end of 2002, 1,367.10 hectares of the land was impoverished; 48,484.00 hectares of cultivated land was degraded and eroded.

In northern mountainous provinces, there remain many stores of pesticides and chemicals which pollute the land and water resources in a large scale, severely affect people’s lives. The improper use of pesticides in terms of types and dosage has caused serious impacts on the community health and rural environmental sanitation. Due to the abuse of fertilizers and pesticides, a number of land area is arid, impoverished and loses porosity. Through the research in Ha Giang, Son La, Lai Chau, Dien Bien – provinces with high slopes and great area of barren land and bare hill, impoverishment and washout situation are too popular. In these provinces, corn plant is suitable and has a big value of poverty reduction, but it is voracious and has a short life. In order to have high productivity of corn plants, the local people have used a lot of chemical fertilizers instead of organic fertilizers. This cultivation habit leads to more seriously impoverished land, water pollution and poor environmental sanitation.

Land degradation has led to the reduction in productivity of crops and livestock, and biodiversity decline. In reverse, this process speeds up the land erosion and degradation.

The accumulation of toxic chemicals in the soil will increase the absorption of harmful elements in crops, livestock and indirectly have adverse effects on the people’s health.

1. 3. Water resources decreases and are polluted

Water in the northern mountains region is now decreasing; pollution is relatively serious because of many reasons. The reasons include water depletion due to deforestation; land pollution because of radioactive substances caused by rock blasting when mining; hospital waste, domestic waste and rampant use of plant protection chemicals…

The destruction of vegetation leads to not only soil erosion but also a series of environmental consequences. Soil being washed away from the mountains flows into streams and rivers, causing water pollution; especially in rainy season, water turbidity increases, concentration of impurities is great, chemical properties of water changes negatively. In dry season, forest-lost areas become harsh; streams are dry, water shortage becomes more serious in four rocky districts of Ha Giang province, high mountainous districts of Lai Chau and Cao Bang province…

Currently, Quang Ninh coastal area has been suffering from the environmental pollution due to the impacts of industrial sewage, domestic waste, polder activities, sea/port

(8) Ethnic Department, Quảng Ninh province, Report of Quảng Ninh environmental situation 2013
shipping activities, and the strong development of coastal aquaculture; especially the extensive farming is likely to cause serious environmental pollution because of food waste and spread diseases. Moreover, there is no centralized wastewater treatment system.

The quality of surface water source supplied for household use is seriously contaminated in some areas of Quang Ninh provinces. Vang Danh stream (Uong Bi) has some parameters that exceed the A2 limit according to the national technical regulation on surface water quality, BOD 1.9 times exceeds the A2 limit, COD 1.13 times exceeds A2 limit. The surface water source used for irrigation purposes is affected by the sewage from factories such as Uong Bi Thermal Power Company, Thang Long Brewing Company, and residential areas along the river basin... Groundwater samples which were tested contain Coliform because of poor sanitation, unsafe wells, high risks of penetration of dirt from surrounding areas, such as: domestic wells in Phong Coc commune (Quang Yen town) have the Coliform content which is 14 times higher than permitted limits, domestic wells near Ha Khau landfill (Ha Long city) have the Coliform content which are 7 times higher than permitted limits.

In Cao Bang province, the water resource is seriously contaminated due to the waste from mineral mining and processing facilities. Illigal sand mining has been an evil which causes critical damages to the environment. Besides, sewage leaks from waste dumps in the province, 5-20m3 per day on average. The pollution radius is 200-300 meters. The reason is that there is no collecting and treatment system for sewage and overrunning rainwater in most wase dumps in the province. This is one of reasons for severe water pollution. In addition, currently, in some areas of the province, a huge amount of industrial, medical and domestic untreated sewage has been discharged into rivers. Specifically, nearly 7000 m3 domestic sewage and over 2000 m3 industrial sewage is discharged into Bang river and Hien river every day. Whereas, the sewage has a content of solid (TSS), biological oxygen demand (BOD5), and chemical oxygen demand (COD)… which exceed the permitted standards. According to the analysis results of surface water in Bang river, Cao Bang town, TSS indicator exceeds permitted standard 5 times, BOD exceeds permitted standard 2-4 times...Water in Hien river is seriously polluted because of the mining activities upstreams. (9).

Water depletion and pollution have a great impact on people’s life quality. Especially, now many new industrial zones have emerged, which poses a big issue concerning water hygience.

1. 4. Air environment is polluted

All urban areas are polluted with dust; the pollution is particularly severe in some places. The construction of hydropower projects, the production facilities of building materials and transportation development…are key factors causing air pollution.

In the countryside, the pollution is due to the poor sanitation and infrastructure. The improper use of chemicals in agriculture (chemical fertilizers, pesticides) has been polluting the environment. Due to the production in a small scale with outdated technology and having no waste disposal equipment, the development of some handicraft villages and processing facilities in some areas has caused serious air pollution, especially in metal, plastic recycling villages, paper production villages, and terracotta villages.

The environmental sanitation conditions in the countryside are limited. The percentage of households with hygiene toilets is low (only 28-30%). While conducting the project “Assessing the impacts of some socio-economic development policies on the environment recently. Proposing the solutions to improve the

9 Cao Bang Ethnic Minority Department, Report on current situation of the environment in Cao Bang. 2013
environmental sanitation in the ethnic minority and mountainous areas”, the Training Institution for Ethnic Minority Officials carried out a survey over 42 households in two communes: Giap Trung and Phu Nam, Bac Me district, Ha Giang province. The survey showed that 31/42 households (73.8%) answered that they built a toilet, and 11/42 households (26.2%) said that they didn’t use toilets, and they went to the forest when having a need. Among 31 out of 42 toilets, the number of hygiene ones is small. According to the survey, among 42 households, the percentage of households having access to clean and hygiene water is only 59.5% (25/42). In the northern mountainous region, the rate of households having access to hygiene water is low, only from 40 to 60%.

According to the report of Cao Bang Ethnic Minority Department, the air is getting polluted seriously. The main reasons include toxic gas emitted from factories and companies’ activities and smog from transport vehicles, construction projects, mining areas, unqualified refuse dumps and other engines… which have polluted the environment and directly affect the people’s health and life quality.

1.5. Poor environmental sanitation in the countryside

Thanks to the socio-economic development policy and increasing investment of the State, there have been remarkable changes in the ethnic minority and mountainous areas. However, although the water supply has been improved, the rate of households which receive the supply is still low; the number of households which are not supplied with water is still high. People in high and mountainous districts often build rainwater tanks (each household is supported to build a tank which has a reserve of approximately 5 to 6 m³). However, due to the limited capacity of the tanks, rainwaters only satisfy the people’s demand for daily drinking water, other demands are not guaranteed. Besides, a problem arises concerning the rainwater’s hygiene. At present, many houses are roofed with fibro-cement sheets containing asbestos which can cause cancer. This kind of sheets is banned in some countries.

According to the survey results, among 42 households questioned, the rate of households which have domestic refuse dumps is 24/42 (57.1%), have waste water reservoirs is 20/42 (47.6%). The survey also shows that 41/42 households (97.6%) say that there is no waste water management policies in tourism sites. Waste and sewage together with the custom of livestock grazing in many areas…have polluted the rural and mountainous environment.

In many areas, local people are communicated and educated about the benefits of building breeding facilities far from home. However, because of financial restriction, people’s worry about being stolen and long-lasting custom and habit, they still trap cattle and poultry under the floor, or near their house, which causes air pollution and health damage.

1. 6. Increasing environmental problems

Our studies show that in the northern mountains region, main environmental problems are due to flood, wildfire, mineral mining, landslides, and limestone mining. Environmental problems such as flood, landslides…occur frequently in the area, especially in provinces: Yen Bai, Ha Giang, Lao Cai, Lai Chau, causing serious consequences to environmental safety and sanitation in ethnic minority region. In northwest area, the frequency of flood is the highest in the country, making up 36%; the northeast stands second, accounting for 25%; 18.16% in the central region and 20.84% in the South.

In July, 2004, the flood in Du Tien and Du Da commune, Yen Minh district, Ha Giang province caused hundreds cubic meters of rock to erode in the mountain slopes, made 34 people missing, swept away 16 houses, caused 2 houses to collapse and one two-floor school of the commune to collapse completely, destroyed many hectares of crops. Also in July, 2004, due to the widespread rain, there was a flood with the magnitude ranging from 2.5 m - 3.5 m in the entire river system of Lao Cai. Great flood
occurred in Chay river with the magnitude of up to 6.83m. In some small and medium streams in Bat Xat, Si Ma Cai district, the sudden serve flood caused damages. In Si Ma Cai, the flood washed away a 15-year-old girl; heavy rains caused landslides over 1,000 m3 of rock in the routes Bac Ha - Si Ma Cai. In Vuoc village, Muong Hum commune, Bat Xat district, Lao Cai province, flood and landslides occurred on May 30, 2008, caused 5 people to die. In Bat Xat, Sa Pa, Bao Yen, Bao Thang (Lao Cai), on August late 8th and early 9th, 2008, due to storm 4 and depression’s effects, heavy rain caused flood, leading to 20 deaths, 45 missing people and dozens of Hong coastal commune were immersed in water. In Ha Giang province, heavy rain from June 23 to 27, 2008, caused landslides, housing collapsing, making 9 people die, 14 people injure, 49 houses completely collapse, 22 houses severely damaged. In Yen Bai in 2008, the Storm 5 caused flood and landslides, which led to 42 deaths, 27 injures, over 5,437 hectares of crop is drown and washed away; 320 housed to be collapsed and washed away.

On June 4 and 5th, 2012, in Vi Xuyen district, Ha Giang province, heavy rains made many areas flooded. It is estimated that more than 50 houses in Lung Sinh village, Viet Lam commune are inundated from 0.5 to 2 meter deep, livestock and living things were washed away. In Ha Giang June 22-23, 2012, prolonged heavy rain together with flash flood occurred suddenly in Bac Me district caused one death, 3 missing people, 7 injures and 59 damaged houses, including 7 houses which were totally washed away and hundred hectares of crops. In Yen Bai, on September 7th, 2012, in La Pan commune, Mu Cang Chai district, heavy rain caused landslides which buried 20 people, consisting of 16 deaths, 2 injures and two missing people.(10)

From 2007 to 2011 alone, in Lao Cai province, there were 18 flash flood, landslides, causing 251 deaths, 1,732 collapsed and damaged houses, over 12,104 hectares of damaged crops, including 500 hectares of eroded land which is unable to cultivate…economic losses are over 1,400 billion dong. In Agust, 2012, in Nam Nhu village, Nam Luc commune, Bac Ha district, the flash flood flattened 12 houses, caused 10 deaths, economic losses are up to 60 billion dong(11).

Environmental problems due to wildfire, mineral mining (mine collapsing, mine coast landslides, explosion of methane gas), and landslides have caused serious consequences of human lives and environment.

2. Some solutions to environmental protection towards sustainable development in northern mountainous provinces

Over the past years, the Party and State have been planning and organizing a series of policies aiming at developing the socio-economic northern mountainous provinces in particular and the areas where a number of ethnic minorities live in the country in general. It’s the policy of forestry development, forest development, economic development and poverty reduction, including: Socio-economic development program for particularly poor communes (CT 135) according to Decision no.135/1988/QĐ-TTg and Decision no. 07/2006/QĐ-TTg; policy to support ethnic minorities people in land, housing and water (Decision 134/2004/ QĐ-TTg); policy to support particularly poor ethnic minorities people in loans to develop production (Decision 32/2007 and Decision126/2008/QĐ-TTg); policy of

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settlements; policy of population centralization and stabilisation; policy of mining and mineral processing development; policy of hydropower development and investment… Thanks to the successful implementation of these policies, in recent years, the annual average economic growth rate of the country is 7-8%, the northern mountainous provinces alone reach 8-11%. The region’s GDP is 10.33%. The economic structure of the northern mountainous region shifted towards increasing the proportion of industry and services and decreasing agriculture’s proportion. Forestry is attached special importance to development. Poor households rate in particularly poor region of the whole country declines from 47% (in 2006) to 28.8% in 2010, a reduction of 3-4% per year in average; average income in the particularly poor region is 4.2 million dong per capita per year. 100% people in need of legal support get free assistance. 71% of all roads to the commune centre or among communes are asphalted; over 90% of all communes have access to electricity from the national grid; 100% of communes have medical clinics. Schools and medical clinics are remodeled. Cultural values and identity of ethnic people are well preserved. The political system of mountainous region is consolidated, national security in the ethnic minorities region is enhanced; the unity bloc of ethnic groups is getting stronger. Many communes and communal centers have secondary schools; 100% of all districts have high schools. The system of boarding high schools is thriving. 100% of all communes have medical staff. 100% of all communes have Culture house or post office. Voice of Vietnam Radio covers wave to nearly 100% of the ethnic communes; 90% of ethnic minorities households are able to listen to the radio; 80% of them are able to watch television. The percentage of ethnic minority people in the Party, country and local government’s agencies is increasing. (12).

However, in the process of developing and implementing policies and in the process of socio-economic development, due to many reasons, deficiencies and shortcomings of the protection of the natural environment are unavoidable. Program 134 (Decision 134/2004-TTg) and program 135 (Decision 135/1998-TTg) in phase 1, phase 2 provide support for housing, manufacture, and life, but there is no support for toilet construction, so many local residents still defecate indiscriminately. The government has Decision 167/2008/QĐ-TTg on December 12, 2008 on the housing support for poor households. While implementing the decision, some local authorities didn’t support people with money, but with 10m3 wood. This is the main reason leading to deforestation in a large scale. People’s committees are assigned to make plans for small hydropower stations, leading to massive development of hydropower stations in northern mountainous provinces which cause unfortunate consequences to the environment. The resettlement arrangement for local residents in the project area is slow and unsuitable with their lifestyle and farming customs, which makes people leave the resettlement region, find new places and cause deforestation living and production land. The northern mountainous region is potential for mineral types. In the last years, together with the survey and inspection over different scales, we have carried out the mining and processing of some kinds of ores to serve the socio-economic development such as Cam Duong apatite ore, Hang Mon coal, Quy Xa iron (Van Ban), Sinh Quyen copper ore (Bat xat – Lao Cai), ead, zinc, manganese ... in Ha Giang, Cao Bang. The model of ore mining and processing is quite diverse in terms of size and technological level. In addition to the mines with large reserves with the state’s license for mining and management, many provinces take advantages of mineral resources, within the competence, grant license implementing policies in ethnic minority and mountainous areas, April 11th, 2013

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12 Ethnic Minority Department – Documents of the National Conference on evaluating and
of mining and processing to state or private enterprises, including those failing to meet the requirements of qualification and technical capacity. Although, the state management of mineral mining has been strengthened, illegal mining still occurs, especially placer deposit and coal. This leads to poor safety. The mining process has caused the pollution which exceeds the permitted level.

In many mining areas near the residence, deep holes are formed, causing severe landslides. In rainy season, landslide occurring in mining areas, negatively affects the natural environment. Forests are destroyed for mining purposes, leading bad consequences to the ecological environment. Many localities have faced with dilemma when investing in hydropower construction because of negative impacts of this kind of “clean and cheap” power industry. While the revenue from hydropower hasn’t received, droughts and floods occur more frequently, directly affect agricultural production. Besides, the pressure from population growth and economic growth has significant influence on the local policy regulation. Because of immediate benefits, many localities fully exploited potential without caring about the consequences on the environment. Massive licensing and hasty construction of hydropower projects and mining projects are direct causes of environmental problems such as landslides, geological tremors, water depletion and pollution…in the region.

The natural environment is degraded and polluted; water resources are scarce, water is polluted in many areas; cultivation land is eroded and washed away; agricultural environment is polluted…These problems affect the health of ethnic minority community, leading to diseases such as respiratory illness, ear, nose, throat problems, malaria; a number of diseases related to water such as gastrointestinal disease, eye disease, skin disease, thyroncus, worms...

Many households are not used to using toilets or use toilets which are not hygienic. There are no cattle and poultry pens or there are simple pens without animal waste storage. In some communities in remote and mountainous areas, local residents drink water which is not boiled, eat food which is not cooked, and defecate freely to the natural environment, which pollutes the land, water and air and adversely affects people’s health. Besides poverty, low education, population explosion, unemployment, backward customs, superstitions and other social evils always occur at the same time with health problems such as malnutrition, infectious diseases, drug addiction, social diseases … These lead to an increase in the mortality rate among infants and people who suffer from diseases and lower life expectancy.

The environment in northern mountains region in particular and the natural environment in Vietnam in general, now faces with the following challenges:

Infrastructure and facilities for environmental protection are poor, backward; environmental pollution is increasing but budget for environment from the state and enterprises are low; environmental management staff’s capacity is limited.

Population growth, free exodus and poverty cause great pressure on natural resources and environment.

Solutions to environmental protection aren’t synchronized. Environmental protection isn’t integrated with socio-economic development, leading to difficulties in preventing pollution and ensuring sustainable development.

Knowledge of environment and sustainable development is poor and people’s responsibility for environmental protection is low.

In order to ensure the harmonization between socio-economic development, poverty reduction and environmental protection toward sustainable development in northern mountains region, in our view, the following groups of solutions to environmental protection towards
sustainable development should be paid attention:

2.1. Building and implementing the legal system of environmental protection laws

2.1.1. During the planning and implementation of socio-economic development policies, environment and climate changes should be linked with the long-term vision.

At the strategic level, we also need to be aware of environmental security issues with serious threat from factors such as climate change; disparities in development among regions; conflicts arising in the exploitation and use of natural resources. In addition, the water of the major rivers flowing into Vietnam is originated abroad and controlled by foreign area, pollution levels in rivers are rising fast...which has an impact on water security and unforeseen consequences. Therefore, if environmental security cannot be handled properly, it will have a negative impact on every socio-economic aspect of the country. Hence, during the planning and implementation of socio-economic development policies in each area, each sector, each locality, each project, we must link environment and climate changes with the long-term vision.

2.1.2. The Party and State should have the planning of environmental management and protection, zoning map as a basis to build a plan for socio-economic development associated with environmental protection of ethnic mountainous areas. Because of the fact that rapid economic growth in northern mountainous provinces (the areas are considered to be the poorest one in the country) is inversely correlated with environmental issues, there is a need to enhance the application of advanced science technology of clean productions; priority given to investment projects of waste treatment and environmental restoration. Among the elements of the socio-economic development policies, besides the support in terms of breeding plants and animals, there should be more concern over instructing local people to apply new technology and local knowledge to enhance the productivity; at the same time protect the land, prevent soil erosion with their experience of intercropping and cultivation on slopes…

2.1.3. The agencies of state management on environment need to be consolidated towards modernization and are capable to perform more complicated tasks and meet the requirements. There is a need to change, consolidate and strengthen the organizational apparatus of state management agencies on environment, especially at the local level (in the spirit of the Decree No. 81/2007/ND-CP dated 23/05/2007 of Government regulating professional organizations on environmental protection at state agencies and state enterprises) and guarantee effective implementation of the Party's guidelines, policies and laws of the State in the field of environment. Funding sources should be arranged to ensure the spirit of Resolution No.41/NQ-TW, regulating that not less than 1% of total budget is spent for environmental protection activities. Key investments are made to solve environmental problems, environmental hot spots in the area such as public dumps of domestic waste, medical waste treatment system and water supply system, industrial wastewater treatment system in industrial zones.

2.1.4. Seriously implementing the Environmental Protection Law, Land Law, Law on forest protection and development, national strategy on water resources in 2020,... associating law implementation with specific sanctions for specific objects. First, it is necessary to supplement, perfect legal regulation and mechanism of environmental protection in industrial zone, export processing zone, economic zones, hospitals, industrial complexes, handicraft villages, river basins, rural and mountainous environment. The inspection of the observation of the law on environmental protection should be promoted; especially violations of law on environmental protection should be strictly handled. There should be close coordination between the various levels, branches and people in the inspection process
and inspection results should be publicized so that people know about them.

It’s necessary to readjust the natural resource tax, mining tax and water use in accordance with reality and there is a clear regulation on businesses’ tax level paid to localities and the state, avoiding the current form of tax-paying.

2.1.5. Mobilizing the participation of economic sectors in environmental protection. Creating mechanism of coordination and cooperation and mobilizing the participation of all economic sectors and the whole society in environmental protection. In order to mobilize the participation of the whole society, the state needs to better implement the policy of sharing benefits from mining and using minerals, land, forest and evenly distributing benefits among the state, economic units and people.

Previously, the state was responsible for migration, resettlement and hydropower construction; now there should be a regulation to force enterprises to share that responsibility. Enterprises must regularly use part of the profits from the project to improve people’s living conditions. People who plant forests need to receive reasonable amount of money because they create a fresh air environment for the locality and create a great reserve of water for hydropower projects that some projects on international environment have done. Part of resource tax expense and projects’ profits should be spent improving ethnic minority people’s lives so that they can stabilize their lives, reduce shifting cultivation and nomadism, which helps limit deforestation for cultivation.

2.2. Associating socio-economic development with environmental protection in order to develop northern mountainous areas in a sustainable way.

2.2.1. Saving natural resources and minerals. Encouraging the community to join the activities of protecting land, water, forest, minerals, especially scattered and small mines. Using laws, policies, economic instruments and administrative measures in order to properly implement legal provisions on natural resources, mineral. Limit and end the rampant mineral mining. Increasing investments on restoring, renewing and improving ecological environment in mining areas.

2.2.2 Strengthening evaluation of the hydropower development plan before granting the construction license of small and medium hydropower factories in order to avoid pollution and water depletion in the area.

2.2.3 Organizing and building forestry, managing forestry and proposing solution to socialize forestry. Organizing and properly implementing program 327 and 661 to green bare hills, enhance forest coverage, increase forest quality, and protect biodiversity in order to create a green lung for the rural mountainous areas. Supporting people with planting, protecting forests and effectively using forest land that they are provided by the government. Building and launching policies on tax exemptions for land use, policies of managing forest core zone and buffer zone. Promoting agro - forestry ecology; encouraging afforestation in areas of comparative advantages. Developing green agriculture and eco-tourism. Restructuring the economy towards environment friendly, accessing the model "green growth".

Continuing to renovate forest development and protection policies. Increasing the investment source from annual state budget; at the same time mobilizing many resources to develop the infrastructure in mountainous areas. Coordinating and integrating socio-economic development programs and project in ethnic minority and mountainous areas. Attracting, calling for funds with investment and development projects of protective forests and special-use forests from ODA, FDI funds…Encouraging enterprises from joint-venture economic sectors to associate with local residents to develop forests with many flexible and dynamic ways such as hiring land to plant material forests for industrial production, wood processing, seed supply and technology transfer…
Renovating and reforming the policy of handing over land and forests. Transferring land and forests which are used ineffectively in farms to people, villages and other economic sectors to protect and develop forests. Then handing over forests and forest land to communities. Encouraging and promoting the role of people who have prestige in the community and promoting the positive impact of customs, conventions and rules of the ethnic communities on forest protection and development.

2.2.4. Having proper plans and budget for waste collection: solid waste, hospital waste...; there is a standard hole to bury waste in order to avoid contaminating water resource. At the same time, there is a policy to invest in conserving and promoting people’s local knowledge. Specifically, paying attention to progressive customs and combining these customs with legal sanctions in environmental protection.

2.2.5. Local authorities need to specify and implement the policy of environmental protection together with the socio-economic development of the area, at the same time promote the laws and conventions in environmental production; promote the role of local communities and enhance the participation of the community in the management of natural resources and environmental protection.

In the socio-economy development program in ethnic minority areas, we should increase funds and instruct local residents to build hygiene toilets. Basing on specific areas, specific policies should be proposed to help increase the number of hygiene toilets so that local residents can give up their habits of defecating in the forests. Providing more funds for people to replace fibro cement sheets with plate, thatched, tile roof in order to help people avoid cancer diseases when using water dripping from the roof.

2.2.6. Strengthening advocacy, raising awareness about the environment and sustainable development in order to build the people’s movement for environmental protection.

Increasing environmental pollution and problems in northern mountains region have serious influence on the local residents’ lives. The situation is not only due to the economic development or population pressure but also complicated issues related to people’s living customs and traditional culture. Changing people’s long-lasting habits and customs is a big issue, requiring consistent and careful advocacy. There is a need to increase the cost of advocacy so that local residents can give up their old customs such as their old farming custom, deforestation for cultivation...and move to low land and centralize in villages, avoid dangers and guarantee environmental sanitation.

Government of all levels together with social, politic organization, nongovernment organizations, representatives among ethnic minority people join to contribute, advocate, educate and raise local residents’ awareness about environment and sustainable development; communicate people about using and protecting land and water resources; encourage people to save natural resources and minerals. In order to do so, we should help the local residents understand their position, role and rights in managing and controlling and protecting the environment. Joining the management of natural resources and environmental protection will help the local residents get equal benefits in collective management, strengthen the community unity and enhance the technical skills and experience.

Forms of advocacy should be used: Advocacy through social media using ethnic minority languages; oral communication; advocacy during meetings, community activities; advocacy in state management agencies’ electronic portal; organization of short advocacy competition to associate environment with the socio-economic development in the forms of written examination or stage performance using local residents’ languages.

Content and advocacy methods are associated with socio-economic development policies and specific objects.
Encouraging local residents who directly produce foods and vegetables to associate farming with environmental protection. Encouraging them to use organic fertilizers in replace for chemicals and pesticides; use clean water and hygiene toilets, raise and trap cattle and poultry far from home, avoid building breeding facilities in the watershed or wind direction. Encouraging people to build biogas tunnel; not build brickyard and hunting. Especially, handicraft villages must strictly fulfil commitments on smoke and waste when using materials.

Advocating and encouraging state-run farms, mining business, hydropower construction enterprises in the area to take their responsibilities towards the communities and environmental protection. The enterprises in the areas should perform well the Party and State’s policy on investment: develop production and at the same time ensure the harmony between the three interests: economy – society – environment protection. The enterprises are responsible for producing, processing consumer goods and consuming agro-forestry products and materials for local people; at the same time they are responsible for protecting the ecological environment. Besides, they must meet the commitment and comply with correct procedure and technical requirements to minimize the impact on environment.

Hopefully in the coming years, with the close attention and guidance from central to local authorities, the investment and support of the Party, state, national and international socio-economic organizations through a series of development policies on key economic projects in the areas, stable poverty reduction policy, policy for people in particularly poor areas…the economy, society and environment of ethnic minority and mountainous areas will definitely develop sustainably.

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11. Information in online newspapers.
After the first three (3) years of implementation (2000 – 2002), the three (3) years of expansion (2003 – 2005) and 8 years of monitoring and evaluation (2006 – 2013), results show the initial comments: for a total of 11 models that were implemented for the two (2) groups of entities, the models relieved the H’Mong people in the high mountain, which is comprised of: 1. Model of forest plantation (Sa Moc); 2. Model of plantation and exploitation of non-timber forest products; 3. Model of intensive cultivation of corn in spring – summer and increasing soya bean cultivation in summer – autumn season in sloping lands; 4. Model of intensive cultivation of upland rice on sloping lands; 5. Model of intensive cultivation of rice on terraces in 1 season; 6. Model of raising cows for beef; 7. Model of bee keeping. On the other hand, there are suitable models for the Dao people which include: 1. Model of intensive cultivation and increasing season of soya bean on terraces; 2. Model of intensive cultivation of rice on terraces; 3. Model of raising cow for beef; 4. Model of bee keeping; 5. Model of poultry husbandry (duck); 6. Model of raising carps on terraces; 7. Model of new plantation/ afforestation, reform and intensive cultivation of Shan Tuyet tea. The lessons learnt are as follows: Self-evaluation of local people who live in model areas is placed in proper condition before expanding the models application; Integrating the activities of models with other local activities; Pay attention when applying the new breeds, especially, new soya bean and corn in mountainous farm of H’Mong people that caused anti-termite capacities which lower the production of indigenous breeds; and Priority in using the indigenous breeds with the application of certified technology and fertilizer.
1. Background of the study

The Dao (Mán), whose population is about 800,000 people, often live halfway up the mountains in groups of 5-7 houses where they practice some means of cultivation such as terracing, good farming practices in the mountains, and farming on rocks (a few of the Dao practiced this method). Living in the high mountains, the H’mong (H’mong, Meo) with the population of nearly 1,100,000 people, they practice good farming in the mountains or shifting cultivation (according to Mr. Nguyen Van Huy, 2003). These are 2 ethnic groups living in critical area of national security and defense (Ha Giang province, for example). Stabilizing their life means that we must create their social - political stability.

Poverty Reduction and Socio-Economic Development for mountainous areas, especially for these 2 groups of people have been the concern and resolution of the government for a long time. The government has a special program “to build the application models of Science and Technology and Developing Social-Economy for the countryside and mountainous areas”. The project “Building the sustainable cultivation models on sloping lands in Ban Peo commune, Hoang Phu Si district, Ha Giang province” is one of the projects of the program. The project was carried out in Hoang Phu Si district, Ha Giang province, in which both the Dao and H’mong peoples live. After the project was completed, the program VietCansol supported them to maintain and expand the practical results of the project Ban Peo with the sub-topic “Support for transferring the results of the sustainable cultivation models on sloping lands in Peo commune to spread out the project”. The support of the program has played an important role in replicating the useful results of the models in accordance with the local people’s expectation. Many lessons, through these supporting results, were drawn from the problem of choosing and replicating the model so that people could gradually acquire the knowledge of Science and Technology and then apply it more and effectively to contribute to the socio-economic development, poverty reduction, and long-term environmental protection of Hoang Phu Si district in particular and of the high- mountainous areas, where the Dao and H’mong live in general.

2. Places and Methodology of the study

2.1 An overview of research places

Ha Giang province: a mountainous province, whose population has 90% of minority ethnicns (The H’mong 32%, the Dao 15,1%), is the most impoverished mountainous province in Vietnam. It consists of 3 main topography regions: the rocky, hilly and lowland.

Hoang Phu Si district: is a district in the high hilly area, in which 12 kinds of ethnic people are living.

Ban Peo commune: located in the southeast of Hoang Phu Si district, about 25km from the different districts, is one of the poorest communes in Hoang Phu Si district and supported by the program 135. The main cultivation activities are agriculture and forestry with low infrastructure, outdated farming methods and practices. This was one of the places of free migration in the district in the past. The commune consists of 3 kinds of ethnic people: the H’mong, Dao and Tay, living in 4 villages: Ban Peo, Nam Dich, thanh Cong and KetThanh.

2.2 Methodology

- Build model: ONFARM

- The technical measures applied are as follows:

Application of new seeds which have good quality and can adapt to the local structure of plants and animals: new rice varieties (San priority 63, LN 931), soybean(DT90, DT 99, AK 06,...), corn(CP-DK 999), grass( Stidia, TD 580, Elephant grass, Watemala), and duck raising for egg production( Khalicampbell), ..

Application of innovative farming and breeding methods: construction of runway to prevent erosion, cover crops, application of
suitable fertilizer for local varieties, pest control, vaccination, techniques to separate swarms of bees, and harvest of honey with dedicated barrel.

Technical training: According to the method of hands-on, on-the-job training.

3. Results

3.1 A summary of the results of building model in Ban Peo

According to the structure “top down”, the effects of each model are summarized below:

**Model of plant forestry trees (Cunninghamia)**

In the first 2 years (2001, 2002), the project conducted training on the techniques of enriching forest resources, designing headwater-forest regeneration in the area of 20 hectares, and separating plots of sloping lands with grass to prevent erosion and tephrosia trees. Besides, it provided 100 households (the H’mong 50, the Dao 50) with 50,000 species of Cunninghamia. In 2005, based on the needs of local people, the project supported half-amount (money for seeds, caring techniques) for 27 households of the Dao to seed successfully 45 kilos of local species of Cunninghamia (survival rate 92%) served to the new planting seasons in 2006-2007. Because the harvesting cycle of Cunninghamia is 8-10 years, the Cunninghamia supported by the project had been harvested earlier. The rest of Cunninghamiahave been being protected and cared to make sure that they will not be destroyed by fires or pests.

![Figure 1. Giving seedling (left) and Cunninghamia forest (right)](image)

**Model of planting and harvesting forestry products from different from woods**

In 2001, the program began to support the model of planting cardamom and amomum under the forest canopy for 40 households. In 2004, these were harvested. Finding out the high benefits from these products, 17 household among the Hmong proactively proposed the project supporting techniques to breed cardamom and 21 households proposed to breed amomum. The project supported a part of money for seeds and trained people some necessary techniques.
Model of intensive farming corn in spring-summer crop and soybean in summer crop in the mountain soil.

Every year, people only grow corn in spring-summer, which has low productivity without any intensive farming season. This model helps people increase the productivity, restructure crops from spring-summer corn – followed by spring corn - summer-autumn soybean, thus, increasing the area and time of covered soil.

Spring-summer corn: new seeds CP-DK 999 and new farming techniques were applied with the participation of 90 households, giving the productivity of 52,6 quintals/hectare (in comparison to 31,1 quintals/hectare).

Summer-autumn soybean: in 2001, new seeds DT99 with short-term cycle were applied by 82 households, the productivity reached 52,6 quintals/hectare (in comparison to 5 quintals/hectare). Thereafter the following years, the area had increased by 34-40 hectares/year.

Model of intensive upland rice in upland soil

In the first 2 years, the project included conducting a new upland rice varieties LN 931 (size 8 ha, 4 ha per year), training technical know-how, application of fertilizer for rice production to 80 households without using new Breed (just use the same old local scale). Especially, most household who only use old varieties is the Mong ethnic living in the remote town center. After putting new seeds and applying the latest technology, results show that the same 931 LN yield of 20.7 quintals / ha, local varieties (open fire) accounts for 12 kg / ha.

Model of land-intensive rice terraces (1 each)

In 2001 and 2002, the project had supported the construction of 20 ha farmer rice cultivation patterns on terraced land, with a total of 63 varieties ShanUu 222 households. In 2004 and 2005, without continuing to maintain the model, farmers received more support ShanUu 63 1,135 kg rice for local people to create conditions for many households were directly involved in the extended model. In 2005,
the area planted with hybrid rice has increased to 44 ShanUu 63 ha, an increase of 11 ha (33.3%) compared to 2004. This shows that people were aware of the economic efficiency of the hybrid rice. The actual yield of rice in 2005 in intensive farming model reached 7.63 t / ha more than doubled compared to the yield of local rice.

**Intensive cultivation model, increased soybean crop land terracing spring on 1 case**

Due to the condition of weather where only one crop is grown on terraced land, the coefficient of land use is not high, in the spring most of the land is left uncultivated, only a small fraction of areas planted with local varieties gave low productivity. Since 2001, the projects under construction increased service model through intensive planting spring-summer soybean or corn. In 2001, the model has been implemented in 2 hectares of spring soybean varieties TBKT AK06 with 34 households. The spring 2002, the project has been deployed to conduct extended its natural characteristics. In particular, DT99, AK06 has been purchasing and selling prices for directing people in Ban Peo to replicate the project that can provide the same. Therefore, the area of soybean plantation has been replaced with spring crop that has increased over 6 times (13.5 ha in 2002) than in 2001 (2 ha), accounting for approximately 15% of the area planted for 2 seasons.

![Figure 4. Intensive cultivation model increased soybean crop land terracing spring](image)

**Spring Model increased soybean crop rice cultivation on terraced land**

Model grass husbandry, veterinary and support cattle (breeding, meat and traction)

In phase 1 of the project, provided 01 veterinary medicine cabinets for the town center and 04 veterinary medicine bag for 4 village extension with full equipment and a variety of basic veterinary medicine. The project implemented vaccination services for the entire livestock and poultry to several project areas. There are 146 households for epidemic prevention models. The project has also provided 1,000 kg of grass seed and TD580 Stiria to breed for the whole region, the grass can grow better adaptability. By 2005, the model was replicated in households in the commune. Besides grass during winter, some new grass has started to be planted and initially tested for positive results as elephant grass, grass Watemala ... In 2004, the project supported a small portion of money to buy cows breeding cattle for meat and cows for traction ... 3 organizations in addition to technical training on reproductive care for cows, beef cows and cows for traction.

**Goldfish farming in terraced**

In the past, local farmers have practiced the production of carp but only for family consumption. In 2004 and 2005, the project has organized technical training for fish to 112 households. In addition to providing food for local farmers, there was an assurance that farmers can expose or sell directly to traders at harvest time. In 2007, livestock productions were sold directly in the field up to 5.4 tons.
Model plant improvement and intensification of Shan snow

The project has conducted technical training and building of 10 ha demonstration of fertilizer application, pruning and cutting down, planting cover crops to prevent erosion and snow. So fresh tea production reached 1,122 kg / ha (yield external model is 658 kg / ha).

Figure 5. Grass animal model (left) and rehabilitation care Shan snow

Animal model bee

The project has already granted 40 and 01 bees like honey drum crafted stainless steel for local farmers which initially promote efficiency in honey, increase security number to 2.5 times revenue, productivity password from 2.4 liters to 6 liters / barrel bridge / year (up 2.5 times). In 2005, The Peo developed 188 honeycombs (an increase of 14 over 2004 organizations). With the average amount of a undisclosed organization is 06 liters / year and the local price of 40,000 VND / liter. The commune has gained 45.12 million contracts.

Duck animal model

Initially, the project was granted 1,240 ducks (740 duck eggs starter breed Khakicampbell) for 86 households with feeder patterns, food and medicines for prevention and early disease. So far the ducks have stabilized and gradually were able to adapt to local conditions.

Figure 6: Model duck eggs professionals

3.2. The suitability of the model for each ethnic group in the project implemented at Peo Village

- Forestry plantation model (Sa tree): The Hmong live near the forest, mainly cultivated upland fields, therefore this model is concerned to people. In fact, Dao ethnic group may be also interested in it; however, there are only upland terraces available, but forest land, so they do not have the proper conditions to apply this model.

- The model of extraction of non-timber forest products: The Dao frequently produce medicinal herbs, and Dao women also go to the forest for NTFPs extracting activities but planting and caring about trees NTFPs is the least concern of the Dao. In contrast, the Hmong are very interested in this model; they can walk
to China or neighboring provinces to learn how to grow this product.

The model plant spring-summer intensive corn and soybean crop increased during summer on land cultivation: As mentioned above, the knives are usually less than the number of Hmong shifting cultivation, so this model is often interested for Hmong better. They would love this model because if they only have 1 regular harvest of corn to make men dish, this soybean crop is sold better in exchange for other things they need.

Models on intensive upland rice on upland soil: Tay group is usually very little place for Dao to apply a limited number of distinct indigenous groups. When having suitable condition, they move to a lower place which is adjacent to the terraces. For the HMong, upland rice is their regular activities; there are a lot of Hmong native upland rice varieties. Therefore, when this model is introduced, they showed eagerness to apply. However, they are less likely to accept new varieties than Dao but mostly they learn to fertilize for seedling density, etc.

Model of Rice Intensification of land terracing: Just like other highland ethnic group, with local people in the Peo - Hoang Su Phi - Ha Giang, rice is still the most important main crop. Rice yield per crop will largely decide the level of income of the people here. So, we can say, for local people in general, and two groups of indigenous peoples in particular, this is the model they are most interested in. Previously, the same local density mismatch for transplanting of crops (transplanting is too little), is not usually given care because of very low yield. Hence, in the introduction of the new rice varieties cultivated with the progress that make everyone to be optimistic. Accordingly every year, the application of technical process increases. It has been noted, however, for the remote social villages, living on high mountains, although their terraces are still cultivated but with the same old, local farming, they only apply extra care on techniques, fertilizer application, and transplanting density. They like to consume the old rice variety as better quality.

Intensive cultivation model, increased soybean crop land terracing spring on 1 case: H’Mong is characterized by lack of confidence, with fear or hesitant to miss season crop models so the model is usually not well received; on the contrary, the wife liked this model because they can sell soybeans, soya beans and soy food daily as Kinh.

Model grass husbandry, veterinary and support for cattle (breeding, meat and traction): The 2 groups prefer this model because Dao people prefer to grow cattle which have not been grazing the pasture, they need gather grass for cattle, especially in winter. The Hmong are after interested in tilling the soil, so cattle raising is often released into the forest, which is less interesting among the Hmong. They are more interested on raising buffalo cow. For them cattle is mainly to be slaughtered. However for Hmong wives, they like cattle breeding, cows can also get traction but not much.

Goldfish farming in terraces: The Dao prefer to live next to rivers and streams (of course rather than H'Mong than Thay) so fishing is their favorite work. They take fish for meal more than H'Mong. Therefore, they receive this model very quickly.

The model plant, renovation, intensive snow Shan: H’Mong people have huge ancient tea fields, but they do not accept to renovate them (monoculture annual pruning, fertilizing ...). For the the Dao, it is more acceptable, they agree to apply fertilizer and pruning.

Bee farming model: The 2 groups like this model, especially the H’Mong. Previously they only know how to exploit bees in the wild forests, now there are techniques they can actively split the herd, breeding, milking herd while maintaining confidently. They are prepared to meet and extension officers to inquire about projects separation technique above.
Model of the duck husbandry: The Dao families usually dig small ponds near the area where they live, so the husbandry ducks is very easy to accept. They also like to eat eggs so they often sign up to accept ducks in this model.

3.3. The lessons learned from the project in the selection, construction, and model replication

- Due to the distribution of residents, Hmong ethnic people often live on high mountains, so the pattern of their farming operations is mainly associated with forests, upland fields, and only a few are terraced fields. Because The Dao people live lower than Hmong people in the same residence, and the production activities is associated with terraced fields, low hills and rivers. So, when choosing households to participate in the development models, there is a need to pay attention to this issue. For example, the Dao people like to catch fish because they live near the rivers and streams so carp farming in fields is very easy to understand whereas Hmong people find this model very difficult to acquire…

- Considering the introduction of the new varieties into the farming system of Hmong people, they start building a new model, hence they discontinue the common technical problems of plant care, fertilizer application of native plants that local people are planting. The new variety is characterized by soft particles, low hardness, resistance to termites. Hmong ethnic has the characteristic that they rarely sale the production immediately, they always hang it in upstairs near the kitchen for a long time after harvesting. Therefore, the new varieties are usually eaten by worms so in the minds of the Hmong people are “the cadres bring them bad seeds”. Moreover, the focus on care techniques will contribute to conservation of indigenous genetic resources..

The farmers, the projects always have item: "model building" and "the model replication". The results of the implementation in Peo village show the supporting of replication only are conducted after having the self-assessment process of the people in the area of building the model. Thus, avoiding massive replication which is not efficient. With the characteristic of honesty, when people like to involve in the model, they have to see or meet directly the extension agents or collaborators extension to support the proposal.

- Must be integrated projects and developed program of organizations or individuals to each other ... to maximize the effectiveness of the project. Besides, there should be coordination with local agencies to aid more support in the product consumption problem. For example, when Peo village grows soybeans and all products are bought by the district and to save as seed for the other households.

- Open training courses and short-term technical training in the implementation of the project are focused on the development of the labor force in the family depending on the characteristics of each ethnic group. With the villages have crowded Hmong people to live, the training should focus on the force of female labor. In contrast, Dao people should pay attention to both male and female labors because this is the second major labor groups and have decided to implement or not to implant the model for the family..

- In the first stage of the project, it may have the full form of support about some original materials such as seeds, fertilizers. The partial support (lasts about 2-3 years later) will be carried out immediately after the confirmation of the effectiveness of the model. Thus avoiding the saying "giving and not giving any more."

- Support the establishment of the organization - groups / economic clubs. Through the activities of this club and to exchange experiences and learn from each other how to do business effectively in other locations. The households can make problems encountered when cropping, and livestock and poultry raising ... from which organization can help the technical care and protection of livestock and poultry free from diseases as well as low-interest
loans with partial funding for the economic households.

- To build and to expand the model for the two ethnic groups should pay attention to the role of the Unions, local unions, particularly the 3-level groups: Women, Veterans and Youth.

+ For WU: Due to the nature of social structures in particular and Peo village ethnic minority areas generally thought of all households were male but the main labor force in agriculture - forestry industry is predominantly female. The daily activities outside the terrace and terraced fields mainly are undertaken by women. Aware of this problem since the project commenced, besides finding and building the demonstration for households, promoting the activities of the association can be given extra special care for women in this development issues of cropping patterns to protect the land in the wide-scale commune and district levels.

+ Veterans: In a total of 42 demonstrations sites in 4 villages of Peo people about cropping patterns to protect the land, there are 35 models of the activities of the member of veterans clubs could understand the positive and cognitive abilities of the members of this assembly. Although membership is only 40 but all 40 members are actively participating in the club of 6 village extension (the club meet 2 times a month conducted in the halls). Currently there are 21 members who have been participating in raising grass area of 8 ha. This is an area of grass intercropped to avoid erosion on the steep upland.

+ Youth: This is the young and educated workforce with high ability to learn in social groups to participate in developing the model farm land protection. From 2001, the Youth Union (with 68 members) joined the project which was organized for 11 training skills through spring planting soybeans on land terracing notably for 7 training sessions organizations in the field for the Peo youth branch where the majority of union members are Hmong people who have not attended schooling..

4. Conclusion

The success of the project: The Peo village project is considered to be a successful project. Even when the project receded, the people must continue to maintain and expand the entire project as well as its social side, the model is found to be effective.

The appropriateness of the model: In the conditions of the highland, mountainous land in Hoang Su Phi district, Ha Giang province, the most suitable model for the household of Hmong people is associated with forest models, as in cultivation of land, only a few are associated with it while terracing, a suitable model for Dao ethnic group is the model associated with terraces, close to family farming.

The lesson learned: Selection of households: Must be based on the distribution based on the characteristics of the resident indigenous people, even distribution; new varieties: consider bringing new varieties into the farming system of Hmong people to start building new models. We should use their old varieties in combination with cultural practices; replication: only implement after having a self-assessment process of the people in building the model. Replication process should be integrated with other projects, if any; training: must be mounted with the main object of the employee and the family. With the interest of Hmong women, and with the interest of Dao people; Form of support: full support in stage 1 of the project and partial support in stage 2 of the project; role-level of mass organizations: pay attention to the role of the women, veterans and youth groups in the development of activities, propagation, and replication of the project.
THE ECONOMIC, CULTURAL AND SOCIAL LIFE OF BAHNAR PEOPLE SUSTAINABLE DEVELOPMENT

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Introduction

Mang Yang district is the longstanding residence of the Bahnar people. In the process of implementing policies of the State of Vietnam for Rural Development in the Central Highlands in recent years, some programs such as the 135 and 327 projects and ADB project have had a positive influence on the economic development of ethnic minorities in Mang Yang district. However, if only economic development is taken noticed of, it will be hard to avoid the negative elements which do harm to its traditional society and culture.

The trend of “Kinhization” in the cultural and social activities in such family activities as weddings; material cultural activities such as eating, living, dressing and spiritual culture such as rituals, festivals, arts, music of the Bahnars in Lo Pang and Kon Thup communes has tremendously and sharply changed traditional values and ethnic identities of these communities. Therefore, the study of traditional culture and its current transformation presents a scientific significance in order to provide a platform for planning economic development projects in rural areas where ethnic minorities are living.

To meet the actual situation mentioned above, the framework of this report mainly focuses on studies of economy, culture and society of the Bahnars in Lo Pang and Kon Thup communes.

First, we provide the history of each hamlet, in which the process of formation of each village, from the establishment till today (2009) was presented. History of villages in Lo Pang commune, such as Hlim village, Roh village, and Chup village to name but a few, is given; and then follows history of villages belonging to Kon Thup commune, including Chuk village, Groi village, Dak Ponang village and so forth. In addition, we also analyze the process of immigration of the Kinh, Tay and Nung groups and their impacts on the transformation in Polei village of the Bahnars.

The data in particular give specific figures on the number of households in the village, “rong house”, housing, schools and first and foremost economic, cultural, social, and political events (government policies) which are related to the change of the Bahnar villages. At the end of this research, we provide several suggestions for developing the economy, culture and society for the Bahnars in two communes of Lo Pang and Kon Thup in the future, for example, paying attention to investigate a strong source of freshwater, setting up lightning-rods for those houses, and offering technical support in organizing producing teams and producing village, etc.

As for economic activities, the livelihoods of Bahnar people rely on the traditional way and modern way. On the basis of comparison between the two livelihoods, we show current changes in the economic activities of the Bahnars in Lo Pang and Kon Thup communes. The traditional economy section primarily focuses on the Bahnars’ traditional livelihoods such as hunting (deer, boars, birds, mice and fish, etc.), gathering (popular vegetables: wild taro, wild centella, wild carpels, coriander, wild mushrooms and so on), freely breeding by natural methods (mainly buffaloes, pigs, chickens, and cows), planting by the method of "tree cutting - clearance - burning – scattering seed – rain waiting" and traditional industries such as textile weaving, mat weaving and
knitting. Moreover, this section introduces the agricultural calendar, taboos as well as a number of good and bad omens of the Bahnars in production and in their daily life. Meanwhile, the modern economy section mainly concerns the replacement of traditional production methods with modern ones and its impact on forest trees and ecological environment. The participation of the Bahnar community in forest management and afforestation is also mentioned. The fast-growing population and the new policies on settlements and other forestry policies concerning the development and protecting of the forests have resulted in some changes in their traditional cultivation method, making them adopt new cultivation technique and new crop varieties, which caused difficulties in approaching the plant varieties of high economic values. Additionally, how the Bahnars exchange their goods and hire labor as well as the availability of the credit system are also discussed. Finally, we suggest some practical solutions and proposals for the development of traditional economy, modern economy, business, and official credit system so that the living standard of the Bahnar community will be improved in years to come.

Another important aspect of the Bahnars’ life is their material culture, which includes the whole complexion of habitation, houses, dress, musical instruments, cuisine, means of transportation, etc. of the Bahnars in Lo Pang commune and Kon Thup commune. Some matters affecting socio–cultural–economic development of the Bahnars including:

**Polei** - The complexion of traditional cohabitation was called Polei, which is considered social cells of Bahnar community in general and the cultural traits of the Bahnars in Lo Pang commune and Kon Thup commune in particular. This is the basic unit of social organization, which is much influenced by different factors because of nature conditions, history background, the complexion of economic activities, social environment, the characteristics of social activities and cultural exchange between people

From the features in the structure of the Polei Bahnar Village, following matters need consideration:

- Social structure according to the institution of traditional culture and the social structure according to the institution of government organization.
- The role of *tapol lo kra polei* (The council of village patriarchs) needs to be properly evaluated.
- The harmonious relationship between custom - regulation – law.
- Local community will be granted more rights to make decision. Also, the economic development model of new immigrants should not be considered as a typical example to follow.
- Houses with the architecture serving family activities and the architecture serving the community activities

**Musical instruments**

Currently, musical instruments of the Bahnars are becoming rare. Only some basic musical instruments are preserved at communal house and in some families that are only used in the buffalo–stabbing festival and funeral ritual. Today, together with the new development wave, Western musical instruments have made their approach to the Bahnar community and had a tendency to encroach traditional musical instruments. It is predicted that these traditional musical instruments will no longer be present in festivals in the near future.

**Gastronomy**

The source of food of the Bahnars which was taken from nature was plentiful and diversified including yams, sweet potatoes, brown tubers, banana tubers, fruits in the forest, etc... In addition, there were also some other foods; for example animals, birds, mice, seafood, insects, vegetables, bamboo shoots, and mushrooms, etc. Nowadays, when the supply of foods from the forest becomes rare, people begin to the cattle and poultry raising and planting some kinds of vegetables and fruits at home or
on terraced field. Also, besides the source of food taken from nature, the Bahnars provide themselves with other foods produced domestically or on terraced field including gourds, pumpkins, aubergines, loofahs, chillis, pineapples, bananas, etc... However, fish, chicken, pork and beef are rarely present in daily meals of families.

For drinking, today, daily gastronomy of the Bahnars is partly influenced and replaced by the gastronomy of the Kinh. Traditional gastronomy is only present in festivals and rituals. As for “todro”, it is now a favorite drink of old people only. The Bahnars young men prefer drinking white wine of the Kinh which is being sold at the market today.

Modern means of transport

Traditional means of transport of the Bahnars has nothing other than the papoose. Although Honda motorbikes and tractor-pulled ploughs have made their presence today, the papoose is still a means of transport close-knit with the Bahnars at these two communes. Honda motorcycles and tractor-pulled ploughs have polluted the environment. Other utensils to contain water such as the gourd are also replaced with plastic jars and bottles. It is predicted that, in the near future, there will be plenty of plastic things and nylons in this area which cause ecological environmental pollution if no recommendations or solutions are proposed.

One more feature that should be taken into notice when studying the Bahnar people is their social culture. It indicates the relationships in their society in which the marriage and family category of the Bahnar people experience many changes because of changes in the material and social culture of the local economic context.

Kinship is a basic social structure in which the relationships between the members are identified by the blood lines including family lines, marriage and family bonds. Therefore, the society of a clan develops its own kinship system. For the Bahnars, identifying a form of kinship system is a complicated issue; thus it has not led to any specific conclusion until today.

Relationship

Unlike other clans, the Bahnars do not include the family names in their full names. Then, it is difficult to identify the relationships. However, if based on the principles of marriage, they can be regarded as bilateral descent, which is not affected by family bond principles regulated by patriarchy or matriarchy. Consequently, all members are related to both the father and the mother’s sides.

Marriage and Family

For the Bahnars, marriage is an event not only for the couple but also for the whole family or even the whole village. Besides, family is also one of the most concerned issues in Bahnar’s life.

For Marriage

Marriage is to create a family bond and then nurture other relationships between the two families. Their principle of marriage is “to marry a person not belonging to the family but not necessarily so”. In a family, a couple which are cousins in the fourth or later generations and are of the same generation will be encouraged to get married because it re-connects the family’s links.

According to the traditional customs, the Bahnar practice exogamy, but not very strictly. This reflects the popular social and ethical value as well as a unique character of the Bahnars. It has been kept and handed down from generations to generations in order to maintain and organize Bahnar families and clans.

The way of choosing a partner for marriage is still very traditional. Girls and boys are supposed to get married at their adolescence (from 13 to 18 years old). It is claimed that early marriage is resulted from low rate of literacy and lack of understanding of the law, also the influence of sexual materials and long-lasting festivals. This is a big cultural challenge which leads to the disadvantages for the girls in adolescence.
For family

Over the last 20 years, the transfer from a great family of 3-4 generations (descended directly or collaterally) to a small family of 2 generations has been become popular.

New family style has possively contributed in the deployment of household economic development models. It creates social activeness of many individuals. This model ensures economic and social functions in the village and commune’s scope.

For gender, this model has positively influenced to labor assignment, with a tendency of increasing men’s responsibility of managing family economy.

The fast increase of family form has partly broken Bahnar people’s traditional social structure. Especially, when the young has not socially grown up yet, this increase does not imbue with cultural particularity which used to be their character, which makes the community spirit in Bahnar villages to be threatened to decline/ disappear.

It is said that Bahnar institutions of marriage and family have shown the characteristics of “democracy” (patriarchy of both father and mother). Regarding functions of a family, Bahnar family has all functions such as human reproduction, economy, social and economic functions.

**Genders and the role of genders in family and society of the Bahnars**

In a Bahnar family, according to genders, the division of labour is always clear, and it infringes the limits of age and generation.

The factors such as traditional customs, property inheritance, education, access to information have put a big influence on gender attendance level in economic and social development of Bahnar people at two communes Lo Pang and Kon Thup.

Last but not least, we conduct a study on the Bahnars’ cultural spirit, which reflects their spirit culture including their belief, festivals, ancient stories, proverbs, music, folksongs, dancing and customary law.

According to Bahnar’s belief, everything on earth even human beings was created by gods. Their gods system, in which yang bok blenh is supreme, mainly includes supernatural gods like yang bok glaih (the god of thunder, rain and wind) and gods caring for people and family. At present, however, the Bahnar’s belief is changing as the influence of government policy, science-technology, modern culture and people’s awareness. Since then, some rituals of worship have been reduced, which leads to the reduction of superstition and some decencies.

Rituals are also closely connected with Bahnar’s festivals which mainly follow period of agriculture. Samah yang dak (ceremony of water source), samah yang ba (ceremony of new rice harvest) and ceremony of buffalo stabbing are three festivals that appeal all community to participate. Among them, ceremony of buffalo stabbing is the biggest for having both rituals (ceremony of buffalo donation, spell and prayer) and festivals (music and dancing). Generally, the festival has both holy space and high aesthetic values. Unlike ceremony of buffalo stabbing, the two other festivals are nearly disappearing day by day as a result of the influence and adjustment of government policy, the people consciousness, the effecting of the progress of science-techniques and the economy element.

Bahnar’s spiritual culture can also be depicted in literatures and arts, such as legends, proverbs, folksongs and riddles. Folksongs and children’s songs are two major components of Bahnar’s music. There are 4 main types yet various nuances of Bahnar folksongs: the love of nature, lullaby, love songs and lamented songs. Children’s songs are short, rhythmic and easy to remember but they are nearly faded into obscurity lately. Dance is mainly performed in festive seasons in order to serve various beliefs and rituals activities as well as in daily activities during shifting cultivation and good crop ceremonies. Similar to folksongs and children’s songs, Bahnar’s dance is sunk into oblivion,
only be performed for the festival of buffalo fighting. Therefore, actions should be taken in order to preserve Bahnar’s cultural identities.

Customary law is the last factor under the influence of spirit culture to be discussed in this research. It is an elder committee, consists of 3 to 8 elders of the villages, to provide solutions and advices for all problems and issues in the villages based on the customary law. They act as mediator when the debate between plaintiff and respondent cannot lead to an end. Content of customary law includes regulation of the village, public order in the village and rules to preserve environment. The regulation of a village not only enacts for residents of the village but also for strangers. For example, they must have permission from the elder before entering. Strange pregnant women are not allowed to come or live in the village unless they have their relatives are living in the village and carry a fine. Rong house is not the place for women because of their menstruation. Visitors should not refuse to drink “rượu cần” or they will not be invited to drink forever, which is the first step to build up a relationship. Moreover, everyone should follow public order. Because of living a community, people are expected to love and help each other.

Each village has its own rules to protect and preserve environment particularly soil and water – 2 important factors of Bahnar’s life. In the water system of Bahnar, drain water is the most important as it is not only the fresh water from nature but also the water given from gods. In recent years, with the aid of the government and some international organization, water issue has improved considerably.

Conclusion

Overall, this research focuses on the factors that affect the local economy and life of the Bahnars, especially culture and livelihood of residents in Lo Pang and Kon Thup communes from many aspects of history, economy, culture and society. From this insightful research, solutions for the development of these localities are proposed. Through the implications and warnings based on collected data from the reality of Lo Pang and Kon Thup communes, larger-scaled projects of economic development in the area will be implemented, contributing to the effort of treasuring the rich culture of Bahnars and simultaneously improving the standard of living for this community.
SOCIAL INTEGRATION AMONG MULTI-ETHNIC STUDENTS: MALAYSIAN UNIVERSITIES EXPERIENCE

Hamdan Bin Said

ABSTRACT

This paper discusses the experience of selected Malaysian higher education institutions in performing their expected roles of the beacons for harmony, bridging racial differences and promoting an atmosphere of reason, inquiry and collegiality. Malaysian higher education institutions are entrusted to address not only the teaching and learning, but also the issue of diversity by creating an environment that will permit positive interaction among students of diverse ethnicities and backgrounds. In other word, Malaysian higher education has been used as one of the tools for fostering unity among diverse ethnic and minority groups. Despite this effort, ethnic relations among the ethnic and minority groups still remained polarized at almost all levels and sectors. This paper discusses the results of study on campus social climate as perceived by undergraduate students. The study employed the Campus Social Environment Survey to measure various aspects of cross-racial interaction among undergraduates in public and private universities. Based on the initial descriptive analysis of four main constructs of racial integration, various structured academic programs, co-curriculum activities, and administrative policies improvements are initiated involving diverse departments in the universities.

Key Word: Cross-racial Interaction, Environment for Diversity, Integration, Diversity, Ethnic Polarization.

Introduction

Malaysia is located in the southernmost peninsular of Southeast Asia and one-third of Borneo in the northern part. The country consists of the Peninsular Malaysia where there are 13 states and three Federal Territories and two states of Sabah and Sarawak in Borneo. The country practices a West minister-style parliamentary system of democratic government with a constitutional monarchy. In general term, this country is still considered a middle-income country with a diversified economy [5].

Education system in Malaysia is quite unique. It has been established since the colonial era. This paper begins with the discussion regarding the population of Malaysia, followed by a brief discussion of residence and education of indigenous group called Orang Asli or also known as Aborigines in other parts of the world, and social integration in higher education involving undergraduate students of diverse ethnic groups. The discussion ends with the initiatives taken by the government and selected higher education institutions in order to enhance social integration to develop a nation that is harmonious, integrated, and democratic, nation that shares a national identity and values.

Population of Malaysia

Currently, the total population of Malaysia is more than 28 million comprises of various ethnicities and religions [6]. To be more specific, some studies indicated that there are more than 200 ethnic groups present in this country. In West Malaysia (also known as Peninsular Malaysia), Orang Asli was the main indigenous ethnic groups while in East Malaysia (states of Sabah and Sarawak) there were several indigenous ethnic groups including Kadazan, Dusun, Bajau, Iban, Dayak, Bidayuh, Murut, Penan, and others [5]. As a whole, the major ethnic groups in Malaysia are Malays (51.3%), Chinese (30.6%), Indian (7.1%), and non-Malay indigenous people (11.0%) [6, 2]. Indigenous groups such as Orang Asli, Kadazan, Dusun, Bajau, Iban, Dayak, Bidayuh, Murut, Penan, and others were very small in percentage. Most of time, these indigenous groups are classified as “other ethnics,” in many researches about race or ethnic.

The Malays and non-Malay indigenous groups together make up the son-of-the-soil group or Bumiputera. In Malaysia, the Malays
culture lies at the core of the Malaysian identity. Despite of that, other ethnic cultures are recognized too. In this country, the official language is Malay language (Bahasa Melayu), while other languages such as English, Mandarin, Tamil, Arabic, and Punjabi are also frequently spoken. Also while the official religion is Islam, which is practiced by above 60% of the population, the rest of the population practices Christianity, Buddhism, Hinduism, and other religions freely. These types of diversities require a comprehensive approach for social integration so that all ethnic and indigenous groups can live harmoniously and peacefully. However, there is no smooth passage toward social and national integration when the country is geographically divided or isolated based on ethnicity. This situation will be explained more in the following subheading. To make the discussion simple, only indigenous group of Orang Asli will be elaborated.

Indigenous Population – Orang Asli

The indigenous group of Orang Asli which is located in Peninsular Malaysia is not a homogeneous ethnic minority. Orang Asli forms a heterogeneous community with unique differences in socio-cultural and cognitive-psychosocial for each ethnic [12]. The rationale behinds this is related to differences in the background of the Orang Asli community itself. There are three major ethnics in Orang Asli community, known as Senoi, Proto-Malay, and Negrito. Each ethnic has six different tribes. This makes the Orang Asli consists of 18 tribes in all [12]. Detail of each tribe is presented in the table 1.

Table 1: Orang Asli Tribes of Peninsular Malaysia

<table>
<thead>
<tr>
<th></th>
<th>Senoi</th>
<th>Malay-Proto</th>
<th>Negrito</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semai</td>
<td>Temuan</td>
<td>Kensiu</td>
<td></td>
</tr>
<tr>
<td>Temiar</td>
<td>Semelai</td>
<td>Kintak</td>
<td></td>
</tr>
<tr>
<td>Jahut</td>
<td>Jakun</td>
<td>Jahai</td>
<td></td>
</tr>
<tr>
<td>Che Wong</td>
<td>Kanaq</td>
<td>Lanoh</td>
<td></td>
</tr>
<tr>
<td>Mahmeri</td>
<td>Kuala</td>
<td>Mendriq</td>
<td></td>
</tr>
<tr>
<td>Semoq Beri</td>
<td>Seletar</td>
<td>Bateq</td>
<td></td>
</tr>
</tbody>
</table>

In Malaysia, since the British era, not much was done with the indigenous groups of Orang Asli. British colonial did not do anything for the development of this group. Not even giving them education. So what happen to this Orang Asli once the British left? Where were this minority indigenous group lived? Well, depending on their ethnicity, they lived in small groups scattered throughout the Peninsular Malaysia. They lived in a very poor state of life. There are a total of 852 villages of Orang Asli which can be classified into three groups: rural village, villages and settlements on the outskirts of the city [12]. These fractions are based on location, level of economic development, and modern infrastructure. See table 2 for categories of Orang Asli Village.

Table 2: Categories of Orang Asli Village

<table>
<thead>
<tr>
<th>Village Category</th>
<th>Freq</th>
<th>%</th>
<th>Criteria</th>
</tr>
</thead>
</table>
| Rural            | 327  | 38 | - Can be reached with earth roads, road trails or waterways.  
|                  |      |    | - Do not have access to clean water, no electricity for 24 hours, and have no other basic amenities.  
|                  |      |    | - Economic resources are not fixed. |
| Outskirts of village | 519  | 61 | - Near the Malay villages.  
|                  |      |    | - Can be reached by road premix.  
|                  |      |    | - Basic facilities, potable water, and 24-hour electricity.  
|                  |      |    | - Having a land development project and the economic resources that remain. |
| City             | 6    | 1 | - Having the complete facilities.  
|                  |      |    | - There is no land development project. |
| Total            | 852  | 100 | |

-
Since independence and until today, Orang Asli communities are still the minority, that is, largely still living in rural areas. At present there are a total of 36,658 head of household or families with a population of 178,197 Orang Asli. State of Pahang Orang Asli population represents the highest number of people that is 67,503 people, followed by the state of Perak with 53,299 people, as indicated in Table 3. Orang Asli population was found to have increased significantly, from 34,747 persons in 1947 to 178,197 people in 2010 with an average annual growth rate of 2.59 per cent [12].

Table 3: Total Population by Ethnic and State

<table>
<thead>
<tr>
<th>State</th>
<th>Senoi</th>
<th>Malay-Proto</th>
<th>Negrito</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pahang</td>
<td>29,439</td>
<td>37,142</td>
<td>925</td>
<td>67,506</td>
</tr>
<tr>
<td>Perak</td>
<td>50,281</td>
<td>605</td>
<td>2,413</td>
<td>53,299</td>
</tr>
<tr>
<td>Kedah</td>
<td>19</td>
<td>0</td>
<td>251</td>
<td>270</td>
</tr>
<tr>
<td>Selangor</td>
<td>5073</td>
<td>12,511</td>
<td>3</td>
<td>17,857</td>
</tr>
<tr>
<td>Kelantan</td>
<td>12,047</td>
<td>29</td>
<td>1,381</td>
<td>13,457</td>
</tr>
<tr>
<td>Terengganu</td>
<td>818</td>
<td>41</td>
<td>34</td>
<td>893</td>
</tr>
<tr>
<td>Negeri Sembian</td>
<td>916</td>
<td>10,435</td>
<td>0</td>
<td>10,531</td>
</tr>
<tr>
<td>Melaka</td>
<td>28</td>
<td>1,486</td>
<td>1</td>
<td>1,515</td>
</tr>
<tr>
<td>Johor</td>
<td>55</td>
<td>13,083</td>
<td>1</td>
<td>13,139</td>
</tr>
<tr>
<td>Total</td>
<td>97,856</td>
<td>75,332</td>
<td>5009</td>
<td>178,197</td>
</tr>
</tbody>
</table>

Obviously right from the beginning, the way these ethnic groups were located and lived did not allow natural integration to take place. The situation worsened when the school system was set up according to specific ethnic groups, particularly to the three major ethnic groups. This will be explained in greater detailed in the subsequent paragraph.

System of Education

Since Malaysia got its independence way back in 1957, there were three types of school system implemented in Malaysia. The school was built based on three major ethnic groups: Malays, Chinese, and Indian. At the primary school level, there were National Primary School, National-Type Chinese Primary School, and National-Type Tamil Primary School. Each of this school used ethnic language as language of instruction. The name of the schools probably changed several time, but the ethnic based school system remained. Where the other ethnic groups including the indigenous groups of Orang Asli were located? What types of schools did their children go? Only a handful of them get education at the National Primary School while the majority of them missed the opportunity to get even basic education. Due to locality and geography, they experienced huge difficulties to get education. During that time, they were not welcomed to enter National-Type Chinese School or National-Type Tamil School. These two types of schools were exclusive for the Chinese and Indian ethnic group students. Although their managed to reach schools about 50 percent did not complete their schooling [12]. That’s the scenario for primary school system.

The ethnic-based type of school system was permitted to continue for secondary education although with different portion. This time only limited ethnic-based secondary schools were allowed to be developed. Once again, where were the children of indigenous group of Orang Asli go for secondary education? What types of secondary schools did they go? The minority ethnic groups including indigenous groups of Orang Asli were asked to go to the National Secondary School. And again due to locality of their settlements only a few managed to reach secondary schools. Once again they were not welcomed in National-Type Chinese or Indian Secondary Schools. Again, nearly 30 percent of them did not complete their secondary education [12]. Hence, it can be concluded that ethnic polarization has started since the primary education and continues to secondary education.

Upon realized this syndrome of ethnic polarization, the government then has taken initiatives to rectify the problem. The measures taken include the introduction of new educational policies such as recognizing one national language and establishing a national school system. The government intends to use
education as one of its tools for fostering unity among diverse ethnic groups including Orang Asli. However, this policy stopped there, it did not involve tertiary education [11]. As a result, after more than four decades, ethnic relations among ethnic groups still remain polarized at almost all levels or sectors. A study found that after varied strategies employed, polarization is still an issue. The strategies used have not succeeded in fostering the level of unity [4]. In fact, there was claim that ethnic polarization is becoming more serious particularly among the new generation and young generation.

So the government has no other option for national or social integration other than higher education. Now tertiary education has to shoulder the burden of integrating the diverse ethnic groups including indigenous groups of Orang Asli. Can higher education in Malaysia play this role handsomely? Only time can tell.

Tertiary Education in Malaysia

During the colonial era, tertiary education in Malaysia mainly was limited to the certain elite groups of people, regardless of their ethnicities. Perhaps this statement was only applicable for the three major ethnic groups. Minority ethnic groups including indigenous groups particularly Orang Asli were not given any attention. Since independent until the year 1990, there was not a single Orang Asli graduated from any university. In fact, once again they were left out. Although the uniting factor at that time was that of class or social status and not that of ethnicities, the problem of polarization involving all the ethnic groups was rarely discussed.

When Malaysia gained independence, the policies and acts related to education and education system were mainly concerned with the school level, that is primary and secondary school [1]. In another word, the changes of education policies and acts did not affect the tertiary education. The main aim particularly the change of education policies was to promote national integration among the younger generation. The belief was that the integration must be initiated while the students are still in their primary and secondary schooling period [7]. It is also the belief that at this stage of schooling the country can have a better change of integration. It is also a belief that the integration at the very young age is much easier to occur. Unfortunately, this initiative was done by merely inculcating the relevant values into the primary and secondary school curriculum. Other efforts were too slow to be initiated. Eventually, they did not take place at all.

For higher education institutions, Malay language was used as medium of instruction only after 1980. This change of language of instruction from English language to Malay language can be regarded as an effort towards social and national integration [11]. Unfortunately, this policy change did not last for long. In fact, some researchers indicated that it lasts only for 12 years taking into consideration of the transition period. Thus, in 1996 as a result of the democratization of higher education, the policy of higher education particularly on the issue of medium of instruction once again change to allow the usage of English language as the medium of instruction at private universities. It is a kind of going back to early independence time with no intention for social or national integration. This situation continues until today.

At the undergraduate level of education, with regard to the general education curriculum, initially prior to 1990 there were no compulsory subjects aiming at social integration on university and college campuses. However, in late 1990’s some universities take the initiative to introduce new subjects related to social integration. This new subject is called the Islamic and Asian Civilization and is placed under the general studies curriculum. Unfortunately, this new subject, however, did not have specific goals for inter-ethnic or inter-racial integration. To make things complicated, each university has its own system and method of teaching this subject. There was no standardization or common curriculum for this subject. Thus, it is up to the university to
conduct its own policies and practices related to ethnic or social integration [6]. In majority of the public universities, this falls under the responsibility of the Student Affairs Department. Looking at this scenario, researchers suggest that this action implies that the higher learning institutions were hoped to continue the integration policies at the school level [3]. The service render, however, was very loose since there was no clear policy on this. What happens next? Many universities provided lips service for this effort. Unclear policy brings diverse effects. Lack of clarity regarding the policy on social integration leads universities to uncertain destination. Lack of clarity on the integration policy leads to no standard curriculum was developed that aims at promoting integration among different ethnicities. This leads to ethnic polarization continues at higher education institutions. Many researchers even go further by suggesting that the issues of ethnic polarization at the universities are partly due to the lack of clear policies on nation building at higher education level. For example, the Strategic Plan for Higher Education does not provide specific objectives towards this end. The issue of national integration was only mentioned briefly in the efforts towards transformation of higher education. There was no standalone national agenda related to social integration or inter-ethnic integration.

The above discussion shows that efforts towards unity among diverse ethnic groups have been promoted at the structural level. This situation raised many questions, particularly, the question of whether or not these noble intentions are evident in the everyday social reality of the university students [9]. Studies by local scholars indicate two opposing views. First, older studies indicated that ethnic polarization is widening between Malays and non-Malay students [8]. For example, a few studies found that about 80% of the respondents agree that they still have negative prejudices towards other ethnic groups. Though at the surface, relations between different ethnicities seem pleasant, university students found it difficult to spend time together for social activities including having meals and studying as a group. Many disagree to the idea of sharing accommodation as roommates. On the other side, the second view admits that ethnic polarization seem to exist, but it is getting less and less due to the shared norms related to contemporary life that focuses on individual needs for material gain, social status and connection. Many contended they have succeeded in overtaking the significance of political and ethnic differences. Additionally, researchers suggest that diverse student activities conducted on university campuses have successfully helped in creating awareness and increasing students’ motivation to interact with other ethnic groups [3]. How far the above claim is true? This will be explained further in the following study.

Research Study

The current study examines the level of social interaction among undergraduate students of diverse ethnic groups. The study focuses on university and college campus experience within a diverse educational setting. The focus of the study is on students’ perceptions and attitudes towards the integration process, interactions during inside and outside the lecture rooms, and the climate across different ethnic groups on campus. The study used the Campus Social Environment Survey as an instrument. The instrument was given randomly to the students. This research is an impetus to the development of a Social Behavior Index for higher education institution. The instrument was designed to measure the degree of social integration among students of different ethnic groups on a university campus. The ultimate goal of the index is to gauge ethnic diversity on campuses. The instrument comprised 34 Likert scale items to identify the students’ perceptions and attitudes regarding inter-ethnic and inter-racial integration among undergraduates. The instrument uses a 4-point scale from 4(strongly agree) to 1 (strongly disagree).

In this study, four dimensions of constructs were selected to quantify “unity”. The constructs
selected were accommodation, acculturation, assimilation, and amalgamation. The four dimensions stated are defined as follows:

Accommodation - This is the first stage towards integration. In this stage, individuals and groups, though aware of each other’s values and norms, make the necessary adjustments to social situations to prevent or reduce conflict in order to carry on together in their varied life activities.

Acculturation – This stage is an adaptation process by which a group requires, retains and relinquishes distinctive characteristics of its culture or traits to conform to those of the dominant group.

Assimilation -This stage is a merger of behaviors and values through social integration that can lead to greater homogeneity in society. This is the stage where a process of boundary reduction occurs where groups incorporating elements of the dominant group’s culture and traits while still maintaining their own distinctive ethnic and cultural identities.

Amalgamation -This is the highest level of integration. This stage is often viewed as an indicator that social distance between groups is fading and ethnicity is becoming less noticeable.

This study involved a total of 1043 first and final year students from four public universities. The students randomly selected to complete the questionnaire were from the departments of sciences and social sciences. At that time that there were very few students from indigenous groups studied engineering or even technical education. Additionally, it is very difficult to get hold of these students and to ask them to answer the questionnaire. Of the 1043 students participated in this study, 19.1 percent were male and 80.9% were female. In term of ethnic group, 70.9 percent were Malays, 13.5 percent were Chinese, 3.5 percent were Indian, and other ethnic groups including indigenous groups of Orang Asli amounted to 12.2 percent. The profile of the participants is listed below in table 4.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Number (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malay</td>
<td>740</td>
<td>70.0</td>
</tr>
<tr>
<td>Chinese</td>
<td>141</td>
<td>13.5</td>
</tr>
<tr>
<td>Indian</td>
<td>37</td>
<td>3.5</td>
</tr>
<tr>
<td>Others</td>
<td>125</td>
<td>12.1</td>
</tr>
<tr>
<td>Total</td>
<td>1043</td>
<td>100</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>199</td>
<td>19.1</td>
</tr>
<tr>
<td>Female</td>
<td>844</td>
<td>80.9</td>
</tr>
<tr>
<td>Year of Study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Year</td>
<td>935</td>
<td>89.6</td>
</tr>
<tr>
<td>Final Year</td>
<td>108</td>
<td>10.4</td>
</tr>
</tbody>
</table>

Overall, all ethnic group students are performing moderately on the four dimensions of social integration. This result indicates that many initiatives must be taken to strengthen social integration among university students. Based on study, the Department of Orang Asli Affairs (JHEOA) signed a memorandum of understanding (MoU) and memorandum of agreement (MoA) to collaborate with universities in strengthening the presence of Orang Asli on campus.

Table 5: Dimensions, Overall Means and Standard Deviations of Social Integration

<table>
<thead>
<tr>
<th>No</th>
<th>Dimension</th>
<th>Overall Means</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Accommodation (9 items)</td>
<td>2.76</td>
<td>0.30</td>
</tr>
<tr>
<td>2</td>
<td>Acculturation (9 items)</td>
<td>2.64</td>
<td>0.29</td>
</tr>
<tr>
<td>3</td>
<td>Assimilation (11 items)</td>
<td>2.89</td>
<td>0.27</td>
</tr>
<tr>
<td>4</td>
<td>Amalgamation (5 items)</td>
<td>2.90</td>
<td>0.40</td>
</tr>
</tbody>
</table>
Government Initiatives

In addition to MoU and MoA, the Ministry of Rural and Regional Development and the Department of Orang Asli Affairs, has taken various initiatives towards transforming communities of Orang Asli in line with other public goal of Vision 2020. The initiatives taken include the introduction and implementation of government policies such as 1Malaysia, New Economic Model Program (NEM), Economic Transformation Program (ETP) and the Tenth Malaysia Plan (10MP). These policies take into account the involvement of Orang Asli directly towards achieving the objectives of Malaysia as a developed country by 2020 [12].

In fact, Orang Asli communities, through their representatives demanded that change to take place immediately to ensure the rights and the needs of their future are secured. Based on this request, a plan called Strategic Plan for Orang Asli Development (PSKO) was designed to implement the vision of JHEOA organization that serves as the essential driving force in the development of indigenous peoples that is comparable to other communities. All parties, including higher education institutions, were requested to take part to materialize the mission of JHEOA by implementing inclusive development so as to enhance the socio-economic status and quality of life as well as the advancement of the legacy of Orang Asli [12]. Universities were requested to play their roles in various capacities. Three universities namely the National University of Malaysia (UKM), University Malaya, and University Science Malaysia were requested to take the lead in different capacities while other universities contribute to this initiative in a smaller scale.

With the assistance of JHEOA, Focus Group of Education which comprises faculty members from various universities was formed to discuss educational issues of Orang Asli. One of the suggestions by the Focus Group of Education is to increase the enrollment of Orang Asli on campus. As of December 31, 2010 a total of 880 Orang Asli students have successfully completed their studies in higher education institutions in the country [12]. Most of these students received assistance from the JHEOA since their primary and secondary school level. To produce this number of graduates of Orang Asli is not easy. Their presence on college and university campus poses challenges and raises many unintended issues not only to themselves but also to faculty members, residential college administrators, and other ethnic groups.

Almost all students of Orang Asli were the first child of the family entering college or universities. They lack of role models to lead them on ways to succeed on campus. They have limited social skills; hence, many of them experience difficulties to socialize with other students from other ethnic groups. The financial assistance that they received from JHEOA, although in one part helps them to finance their studies; it also makes others see them as receiving special treatment from the universities. Many students questioned this privilege. Additionally, students from other ethnics particularly the three major ethnic groups have no interest to mingle around with them. Thus, natural social integration is hard to materialize on campus. This forces many universities to explore and use institutionalized and non-institutionalized initiatives or programs to ensure that integration occurred. Examples of programs or activities for the initiatives will be discussed in the following examples.

a) Transformation of Higher Education

The ministry has initiated the transformation of higher education plan, that is, geared towards strengthening the country and the people so as to develop a society that holds the values of democratic, justice, progressive, respect for diversity, integrity and harmony, in facing future challenges. To ensure that all ethnic groups including indigenous people Orang Asli be part of the transformation, the inclusive plan was developed to put more focused on several areas, that is, widening access and increasing equity, improving the quality of teaching and learning, strengthening...
research and innovation, cultivating life-long learning and strengthening the delivery system of higher education.

b) Research Fund for Social Integration

The field of ethnic relations and social integration becomes one of the most important research focuses in Malaysia. As a result, more studies on diverse dimensions of ethnic relations and national integration are conducted particularly by lecturers and postgraduate students from University of Malaya, National University of Malaysia, and International Islamic University. Focus of the research includes (1) ethnic relations for important component for social and country development; and (2) ritual, language, culture, life style, or behavior of Orang Asli. Studies conducted are able to produce diverse yet interesting and important themes regarding ethnic relations and national integration. Among others include religious tolerance, inter-racial integration, and etc.

b) New Academic Courses

Universities are asked to introduce new courses focusing on learning and understanding different culture. The courses emphasize on the inculcating the feeling of appreciation and understanding among students toward different culture and civilization around them. The purpose of the course is to strengthen the relationship problems among ethnic groups. This new course provides exposure to the concept of ethnic relations and students are given opportunities to carry out their activities together to enable deep understanding on how diverse ethnic societies can work together and interact. Example of courses includes Ethnic Relation, Islamic civilization, Asia Civilization, Malaysian Culture and Society, and Islamic Hadhari.

c) New Policies for on Campus Activities

At the residential colleges, universities have developed the following new policies to enhance social integration among students.

- Not allowing students to initiate or register on campus any student club or society based on a single ethnic group.
- Providing financial incentive to students to organize multi-ethnics events. To secure this incentive, the students have to provide some evidence indicating that they are representatives of multi-ethnic groups.
- Offering a special reduce-rate rent for students who share accommodation with students of different ethnic groups.
- Offering multi-ethnic group student societies various facilities and financial assistance to run social programs and activities.
- Organizing multi-ethnic cultural events on campus such as traditional dress day where students from different ethnic groups are asked to change dress and food
- Organizing singing competition for non-indigenous participants while the awards are presented by the representatives of the indigenous group.
- Appointing residential college committee members from diverse ethnic groups. The participants for the committee members must be supported by various ethnic groups including indigenous Orang Asli.
- Using national language for running all on campus student activities.

At the faculty level, universities have initiated the following initiatives:

- Appointing specific academicians who know the students’ culture background as academic advisors. These academic advisors or also known as faculty advisors must monitor closely the indigenous students’ academic performance, personal development, and career development.
- Providing small amount of allocation to the academic advisors to conduct activities tailored to the need of indigenous students.
- Setting up extra tutoring and coaching for indigenous students
- Encouraging academicians to provide group assignments where group members must be from different ethnic groups
- Organizing service-learning to indigenous students place of residence

Conclusion

This paper discusses the development of higher education in Malaysia from an ethnic relations perspective. The paper concluded that today’s ethnic relation at local universities is
very much a result of the history and development of the education policies as a whole. The objectives of promoting ethnic and national integration have always been central to these policies. The earlier effort of social and national integration that was mainly focused at the school level has now extended to the tertiary level. The effort in promoting unity through education has now reached the higher education and not only concentrated in the school level is a sign that the process of ethnic relations in the Malaysian education system is moving forward towards a new height.

It is noted the resolutions to ensure that the efforts to foster social and national unity be enhanced in higher learning institutions. This is done through various ways. One of the ways is through the introduction of courses that focus on intercultural and intra-cultural studies. These courses are made compulsory for all students and the teaching and learning of these courses are implemented through discussion and participation of all students. Additionally, the students are required to carry out community work and activities and this will be counted in their credit hours. Besides having compulsory courses in the university curricula, co-curricular activities at the faculties and residential colleges are identified as potential sites where inter-ethnic understanding and relationship can be fostered.

REFERENCES


STUDENT CAPACITY OF ETHNIC MINORITIES: BASIC PREMISE FOR QUALITY ASSURANCE OF HUMAN RESOURCES DEVELOPMENT FOR SUSTAINABLE DEVELOPMENT IN ETHNIC MINORITIES

Presented by: Assoc. Prof. Phạm Hồng Quang
Thai Nguyen University of Education

ABSTRACT

This article refers to the tendency of competency development (including comparison in the experience of Vietnam and Japan). This is an important and dominant trend, ensuring the development of human resource for sustainable development. The major approach to achieve this goal is to innovate the teaching methodology in the light of modern theory. Ethnic minority students, though in difficult situations, are fully capable of obtaining new ways of teaching. Further studies which should be carried out include the preservation and development of minorities’ languages, living environment development and the establishment of flexible education system in the regions of minority groups, and division of vocational training to ethnic minority students.

1. Rationale

Sustainable development refers to the preparation of quality human resources. According to UNDP, the concept of human development includes “human nature development and human capabilities; effective use of their abilities”. From this concept, it can be further explained that the position and role of education are very important in the human development, considering the effective use of their potentials as an educational outcome. In the innovation of basic education and training, the concept comes from the capacity range goals of curriculum content and assessment, hence, we can conclude that human capabilities are the outcome of education system. A person is considered qualified if he or she has the ability to solve challenging practical problems. Therefore, the capacity concept used in schools today is understood as the sum of the individual properties of the people in meeting the requirements of the educational process and ensuring that the activities will be able to achieve high results. For ethnic minority students, shaping their capacity for education through the school system is an important work to contribute for sustainable development. After nearly 10 years of partnership with the Japanese Ryukyu University, College of Education (TNU) had more educational experience in ethnic minority areas. Below is the cooperation results between the two schools, based on empirical research on teaching (including teaching Vietnamese) ethnic minority areas in Vietnam (Thuong Nung, Cuc Duong Primary School, Vo Nhai district, Thai Nguyen province). This shows a good experience for students to develop capacity in areas with special difficulties.

2. Cooperation results were achieved as follows

2.1. Meaning of liberal educational research program

The professors of the University of Ryukyus in Okinawa gave the ideas of conducting research on education for ethnic minorities through comparison method between 02 regions of Vietnam and Japan. This is a work of deep humanity. Its humanism is reflected in the following aspects

i) The object of the research program is directed to human-ethnic minority children in Vietnam who are considered disadvantaged or of difficult living conditions, traffic barriers, low production levels, have less opportunity to network, especially the ability to continue learning, including minority children living in low proportion on educational development problem areas, especially those under the care of Vietnamese government and had special interest in applying policies and development priorities. Therefore, this research program could help Vietnam to have more experience in policy
making (especially for education policy) for ethnic minorities;

ii) Results of research on educational activities on the subject of ethnic minorities could help the Vietnam government to have confirm more scientific data, namely: the skill levels of the ethnic minorities students who have full access to the new education; the level of intelligence and good nature to participate in educational equality compared to the Kinh and other ethnic groups;

iii) The results of the study have created confidence among learners – this is an important result of human educational strategies. When learners have faith in themselves, it will help them to have a positive academic motivation, and enthusiasm because they are respected and encouraged throughout the course as well as participation in public life;

iv) Equalities between teachers (foreign education experts) and students (students from ethnic minorities) through active communication are important for children in ethnic minorities who have lesser opportunities to participate in new communication relations.

2.2. The implication of science education theory

The results of this research program have enriched the theory of education. Especially in Vietnam in the last 20 years, it had focused on the “student-centered learning”. In fact, this perspective on educational approach has significant improvement in terms of active learning which is the core school activity. This asserts the perception and inherent human action, requirements, and goals of education which is different from the traditional method, the teacher-centered method. However, the role of teachers was overlooked during the recent years in Vietnam. They misunderstood that the student-centered method means passing the responsibility of learning to students. To understand the true essence of student-centered learning, it means “Teaching by giving more learning activities to learners” so that all forms, work from of the school system must focus on human development “ giving more self-study as a basic form of education…”(Hồ Chí Minh); in the development of human personality, “self-activity of the individual is directly a decisive factor” [4]. At the same time, the preparation of teachers must also be more positive and creative.

Through the teaching hours at primary school in Cuc Duong, Thuong Nung (Vo Nhai district, Thai Nguyen Province) and Department of Primary Education, College of Education, Thai Nguyen University, findings show that:

i) The preparation of teachers (the Japanese) is very careful that requires a lot of intellectual investment for the lesson preparation; the best part here is that the idea of teaching materials and tools is very simple, easy to find and easy to make.

ii) In teaching activities, teachers are paying attention to preparation (in various forms, plans…) which removed obstacles between teachers and learners; issues raised by the teaching situations (questions, problems, simulation…) that created an active participation among learners even from the beginning.

iii) The participation of students in lessons takes place spontaneously and actively as it is the duty of learners and they become very excited learners.

Active teaching method to students who are the center of the learning process has been demonstrated through lectures by professors and students from Department of Education, University of Ryukyu. After the teaching demonstration, we had a better understanding on how to implement the educational theory from the lectures. In this situation, it is the first time that learners (ethnic minority students) are exposed to foreigners, so due to language barrier and differences in culture, the learners were shy to communicate with the foreigners but after a series of closeness and openness in communication, they become active and excited communicators. When observing lecturing hours by Japanese professors, we do not see the gap between teacher and student that is very common in Vietnam, we only see the special attention from teacher to students, teacher is just
a facilitator in class but performs very clearly in terms of lesson preparation for educational activities.

One more aspect of educational theory has been proven about the program and teaching content. When approaching lectures, the Japanese experts have clarified the concept of "development program" which is still facing many obstacles to Vietnam, from teacher’s perception to action. In the lecture in Vietnam, the Japanese professor has prepared a lesson plan not just "precast molds". Especially local knowledge (which is very rich in ethnic minority areas) which the faculty has fully exploited. The lectures provided to learners have great appeal for students perhaps because they realize the value, the content of their life within the school premises which was put into actual life experiences. In Vietnam, teachers are familiar with the old teaching methodology: compliance and re-read and copy ... now it has a better insight about the position and role of the teacher to major changes. New scheme for the textbook program after 2015, Vietnam's Ministry of Education and Training is developing in this direction. Core competencies of teachers must have the capacity - development program of teachers’ basic skills that need to be formed in the lectures in Vietnam, the Japanese experts teaching has contributed to the formation of new knowledge, new insights that are positive for Vietnam teachers.

The ability to integrate the teaching hours is very high. One subject, for example, "The sun and the mountain people" has been integrated in teaching geography, history, anthropology, cultural expression ... in dynamic and attractive lessons. This is the new project of innovative programs in Vietnam after 2015. Through this lesson, the Vietnamese teachers have realized their own ability. Creative ability of students must be exploited considering the fact that student learning capabilities of ethnic minority are very good.

2.3. Meaning of innovative educational methods and forms of education

The results of the research program are highlighted in the most formal method of teaching institutions, in class, outside of class, education and teaching, a strong impact on pedagogical university faculty, staff management schools and teachers and students, and parents. Through the lectures of Japanese teachers and school mobilization, classes, schools in Japan have shown remarkable results as follows:

i) The manner of teaching (methods, techniques, forms, patterns, how to evaluate ...) are based on the scientific basis for certain pedagogical theory;

ii) The innovation of learning on how it works is not too difficult for teachers, if there is a determination, responsibility and the encouragement from managers;

iii) Respect for students is the highest principles in innovative teaching methods;

iv) Not too complex educational situations but not trivialize the academic content, pedagogical ideas have any insights and flexibility and lessons must be very well prepared for many aspects.

We can say that creating confidence for the teachers’ new potentials for their teaching method is what the Japanese experts did. This result has been the primary concern of teachers in the schools. This core element makes the sustainable development of teacher capacity. Even in areas with special difficulties, the opportunity was not all, the self-creation of teaching reform proposals in place by force, from readily available materials, conditions and circumstances that will surely improve the quality of education.

3. Difficulties encountered by ethnic minority students in studying in mountainous regions

To achieve sustainable development of the ethnic minorities, the following challenges need to be overcome:

First, the personality problems of students are shaped by the following factors: the influence of genetic-biological factor (vital
platform), impact of education (mainstream), influence of the environment (decision), and the influence of autonomous individuals (direct decision). Thus, in the “conventional education system”, it is embodied in promoting the advantages of genetic factors, environmental factors to educate and shape the limitations of the learners, exerting for individual resistance to the negative effects of environment, which provides prime importance to the active role of individuals. Education triggers that available capacity of learners. For students from ethnic minorities in Vietnam, they have the full and complete ability to develop quality learning. The academic abilities and educational attainment of the adult education system of Vietnam have proven that. The core issue of education in areas with a high ethnic minority population is built and developed the environment which is an important determinant for the formation of personality. Education cannot stand separately from environmental factors because location is a key that can only be successfully integrated to human factors and educational environment. In regard to this situation, the best policy for the education of ethnic minorities is not only focused on the priority score in creating the best conditions of living environment for themselves, but the attitude of respect and enhanced capacity of learners, thus, we shall be fully capable of building a progressive education in more difficult areas.

Second, there is emerging conflict between the need to preserve cultural, personal development and community development. Preserving cultural identity must be associated with the preservation and development of ethnic languages, but emerging demand for learning Vietnamese (Kinh language) to learn more, to grow more than learning the mother tongue [5]. Not only is the demand for ethnic minority students, but the students themselves, including the family and community, also face a conflict between conservation elements with factors need to develop. Thus, there is a need to study and implement the issue on bilingual education.

Third, multicultural country needs a flexible education system that stems from the needs of local communities with specific policies. The focus of multicultural education is the education model to create community identity in language, culture in the context of regional integration and internationalization.

Thus, there are many issues related to human resource development-factors in ensuring sustainable development in ethnic minority areas in Vietnam that needs to be continuously dealt to: the ability to further study or make use of local vocational training, relationship between language preservation (mother tongue) with Vietnamese language, national education programs and local programs, and particularly basic environment conditions in determining the formation of power of human qualities.
MAKING TOURISM PRODUCTS FROM CULTURAL HERITAGES OF DAO PEOPLE IN SA PA

Dr. Tran Huu Son
Department of Culture, Sports and Tourism in Lao Cai

In highland areas, Dao People in Sa Pa, Lao Cai Province, Vietnam are making their rich culture to become attractive tourist productions. In order to understand their experiences and lessons from this model, information about the process of building cultural heritages as tourist productions will be collected. In addition, the relationship between the exploitation of natural resources for tourism and the conservation of traditional culture and building a sustainable approach for tourism development should be taken into account.

1. Before dealing with specific theoretical points, we need to identify some basic definition such as “cultural heritage”, “tourism product”.

Cultural heritage includes spiritual, intangible, and material things which have historical values and are preserved from generations to generations of Dao People in form of memory, writing documents, oral stories, carrier orientation, art performance, etc. It is both tangible and intangible heritages. The formal includes historical and cultural locations, tourist attractions, traditional and national assets, and tangible objects in Dao people’s communities. Intangible heritages include language, Nom Dao writing, literature art, customs, festival, secrets in craft making.

Tourism products include all services, goods provided for tourists in order to satisfy their demands. Tourism products in Dao people villages are community houses, means of transportation, cuisine, tourist attractions, (architecture, terrace fields, worship forest, etc), art performances, traditional games, handicrafts, and home-remedy shower services.

2. Dao people in Sa Pa, Lao Cai Province, are the Red Dao, belonging to Kiem Mien language. There are more than 10,000 people settling in 41 villages in Ban Khoang, Ta Phin, Trung Chai, Ta Van, Thanh Kim, Ban Phung, Ban Ho, Thanh Phu, Nam Sai, Nam Cang, Suoi Thau, Su Phan communes. Sa Pa district is one of the most famous tourist attractions in mountainous areas of Vietnam. Every year, nearly 50,000 tourists come to visit this place, in which 25,000 people are from foreign countries with 85 different nationalities. Dao people are centered at four travel routes for tourism of the district including Sa Pa-Ta Phin, Sa Pa-Ta Van-Ban Den-Suoi Thau and Sa Pa-Ban Khoang – Ta Giang Phinh. They settle in an important tourist attraction, and a number of villages become attractive tourist spots from which they benefit and strengthen their advantages of natural resources to create tourism products.

The region where Dao people reside is at the altitude of 1000-1600m, close to Hoang Lien national forest. It is the place of biodiversity with hundreds of animals and plants, in which many of them are endemic. The villages are mostly close to streams or waterfalls and are surrounded by systems of forests, caves and terrace fields. The combination of these factors has been creating attractive natural resources for tourism in highland areas.

Tourists are much more impressed when the natural resources for tourism are collaborated with human culture which is defined as worship system, special customs and rituals such as “put tong” festival, nominated rituals, Ban Vuong ritual, wedding, new house celebration, and art performances such as folksongs and dancing. Especially, Dao people in Sa Pa maintain and develop famous handicraft careers in terms of silver carve, textile, and woodwork.

Meanwhile, there is a high demand of visiting villages of Dao people and their
relatives in the areas. In 2004, 500 visitors from European countries were surveyed by a group of researchers from Bocdo University in France. According to the survey, about 72-80 percent of tourists would like to pay a visit to villages. In 2007, the number kept increasing to 87% out of the total international visitors. This has made villages of Dao people become an extremely attractive spot. To be more specific, Ban Ho village attracted 12000 international tourists in 2007. Ta Phin commune where the majority of Dao people reside was the choice of nearly 15000 people. Ta Van, Nam Cang, Suoi Thau were also visited by 2000-4000 people per year. Therefore, the number of poor households who successfully overcome poverty is about twice or three times as many as in other places. Tourism contributed to 10-40% income of Dao people. In order to achieve this amazing result, Dao people in Sa Pa have been building a program to make cultural heritages to be tourism products.

3. Creating tourism products from cultural heritages program of Dao people:

3.1 Research on the demands of visitors.

One of the advantages of Dao people in Sa Pa is that this district belongs to the national tourist attraction, and the number of visitors to villages is very high. However, in order to develop tourism products from cultural heritages of Dao people, they need to conduct a survey on the demands of visitors. In early years of XXI century, given the support of some non-government organizations, and Culture, sports and tourism Department, Lao Cai conducted research on international visitors’ demands in collaboration with local people. According to the research”

- 90% visitors liked work with tourist guide who were native Dao or Hmong people.

- 71% visitors demanded to be accommodated with the communities of Dao people in their village. Especially, in some places where they had to travel about 10-20 km from the district, the demand was very high.

- 81% visitors wanted to take part in daily activities of local people such as making textile, cooking, and producing home-remedies.

- 83% of them liked to buy souvenirs right at the producing places and households.

3.2. From the research, the department of culture, sports and tourism in Lao Cai and the local government collaborated with advisers to build a model of community tourism. The first model was implemented at Den Hamlet, Ban Ho commune (from 2001-2005) In recent years, this model has been studied and applied at Sa Xeng hamlet, Ta Thin commune, Nam Cang hamlet, Nam Cang commune. In this model, the role of Dao people was always emphasized. They had to be the participatory factors taking part in and benefiting from tourism activities. Government firms shared benefits with the community of Dao people in form of community service system such as homestaying, selling handicrafts, and providing services for staying and travelling. Community tourism is a combination of four elements: visitors, local firms providing services, local people and local government.

These four elements bear a very close relationship. When visitors want to have their demands satisfied, it is necessary to contact with providing firms. The participation of local people and allowance of local government play an essential role in management and orientation. When local people want to benefit from a system of services, they are required to establish a representative committee. The function of this committee is to mange services for accommodation, food and daily activities.

Especially, it has the rights to agree on the price to avoid difficulties generated from enterprises for their own interest. In the past, enterprises took visitors to Dao people’s villages without paying for the local people, even buying any of their products. Meanwhile the true owner of natural resources for tourism did not benefit. Enterprises from Hanoi, Sa Pa Town, got much money. This inequality caused a conflict among local people, enterprises and visitors. Visitors were not allowed to take photo, if they really
wanted, they had to pay for local people, and the situation of inviting visitors to buy products with insistence really annoyed them. However, since the community model was designed and implemented, the above mentioned issues decreased quickly, especially in Nam Cang and Ban Ho Communes. On the other hand, community was supported financially from the bank and the investments for commercializing their products.

3.3 From the model, Dao people in Sa Pa have been developing their advantages of cultural heritages in order to make tourism products.

3.3.1 Dao People promoted traditional handicraft:

Traditional handicrafts such as textile, shaping, and woodwork with high cultural values are very popular in Dao people. However, this beauty is only one part to support mainly for agriculture. Products of these activities had been self-sufficiency for families rather than an area of interest. Nevertheless, since tourism was promoted, Dao people in Sa Pa selected some typical careers for investments so as to provide products for visitors, and textile was an example. Woman association in Ta Phin, Suoi Thau, Nam Cang communes found clubs for textile producing which attracts the participation of 300 members. There are 100 members in the club of Nam Cang commune. These clubs are advised and supported by non-government organizations on the product design, and product consumption. Local government also supports for grants, organizes free classes for local people. Therefore, each member taking part in making tourism products can earn money and has high income. The average income is from 300,000 – 500,000VND per month. Some women including Ms. Ly May Chan, Ly Ta Dung, Ly May Pham, Chao May Coi earn from 4-7 millions VND per year. Those whose take part in both producing and selling earn from 1-2 millions. This data shows a very high income of Dao people in Sa Pa.

The principles in making handicrafts as well as textile need to ensure maintaining and developing traditional cultural heritage. In their own art of textile, Dao women preserve some unique traditions with their own imprints. The popular patterns in textile are pine trees, magician, and lamp shape in the nominated ritual, and dog footprints. Also, the preserve a strict combination of color with for main colors: yellow, black, red, and white. They always emphasize the contrast of some colors such as red goes with white, yellow goes with white and white goes with black. This method contributes to make suing pattern more colorful, and attractive. However, the diversity in textile products really impresses visitors.

Similarly, in silver carving, Dao people make various things such as rings, bracelets, silver chains, souvenirs made from silver. It is the traditional patterns that appear on those products. Additionally, in some places, products are made from original or genius silver rather than the one which is combined with aluminum or alloys.

In the past, Dao people in Ta Phin and Nam Cang Sa Pa produced drums, or water containers from woodwork. Nevertheless, those products are mainly for daily activities of families. Nowadays, understanding visitors’ the demands for these products, Mr. Ly Phu Kinh in Ta Phin establishes a club of making drums and woodwork. Basing on visitors’ requests, the club has been making different types of drums such as small drums as souvenirs, bigger drums for decorations in restaurants, or hotels. And their products really gains reputation in the market and are sold at many stores in Lao Cai city, Sa Pa district or even in Hanoi capital or Ha Long city.

The average numbers of drum made every month are from 20-40 which contributes 1.5-2 millions VND to their monthly income.

In general, handicraft career of Dao people for visitors in Sa Pa has been restored and developed. Thanks to tourism, their works become not only products for daily activities but
also for tourism. However, the following principles need ensuring:

- Craft products inherit traditional techniques, patterns and art principles. Especially, many products contribute to reflect cultural identity of Dao people via using patterns.
- The products are made by hands instead of machines.
- The products are diversified in patterns, origins so as to meet customers’ demands.
- Craft products are easy to handle or carry.

3.3.2 Stimulating the service of bathing with leaves

In the past, Dao people were very experienced in traditional remedies, and using herbs to treat serious diseases in communities. Dao women were experts in medicine and became famous physicians. In everyday life of Dao people, they bathed with herb leaves to ensure the health of family members. However, in order to meet visitors’ demands nowadays, Dao people open and promote services of herb leaves bathing. In Sa Xeng hamlet, Ta Phin commune, there are 11 households running this business. There are also some in Nam Tong, Nam Cang, Giang Ta Chai hamlets. This special service contributes 500-2 millions VND into family monthly income.

3.3.3 Making homestay service from living houses

Traditional house patterns of Dao people are very small without many sanitation facilities. However, because of the demands of staying at the village, many households modify their house for homestay services. In 2005, in Ta Phin commune, there were 2 households ran this services, but now, the number increased to 11. In Nam Cang, Ban Ho, Nam Dai, many families are building their houses for this service. However, the traditional structures are kept. One or two compartments are added so that visitors staying there will not interrupt family activities. Rooms for homestay are designed like reasonable hostel with closet, tables, chairs, televisions, and sanitation facilities inside.

However, the materials for building homestay are traditional including wood, bamboo rather than modern ones such as concrete, bricks, or tiles. Therefore, Dao people still keep their traditional structure in house building as well as facilitate visitors. As a result, the number of visitors, those who want to use homestay service increases rapidly. In 2005, only about 200 visitors would like to use this service in Ta Phin, but in 2008, the number increased to 515, and in 2009, 1187 visitors used homestay services in 11 households in Sa Xeng hamlet. Since located far from the district center, Nam Cang, Ban Ho, and Giang Ta Chai more and more attracts visitor using the service, from 300-500 people.

Together with the above mentioned services, Dao people in Sa Pa combine their traditional heritages to create many products. Some hamlets of Dao people chosen as places of tourism have formed groups of art performers in order to build art performances from their own identities. Art performance teams in Ta Phin commune perform bell dancing, sword dancing, and lamp dancing in “put tong” festivals so as to meet visitors’ demands.

Moreover, Dao people in Sa Pa use “pi le” trumpets for such activities and occasions as marriage, inviting people to sing.

3.4 The principles of creating tourism products from cultural heritages:

From the reality of applying the model of community tourism and creating tourism products from cultural products of Dao people in Sa Pa, some principles are drew:

Emphasize the role of community: The owner of the tourist attractions have to be communities of Dao people. Enterprises who want to sell products in these areas need to take sharing benefits to the community into consideration. This is a crucial element that leads to success or failure of community tourism model in Sa Pa. Only when Dao people have equal income, and are beneficiaries from income sources generated from tourism products can
tourism services of Dao people exist and develop. In many cases, the tourist attractions are destroyed because of the ignorance towards the benefits of Dao people. In contrast, the more their benefits are emphasized, the more people come to visit that place. This principle requires a strict management of local government by setting up specific regulations for enterprises in sharing benefits with local people.

The role of Dao people communities in tourist attractions

- Developing community tourism in the areas of Dao people sustainably. Not only short term but also long term benefits for the next generations should be taken into consideration. This issue relates to planning, making policies for tourism as well as environmental issues. Especially, the conservation of traditional values to produce tourism items requires the following principles:

  + Tourism products imbue with traditions of Dao people community. The traditional elements contribute to create the uniqueness, attractiveness of Dao people’s products. The lessons are learnt from the process of developing textile and handicrafts of Dao people in Sa Pa. By the end of 1990s, Dao people in Sa Pa produced souvenirs, and brocade following the patterns that customers required. As a result, their products were like those of Con Minh, Laos, or Thai Lan. There was no uniqueness of their own implied in the products, so they were refused strongly by visitors. From the beginning of nineteen century, with advice and suggestions from scientists and non-government organizations, Dao people inherited their traditions and displayed them on their products and made them unique. Since then, not only did they sell their products for visitors coming to Sa Pa but also export to America, Europe, and big market center in Vietnam including Hanoi, Ha Long, Hue and Ho Chi Minh city.

  + Art performances, ritual performances, and cultural activities of Dao people need to reflect the objectiveness, realness in cultural traditions of Dao people. Moreover, fake products to attract customers mustn’t be allowed to exist. The reason is that in some other tourist places, fake wedding, festivals or even worship rituals are conducted to attract customers. At first, these fake performances did impress those who came to visit. However, visitors then came to realize that these performances were fake, and they refused them. Therefore, Sa Pa is determined to say no to fake wedding, “put tong” festival, or worship rituals to impress customers. Dao people survey and keep visitors informed of their festivals, social activities, and rituals in a year so that they can come and witness the real performances.

  + It is not the purpose of community tourism model of Dao people in Sa Pa to attract so many customers that they are overloaded. The managing staff collaborate with travel agencies to organize an average number of visitors from 10000-30000 a year. As a result, environment protection and cultural conservation are ensured.

In general, there exists close relation between the conservation of cultural heritage and development of tourism.

- Sustainable development of tourism requires the conservation of traditional beauties because they are not only resources but also a source of tourism products. Any tourist attractions will be refused by visitors if the soul which is traditional beauties is lost. However, in order to preserve and develop cultural identity, we need a policy system such as respect the freedom of religion, honor handicraft artists and tourism products, training and maintaining cultural identity from generations to generations (particularly, combining the practicing of folksongs, dancing and traditional games into extra-curriculum activities at school)

- Developing tourism contribute to increase family income, and awake their awareness of the role of cultural identity in creating tourism products. Therefore, the development of tourism indirectly contributes to preserve traditional cultural values. Local people in general and the young in particular are very proud of their cultural beauties. As a result, they continue to
develop handicraft making career, home-remedy making and some worship rituals which are faded once. Even, when working with customers, they wear their traditional clothes.

Conclusion

Villages of Dao people in Sa Pa are becoming a good example of community tourism. This model has been attracting a great number of visitors to Sa Pa, contributing to the process of poverty reduction and improvement local people’s living standard. This result is obtained thanks to Dao people efforts in building a model of tourism for community with the collaboration of four elements. The government directs and enacts policies in managing the development of tourism. Local people take part in managing, preserving cultural beauties as well as benefit from them. Local firms and non-government organizations promote advertising and inviting visitors. Advisers, especially non-government organization give instant advice and feedback to local people and propose solutions to problems related to preserving and stimulating cultural identity. Additionally, traditional materials in making tourism products and practicing cultural heritages at the community sustainably are emphasized. Cultural identity has been an important source for developing community tourism, and the more tourism is promoted, the more people understand about the role of preserving and developing their own traditional cultural identity.

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DO THE POOREST ETHNIC MINORITIES BENEFIT FROM A LARGE-SCALE POVERTY REDUCTION PROGRAM? EVIDENCE FROM VIETNAM

Phung Duc Tung
Daniel Westbrook
Nguyen Viet Cuong

ABSTRACT

To increase the opportunities for poor ethnic minorities to benefit from economic growth the government of Vietnam implemented a program entitled ‘Socio-economic Development for the Communes Facing Greatest Hardships in the Ethnic Minority and Mountainous Areas’ during 2006 - 2010. This paper provides empirical evidence of this program’s impacts on households in the project areas. We find that the program had positive impacts on several important outcomes of the ethnic minority households, including productive asset ownership, household durables ownership, and rice productivity. Among higher-order outcomes, they enjoyed positive impacts in income from agriculture, household total income, and household per-capita income. A particularly important result is that poverty among minority households in treatment communes declined significantly more than it declined in comparison communes. Finally, ethnic minority households enjoyed a reduction in travel time to health facilities, relative to households in control communes.

Keywords: Poverty reduction, ethnic minority, household survey, Vietnam

JEL Classification: I38; H43; O11.

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1. Introduction

Vietnam is one of the most successful countries in the world in terms of poverty reduction and economic achievement over the past twenty years. The poverty rate fell from 58 percent in 1993 to around 14 percent by 2008. However, poor households in some regions gain much less from economic growth than better-off households. Most of the households which are still below the poverty line in Vietnam live in remote rural areas which are mainly populated by ethnic minorities (World Bank, 2012). To increase the opportunities for poor households of specific groups and regions to benefit from economic growth the government has introduced many targeted programs. The most important poverty reduction program for poor and ethnic minorities in the most remote and difficult areas is entitled ‘Socio-economic Development for the Communes Facing Greatest Hardships in the Ethnic Minority and Mountainous Areas,’ commonly known as Program 135 (P135). The program included four components: basic infrastructure development, improved and market-oriented agricultural production, improved socio-cultural lives through better access to social services, and capacity building for State officials. The total budget of P135-II was approximately 1.1 billion USD.

In this study we measure the effects of P135-II on economic outcomes of households in project areas, focusing mainly on poverty status, income, agricultural production, housing conditions, and access to basic public services. We are able to observe the selection criteria of most commune projects and to obtain high-quality panel data on treatment and control households. Our study contributes a case study to the literature on impact evaluation of large complex programs. Findings from the study are also useful to the government of Vietnam and to international organizations involved in designing the third phase of Program 135.

2. Data Sets

This study relies on the 2007 Baseline Survey of P135-II (abbreviated as BLS 2007) and the 2012 End-line Survey of P135-II (abbreviated as BLS 2012). The two surveys covered communes and households in treatment and control communes before and after the implementation of P135-II. Sample households were selected from 400 communes, of which 266 were treatment communes and 134 were control communes. In each selected commune, 15 households were randomly selected for interview.

3. Income and Poverty Profiles of P135-II Treatment Communes

Table 1 presents incomes and poverty rates of households in P135-II treatment communes. The first column of Table 1 shows the estimated population share of each group to provide context for the remaining columns in Table 1 and for the remaining tables in this section. Real per capita income of households in these communes increased by 21 percent during 2007-2012. This rate is lower than the income growth rate at the national level.
Table 1: Per capita income and poverty rates of households in treatment communes.

<table>
<thead>
<tr>
<th>Groups</th>
<th>% Share in Pop</th>
<th>Per capita income (thousand VND)</th>
<th>Poverty rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2007</td>
<td>2012</td>
</tr>
<tr>
<td>All households</td>
<td>100</td>
<td>6,039</td>
<td>7,295</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kinh</td>
<td>14.2</td>
<td>9,274</td>
<td>11,378</td>
</tr>
<tr>
<td>Ethnic minorities</td>
<td>85.8</td>
<td>5,210</td>
<td>6,294</td>
</tr>
<tr>
<td><strong>Ethnic minority groups</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tay</td>
<td>11.2</td>
<td>5,916</td>
<td>7,353</td>
</tr>
<tr>
<td>Thai</td>
<td>9.7</td>
<td>5,181</td>
<td>5,102</td>
</tr>
<tr>
<td>Muong</td>
<td>6.7</td>
<td>6,787</td>
<td>7,455</td>
</tr>
<tr>
<td>Nung</td>
<td>5.5</td>
<td>5,801</td>
<td>7,723</td>
</tr>
<tr>
<td>H'Mong</td>
<td>18.0</td>
<td>3,306</td>
<td>5,001</td>
</tr>
<tr>
<td>Dao</td>
<td>11.8</td>
<td>5,022</td>
<td>5,776</td>
</tr>
<tr>
<td>Other minorities</td>
<td>23.0</td>
<td>5,863</td>
<td>7,111</td>
</tr>
<tr>
<td><strong>Gender of household head</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>86.5</td>
<td>5,763</td>
<td>7,024</td>
</tr>
<tr>
<td>Female</td>
<td>13.5</td>
<td>9,101</td>
<td>10,119</td>
</tr>
<tr>
<td><strong>Age of household head</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 25</td>
<td>8.6</td>
<td>5,891</td>
<td>6,667</td>
</tr>
<tr>
<td>26-35</td>
<td>31.1</td>
<td>5,035</td>
<td>6,284</td>
</tr>
<tr>
<td>35-45</td>
<td>29.2</td>
<td>5,684</td>
<td>7,308</td>
</tr>
<tr>
<td>46-60</td>
<td>23.7</td>
<td>7,445</td>
<td>8,741</td>
</tr>
<tr>
<td>Above 60</td>
<td>7.4</td>
<td>6,323</td>
<td>7,005</td>
</tr>
<tr>
<td><strong>Regions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North</td>
<td>63.1</td>
<td>5,084</td>
<td>6,551</td>
</tr>
<tr>
<td>Central</td>
<td>30.5</td>
<td>6,132</td>
<td>7,284</td>
</tr>
<tr>
<td>South</td>
<td>6.4</td>
<td>8,713</td>
<td>9,608</td>
</tr>
</tbody>
</table>

Note: Real income per capita is measured at January 2012 prices.

Source: Authors’ calculations based on the BLS 2007 and ELS 2012.

All estimates account for complex sample design.

Among the households in P135-II treatment communes, Kinh households have substantially higher incomes than ethnic minorities have, which is consistent with the large income gaps found between the Kinh and ethnic minorities in most studies on poverty in Vietnam (e.g., World Bank, 2012). Except for Thai and Muong, the ethnic minorities in P135-II treatment communes experienced increases in per capita...
income. The two ethnic minorities with the lowest per-capita incomes in 2012 were the H’Mong and Thai. The H’Mong experienced a very high rate of income growth, but the Thai incomes actually declined.

Table 1 shows that the overall poverty rate decreased from 57.5 % to 49.2 % during the study period, with the largest declines among ethnic minorities, though the Muong and Thai showed no improvement. While the poverty rate simply records the proportion of households living below a given poverty line, the poverty gap index and the poverty severity index measure the intensity of poverty. Based on Table 2 there was substantial variation in the poverty gap and poverty severity among ethnic minorities. Table 2 indicates some large changes in these poverty indexes during the period 2007-2012 including substantial increases for Thai and Muong households. For Thai and Muong households poverty became more severe, with their poor households living even farther below the poverty line in 2012 than in 2007. On the other hand, the gap between poor H’Mong households and the poverty line had narrowed by 2012.

Table 2: Poverty gap and severity indexes by demographics and region.

<table>
<thead>
<tr>
<th>Groups</th>
<th>Poverty gap index (%)</th>
<th>Poverty severity index (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All households</td>
<td>23.5</td>
<td>22.4</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kinh</td>
<td>11.7</td>
<td>13.3</td>
</tr>
<tr>
<td>Ethnic minorities</td>
<td>26.5</td>
<td>24.6</td>
</tr>
<tr>
<td>Ethnic minority groups</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tay</td>
<td>22.3</td>
<td>18.1</td>
</tr>
<tr>
<td>Thai</td>
<td>26.0</td>
<td>32.1</td>
</tr>
<tr>
<td>Muong</td>
<td>16.8</td>
<td>23.5</td>
</tr>
<tr>
<td>Nung</td>
<td>22.2</td>
<td>17.8</td>
</tr>
<tr>
<td>H’Mong</td>
<td>37.8</td>
<td>26.0</td>
</tr>
<tr>
<td>Dao</td>
<td>22.7</td>
<td>24.0</td>
</tr>
<tr>
<td>Other ethnic minorities</td>
<td>24.9</td>
<td>23.8</td>
</tr>
<tr>
<td>Gender of household head</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>23.9</td>
<td>23.0</td>
</tr>
<tr>
<td>Female</td>
<td>18.5</td>
<td>15.3</td>
</tr>
<tr>
<td>Age of household head</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 25</td>
<td>30.0</td>
<td>26.4</td>
</tr>
<tr>
<td>26-35</td>
<td>27.2</td>
<td>25.5</td>
</tr>
<tr>
<td>35-45</td>
<td>23.8</td>
<td>21.0</td>
</tr>
<tr>
<td>46-60</td>
<td>18.5</td>
<td>17.8</td>
</tr>
<tr>
<td>Above 60</td>
<td>21.0</td>
<td>27.6</td>
</tr>
<tr>
<td>Groups</td>
<td>Poverty gap index (%)</td>
<td>Poverty severity index (%)</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Regions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>North</td>
<td>27.1</td>
<td>22.0</td>
</tr>
<tr>
<td>Central</td>
<td>23.5</td>
<td>27.3</td>
</tr>
<tr>
<td>South</td>
<td>12.9</td>
<td>17.0</td>
</tr>
</tbody>
</table>

*Note: Income per capita is measured in the price of January 2012.*

Table 3 shows that households in P135-II areas rely largely on agricultural income; crops and livestock are the main contributors (see Table 4). However, there does seem to be an incipient transition from farm to wage activities: the share of agriculture in household income decreased from 64% in 2007 to 57% in 2012, while the share of wage income increased from 20% to 24%.

<table>
<thead>
<tr>
<th>Household Income</th>
<th>Household income (thousand VND/year)</th>
<th>Income share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>29,443</td>
<td>34,096</td>
</tr>
<tr>
<td>Wage income</td>
<td>6,403</td>
<td>10,000</td>
</tr>
<tr>
<td>Agriculture</td>
<td>16,688</td>
<td>17,464</td>
</tr>
<tr>
<td>Non-farm, non-wage</td>
<td>2,707</td>
<td>2,521</td>
</tr>
<tr>
<td>Others</td>
<td>3,645</td>
<td>4,110</td>
</tr>
</tbody>
</table>

*Note: Income per capita is measured in the price of January 2012.*

*Source: Authors’ calculations based on the BLS 2007 and ELS 2012.*

_All estimates account for complex sample design._

Table 4: Shares of income from agriculture, forestry and aquaculture (%).

<table>
<thead>
<tr>
<th>Source</th>
<th>2007</th>
<th>2012</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>100</td>
<td>100</td>
<td>0.00</td>
</tr>
<tr>
<td>Crops</td>
<td>64</td>
<td>68</td>
<td>4</td>
</tr>
<tr>
<td>Livestock</td>
<td>16</td>
<td>16</td>
<td>-0.15</td>
</tr>
<tr>
<td>Agricultural services</td>
<td>0.13</td>
<td>0.21</td>
<td>0.08</td>
</tr>
<tr>
<td>Forestry</td>
<td>15</td>
<td>12</td>
<td>-3.70</td>
</tr>
<tr>
<td>Aquaculture</td>
<td>4</td>
<td>4</td>
<td>-0.39</td>
</tr>
</tbody>
</table>

*Note: Income per capita is measured in the price of January 2012.*
4. Impact Evaluation Methodology

The subscripts designate the following: \( c = \text{commune}, i = \text{household}, t = \text{time period} \). Notice that the treatment is at the commune level, not at the household level. The question of self-selection at the household level does not arise in this case. Self-selection might occur at the commune level if communes lobby for inclusion or embrace P135-II with varying degrees of enthusiasm. Certainly, we have non-random assignment of treatment at the commune level: if assignment to treatment were based on exogenous regressors (but not on unobservables), then that could easily be controlled by including those exogenous regressors.

\[
Y_{citi} = \beta_0 + \alpha_1 T_{ct} + \alpha_2 (T_{ct} \times S_{ci}) + \beta X_{citi} + \gamma Z_{ct} + \mu_c + \mu_{ct} + \tau Year_i + \varepsilon_{citi} (1)
\]

where:

- \( Y_{citi} \) Outcome variable
- \( T_{ct} \) Treatment indicator
- \( S_{ci} \) Indicator of household minority status (0 = non-minority; 1 = minority)
- \( X_{citi} \) Vector of time-varying observable household characteristics
- \( Z_{ct} \) Vector of time-varying observable commune characteristics
- \( \mu_c \) Time-invariant commune characteristics (may include unobservables)
- \( \mu_{ct} \) Time-invariant household characteristics in addition to minority status (may include unobservables)
- \( \tau \) Time-specific effect
- \( \varepsilon_{citi} \) Idiosyncratic household deviations from expectation
- \( \alpha_1 \) Impact of Treatment on non-minority households \((S_i = 0)\)
- \( \alpha_2 \) Differential impact of Treatment on minority households \((S_i = 1)\)
- \( \alpha_1 + \alpha_2 \) Impact of Treatment on minority households \((S_i = 1)\)

The conventional Difference in Differences (DID) estimator of the impact of \( T_{ct} = 1 \) is given by:

\[
DID = (Y_{2012}^T - Y_{2012}^C) - (Y_{2007}^T - Y_{2007}^C).
\]

The DID estimator of the program impact would be valid if the time-varying characteristics \( X_{citi} \) and \( Z_{ct} \) were uncorrelated with treatment \( T_{ct} = 1 \), as would be the case if assignment to P135-II had been random. However, the treatment communes were not randomly selected, so we controlled for characteristics \( X_{citi} \) and \( Z_{ct} \) by estimating model (1) using household fixed-effects regression to control for the unobservables in \( \mu_c \) and \( \mu_{ct} \).
While we know that the primary criterion for a commune’s assignment to treatment was its poverty rate, we also note that the poverty rate would be endogenous for most of the response variables we consider. Thus, we substitute determinants of the poverty rate (they are among the elements of \( X_{ct} \) and \( Z_{ct} \)) and take equation (1) as a “partial” reduced form equation; “partial” in the sense that we have substituted exogenous determinants for the endogenous poverty rate, but we recognize that assignment to treatment may still be related to some unobservable productivity effects. If these unobservable productivity effects are negatively related to assignment to treatment, then assignment to treatment is endogenous. Furthermore, if the unobservable productivity effects are positively related to the response variables of interest, the estimated treatment effect will be downward biased. If this is the case, our estimated impacts may be considered as “conservative.”

5. Impact Estimation Results

We focus heavily on measures of agricultural productivity because important elements of P135-II target agricultural productivity. Control variables for the household income regressions include: education and education squared of the best-educated working-age member of the household; age, age squared, and gender of the household head; size of the household; total land area held by the household; annual remittances received by the household; an indicator for the number of negative shocks experienced by the household during the past few years; and a dummy variable for the year (2007 or 2012). Working age is defined as 15 ≤ age ≤ 65 for both men and women.

Estimation results are given in Table 5 below.\(^{15}\) Estimated P135-II impact appears in columns headed by DID FE/X (difference-in-differences, fixed-effects, with controls). T-ratios for the hypothesis that the impact is no greater than zero are given, as are one-tail p-values for testing that hypothesis. Impacts are given for minority and non-minority households.

It is essential to keep in mind the role of the counterfactual (control communes) for interpreting the estimated impacts. For example, the estimated impact on asset index for minorities is 0.38. However, the sample means show the following: between 2007 and 2012 the asset index among comparison households decreased from 2.43 to 2.09 (in 2007 households had 2.43 asset items, on average; this declined to 2.09 by 2012). Thus, the change over time was -0.34. Over the same time span asset items owned by households in treatment communes increased from 2.30 to 2.33, an increase of 0.03. When we use these data to calculate the difference-in-differences estimator, the calculation would be \( [(2.33 - 2.30) - (2.09 - 2.43)] = 0.37 \). Thus, the significant positive impact does not necessarily mean that households in the treatment area were much better off in 2012 than they were in 2007. The estimated impact in this case should be interpreted as follows: in the absence of treatment, the asset index of treatment households would have decreased by the same amount as for the comparison households. Finally, we see in this case that the controls did not play a very important role: the estimated impact is quite close to the ordinary DID calculation.

For further illustration, the large negative impact (-22,536) appears to indicate that households in the treatment communes are much worse off. Again, the key interpretation is relative: households in the treatment communes saw their incomes from businesses rise from 22,988 to 28,703 between 2007 and 2012.

\(^{15}\) Fixed-effects estimation was implemented via the xtreg command in STATA; estimation accounted for the complex sample design (stratification, clustering, and weighting). Outliers, defined as observations on the response variable with values greater than four standard deviations from the mean, were deleted prior to estimation.
However, households in comparison to communes enjoyed a much larger average increase: from 21,912 to 48,759. Thus, business incomes of households in the treatment communes failed to grow as rapidly as business incomes of counterpart households in comparison to communes.

Minority households recorded statistically significant positive impacts due to P135-II for several important variables: productive asset ownership, household durables ownership, and rice productivity. Among higher-order outcomes, they enjoyed positive impacts in income from agriculture, household total income, and household per-capita income. A particularly important result is that poverty among minority households in treatment communes declined significantly more than it declined in comparison to communes. Specifically, for ethnic minority households, P135-II increased the rice productivity about 10%, agriculture income about 17%, total income of these households about 16%, and then reduce the poverty of ethnic minority about 10%. In addition, this Program helps to reduce the travel time of ethnic minority households to health facilities about 12%.

In only two instances were estimated impacts for minority households as negative. First, the value of their corn productivity among households in treatment communes increased less than that in comparison communes. but it did increase (from 770 VND per square meter to 1,590 VND per square meter compared to an increase from 0.94 VND per square meter to 1,940 VND per square meter). In this case we see not only did comparison households enjoy a larger increase in the value of their corn productivity, they started off at a higher value as well. A similar description is appropriate for the negative impact recorded for the share of land allocated to industrial crops.

Statistically significant positive impacts were recorded for non-minority households for their household durables index and for their corn, cassava, and industrial crops productivities. While the industrial crop productivity increased, the share of land allocated to industrial crops decreased. Perhaps both results were driven by taking the least-productive land out of industrial crops production.

Non-minority households in treatment areas saw their agricultural incomes decline while those in comparison areas saw theirs increase: this contrast is reflected in the statistically significant impact on income from agriculture.

Finally, the measured travel time to health facilities in treatment communes increased. While it seems unlikely that travel times to specific facilities increased, this result could be driven by a shift in the mix of health facilities visited.

The right-hand panels of Table 5 support two important generalizations. First, in almost all measures the treatment communes were worse off in 2007 than the comparison communes. This is consistent with authorities directing P135-II resources to communes most in need. Second, non-minority households are better off than minority households in several very important respects. In particular they have lower incomes and lower school enrollments. For both of these, there is evidence of improvement. Incomes increased, but not as much as non-minorities. Enrollments also increased, and by larger percentages than for non-minorities. Finally, the fact that we found a number of statistically significant impacts despite the fact that overall budget allocations to treatment communes were no different on average than those to control communes suggests that the design of P135-II made it more effective than other infrastructure support. We conjecture P135-II’s focus on capacity building and community participation enhanced its effectiveness.

6. Conclusions

The estimated impacts on key response variables for minority households are on balance positive. The most important results are the large and statistically significant impacts on total
income, per-capita household income, and poverty status. Results for non-minority households appear mixed, but impacts on the most important measures (total income, per-capita income, and poverty status), are neither large nor statistically significant.

School enrollment is critically important to households and their communities. Enrollment rates of minority children are lower than those of non-minorities, especially for upper-secondary school. However, enrollments improved among households in treatment and in comparison communes. In all cases but one, enrollments in treatment communes increased more than in comparison communes, but the impacts were not statistically significant.
Table 5: Impact estimation results

<table>
<thead>
<tr>
<th>Response Variable</th>
<th>Minorities</th>
<th>Non-Minorities</th>
<th>Minorities</th>
<th>Non-Minorities</th>
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<td>DID FE/X</td>
<td>t-ratio</td>
<td>p-value</td>
<td>DID FE/X</td>
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<td>Control</td>
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<td>Control</td>
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**Notes:**
- Travel Time to Health Facilities includes a range from 0.0033 to 0.079.
- Enrollment percentages range from 0.04 to 0.32.
- Travel Times range from 3 to 62.36.
THE WELFARE OF ETHNIC GROUPS IN VIETNAM 1989-2009
Hai-Anh Dang, World Bank
Gabriel Demombynes, World Bank

ABSTRACT
Many studies treat ethnic minorities in Vietnam as a monolithic group and find that as a whole they have been left behind by the country’s economic progress. This paper provides a new perspective based on an analysis of individual ethnic groups, using census data from 1989, 1999, and 2009. To our knowledge, no existing study has tracked the welfare of individual ethnic groups over time using this data. We follow the progress of individual ethnic groups over time, measured using education levels, literacy rates, economic sector, migration rates, and a wealth index. We find that the welfare improvements of ethnic minorities vary greatly across individual ethnic group. Although as a whole they are still worse off than the Kinh majority, contrary to conventional wisdom, ethnic minorities as a whole have made experienced substantial gains since the start of Vietnam’s takeoff. The welfare levels of the groups relative to Kinh in 2009 largely match their relative positions in 1989.

Keywords: ethnic minority, census, education, wealth index, migration

1. INTRODUCTION
The rapid economic growth that Vietnam has experienced since the doi moi reforms began in the late 1980s has broadly increased welfare across the socioeconomic spectrum. Using the country’s 1993 consumption-based poverty line, the overall fraction of the population living in poverty has fallen from 58 percent in 1993 to below 10 percent in 2012. Apart from the Kinh majority, which makes up approximately 85 percent of the population, Vietnam has 53 ethnic minority groups. Using the 1993 poverty line, the poverty rate among ethnic minorities has fallen from 86 percent in 1993 to below 50 percent in 2012.

As overall poverty has declined, and relatively few Kinh remain above the poverty line, ethnic minorities have made up an increasing share of the poor. In 2012, ethnic minorities made up just over half (51 percent) of the poor and three out of four of the extreme poor (using a lower “extreme poverty” line.)

A large number of earlier research papers as well as many government reports have considered aspects of ethnic minority welfare in Vietnam. Several studies decompose differences in consumption or earnings levels between ethnic minorities and the Kinh majority, e.g. van de Walle and Gunewardena (2001), Baulch et al (2007, 2012), and Dang (2012). These studies find that the differences are partially accounted for lower education levels, more limited land access, and other characteristics. For example, in one application of this approach, Dang (2012) finds that differences in characteristics account for 66-74 percent of earnings differences between Kinh and ethnic minorities. The portion not accounted for by characteristics in such analyses may reflect differences in unobserved factors such as school quality, ability, culture, or discrimination.

16 These figures are based on a consumption-based poverty line established in 1993. In 2010, the consumption poverty methodology was overhauled, and a new, higher poverty line was established. By this new line, the overall poverty headcount was 17.2 percent in 2012. Note also that the Government of Vietnam has a separate set of poverty figures, based principally on income, which are used chiefly to target anti-poverty problems.

17 The figures presented here are based on the consumption-based poverty line developed by the General Statistics Office and the World Bank.
This paper provides a new analysis of the welfare of ethnic minorities over time using census data from 1989, 1999, and 2009, with two substantial contributions. First, unlike earlier studies which focus on a shorter period, the census analysis makes it possible to track the situation of ethnic minorities over the two decades since Vietnam’s economic takeoff. Second, the use of census data allows for a much more detailed breakdown by ethnic group. Most earlier studies are based on household survey data and due to limited sample size are only able to analyze ethnic minorities as a single aggregated group.

The preliminary version of the analysis presented in this short paper is organized as follows. Section II presents shows trends across the three census years for some characteristics of the Kinh majority and the largest ethnic minority groups. Section III describes a wealth index estimated using the 1999 and 2009 census data and presents scatter plots showing the mean values of the wealth index against characteristics by ethnic group. Section IV concludes.

2. Trends in Ethnic Minority Welfare

2.1 Data

The analysis presented here uses the microdata from three rounds of the Vietnam Population Census conducted in 1989, 1999, 2009. These are respectively 5%, 25%, and 15% samples of the microdata. The censuses collected information on household demographics, education, assets, employment, and housing conditions, at levels of detailed that vary over time. The available 1989 microdata is missing information on housing conditions for a substantial fraction of the sample.

2.2 Characteristics by Group

This section presents a series of basic characteristics by ethnic group across the three census years. Figures presented here show only the Kinh majority and the eight largest minority groups. Tables with calculations for all groups are shown in an annex.

Figure 1 shows primary completion rates among adults. Primary completion rates for adults as a whole tend to move slowly because enrollment increases only affect the completion rates of young people, and at any given point in time a large fraction of the population consists of people who were educated many years previously. Nonetheless, the census figures show clearly a dramatic expansion in primary completion rates between 1989 and 2009. They grew from 68 percent to 83 percent for Kinh. But they also grew substantially for every single minority group. With the exception of the Tay and Muong, primary completion rates remain significantly below those of the Kinh for other groups. The differences by group in 2009 follow the same pattern as those in 1989.
Source: Authors’ analysis of 1989, 1999, and 2009 census data.

Figure 2 shows a graph with literacy rates for adults by year and ethnic group. Self-reported literacy rates are higher than primary completion rates. The overall patterns are unsurprisingly very similar to those for primary completion rates: the Kinh have the highest levels, every single ethnic group has made gains over time, and the differences in 2009 are broadly similar to those in 1989.

Source: Authors’ analysis of 1989, 1999, and 2009 census data.

Figure 3 presents the fraction of working adults by group and year who do not report that their main activity is agriculture. Along this variable, the Hoa are an exception: relatively few are working in agriculture, and the percentage has declined slightly from 1989. For all other

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18 This coarse census question only concerns main activity and does not reflect secondary activities. Other research suggests that over time many households that have agriculture as their primary activity increasingly engaged in other secondary activities.
groups, there has been some movement out of agriculture. After little shift in the 1990s, there was substantial movement of Kinh out of agriculture between 1999 and 2009. Other groups besides the Kinh and Hoa also moved out of agriculture. Despite those changes, because they were all overwhelmingly working in agriculture in 1989, agriculture remained their dominant activity in 2009.

Figure 3: Percentage Not Working in Agriculture by Year and Ethnic Group for Largest Groups

Source: Authors’ analysis of 1989, 1999, and 2009 census data.

Finally, Figure 4 presents migration rates by ethnic groups. These are the percentages of members of the ethnic group who are reported to have been living in a different province five years previous to the census. For this measure, patterns vary substantially by year and ethnic group. The Kinh have the highest migration rates in each census year, and the highest rate by far in 2009, when 5.5 percent were classified as migrants by this measure. Other groups with relative high migration rates in 2009 are the Tay, Kho Me, and Muong.

Figure 4: Percentage Living in a Different Province 5 Years Previous

Source: Authors’ analysis of 1989, 1999, and 2009 census data.

3. What Explains the Relative Success of Different Groups?

3.1 Wealth Index

The census data does not collect data on income or consumption. To compare the socioeconomic status of individual ethnic groups
over time, we construct a wealth index using data that is collected in the census. A simple index was calculated as the sum of seven binary (0-1) variables indicating whether the household has 1) a television, 2) a radio, 3) a modern toilet, 4) access to potable drinking water, 5) electricity for lighting, 6) a living area of 50 square meters or more, and 7) ownership of its residence.

Unfortunately, data on asset ownership was not collected in the 1989 census, and the data on housing conditions is not available in the surviving microdata. Consequently, the asset index was only constructed for 1999 and 2009.

Figure 5 presents mean wealth by group for the largest groups in the two years for which appropriate data is available. The wealthiest groups in both years are the Kinh and Hoa. Wealth gains have taken place for every single group, and the largest gains in absolute value occurred for the Kho Me.

### 3.2 Correlates of Wealth

In this section, we consider how the wealth index correlates with various other indicators. Two scatter plots are presented for each indicator. The first shows mean wealth versus the indicator for all groups. The second shows only the 10 groups which each constituted at least 0.5 percent of the national population in 2009. In all figures, data for 1999 is shown in blue and data for 2009 is shown in red.

Figures 6 and 7 show mean wealth index versus primary completion rate. Unsurprisingly, the two variables are correlated within each year. The trajectories visible in Figure 7 also show that the two variables have moved together for individual groups. Figures 8 and 9 show mean similar patterns for literacy rates.

![Figure 5: Percentage Living in a Different Province 5 Years Previous](image-url)

Source: Authors’ analysis of 1999 and 2009 census.

Figures 10 and 11 show wealth versus the fraction of working adults who are not working in agriculture. The figures show that although there has been some change over time, the vast majority of most groups are still chiefly in agriculture, and having a large percentage of the group in agriculture is strongly associated with lower wealth. The groups that have achieved higher wealth levels are generally those that have moved out of agriculture to a greater degree.
Figure 6: Mean Wealth Index vs. Primary Completion Rate in 1999 and 2009, by Ethnic Group

Figure 7: Mean Wealth Index vs. Primary Completion Rate in 1999 and 2009, by Ethnic Group, for Groups Constituting At Least 0.5 Percent of the National Population in 2009

Source: Authors’ analysis of 1999 and 2009 census data.

Figure 8: Mean Wealth Index vs. Literacy Rate in 1999 and 2009, by Ethnic Group

Figure 9: Mean Wealth Index vs. Literacy Rate in 1999 and 2009, by Ethnic Group, for Groups Constituting At Least 0.5 Percent of the National Population in 2009

Source: Authors’ analysis of 1999 and 2009 census data.
Figure 10: Mean Wealth Index vs. Percentage of Adults Not Working in Agriculture in 1999 and 2009, by Ethnic Group

Source: Authors’ analysis of 1999 and 2009 census data.

Figure 11: Mean Wealth Index vs. Percentage of Adults Not Working in Agriculture in 1999 and 2009, by Ethnic Group, for Groups Constituting At Least 0.5 Percent of the National Population in 2009

Source: Authors’ analysis of 1999 and 2009 census data.

Figure 12: Mean Wealth Index vs. Percentage Living in Another Province 5 Years Previously, in 1999 and 2009, by Ethnic Group

Source: Authors’ analysis of 1999 and 2009 census data.

Figure 13: Mean Wealth Index vs. Percentage Living in Another Province 5 Years Ago, in 1999 and 2009, by Ethnic Group for Groups Constituting At Least 0.5 Percent of the National Population in 2009

Source: Authors’ analysis of 1999 and 2009 census data.
Figures 12 and 13 show migration rates versus wealth levels. The two variables are only loosely correlated, but the groups with higher wealth levels are generally those with higher migrate rates.

4. Conclusions

This paper has presented a preliminary look at measures of ethnic minority group welfare based on analysis of the Vietnam census data as well as correlations of the measures with a simple wealth index.

The descriptive presentation here points to several conclusions:

- The experiences of individual ethnic groups over the period 1989-2009 have been varied.
- As is the case for the Kinh majority, individual ethnic majority groups have experienced increasing wealth levels, rising school completion rates, rising literacy, a shrinking share working in agriculture, and (for most but not all groups), rising migration rates.
- The relative positions of the groups along these welfare measures in 2009 are strongly correlated with their relative positions in 1989.

REFERENCES


### Annex Table 1: Characteristics by Ethnic Group in 1989

<table>
<thead>
<tr>
<th>Ethnic group</th>
<th>Population</th>
<th>Population Share (%)</th>
<th>% Literate Adults</th>
<th>% Adults Completed Primary School</th>
<th>% Adults Not Working in Agriculture</th>
<th>% Living in Other Province 5 Years Ago</th>
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## Annex Table 3: Characteristics by Ethnic Group in 2009

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DIFFICULTIES IN BUILDING AND IMPLEMENTING ANNUAL PLANS FOR SOCIO-ECONOMIC DEVELOPMENT OF THE POOR COMMUNES IN DAKNONG PROVINCE

Dr. Phan Van Tan
Tay Nguyen University

1. Introduction

Although the local communes take the responsibility for annual plans for socio-economic development, it is the permanent board of the Commune People’s Committee that drafts and submits the plans to the People’s Council of the commune and that of the district. Such factors as the market economy, democracy, people’s consent, commune strengths, long-term plan haven’t been clearly stated. Supported by the project “Enhancing the capacity of sustainable economic development for the ethnic groups in DakNong Province – 3EM”, we have provided assistance to the 23 poorest communes in 5 districts of DakNong Province to build the market oriented plan for socio-economic development since 2012. After two years of building and implementing plans for socio-economic development of the poor communes, we discovered some challenging issues.

2. Planning Method

The method of building and implementing annual plans was based on economic development project of the district and the province.

Publication of “the guidebook for planning the market oriented socio-economic development” based on the planning handbook of the Ministry of Planning and Investment, the guidebook of the People’s Committee of Ninh Thuan Province, Ha Tinh Province and DakLak Province, was edited to suit DakNong’s conditions.

The socio-economic development plan of the 23 communes was built at the level of communes with the participation of at least 30 local people (including poor and ethnic people). The planning tools used were: SWOT Analysis, problem tree, and goal tree (causes, priority, solution, action). In order to prepare for the planning, the guidebook introduces five (5) data collection samples for the village, 20 for the communes and 3 for the district.

The plan for socio-economic development, which shows local people’s democracy and consent, is started in June and completed in December every year.

3. The challenges in building and implementing the plan in 23 communes

The 23 communes were all poor communes with the poverty rate of 40-50 % (up to 60% in some communes), 30% ethnic people, which are isolated from the provincial center with the insufficient facilities and economic development orientation, and limited ability to mobilize local people’s labour and investment to develop the economy.

The lack of clarification of provincial production area project made it difficult to build and implement the plan in the communes.

Most family have no certificate of land use so they couldn’t ask for a bank loan or ready to invest.

Although the priority production and follow-up activities were decided, these were too many compared to the limitation of people’s production and financial capacity.

The market economic orientation of the primary product is not clear while the local people were not sure about which links of production chain they can do best. All the communes are focused on the same primary agricultural product, coffee and pepper, which made them less competitive. They haven’t worked on the tackled matters and criteria of qualified agricultural products (GAP, 4C, Utz-certifield …);

The 23 communes have primarily focused on farming and breeding with small advantages. The lack of traditional handicraft has lowered the total income and adaptation ability.
The farming area and productivity sometimes exceed or fall behind the plan. Hence, the agricultural stability gets low.

The facilities for agricultural production have not met the need due to the limitation of the financial contribution of the local people and government loan and investment.

The weaknesses in medium-term market forecast made it difficult to boost the production.

The farmers’ ability is not sufficient to meet the requirements of the market economic conditions due to their lack of knowledge concerning the economic sector.

4. **Suggestions in planning the socio-economic development for the poor communes**

Provide training on planning and follow-up mechanism to officers of the village, commune and district, including female, farmer union and the youth union. Each training class last for only 2-3 days focusing on the content in the guidebook for planning the socio-economic development and analyzing tools such as SWOT Analysis, problem tree, and goal tree.

Include the specific scheme for land use from the province, district and commune. The mountainous communes often have some small areas with different features of soil, climate and irrigation.

Issue the book for right of land use, and open methods to capital loan.

Train and help farmers improve their agricultural techniques on farming and raising the attributed and suggested domestic animals and crops, the methods to reach the market standards, and the value chain and necessary links in the chain.

Support of the government and non-government organizations in the following matters: facilities for village and commune, capital policy, and payment for training class.
ADAPTATION OF KATU PEOPLE IN A VUONG HYDRO POWER PLANT, QUANG NAM RESETTLEMENT AREA: A RESEARCH ON THE RESETTLEMENT AREA IN KUTCRUN, MÀ COOIH COMMUNE, DONG GIANG DISTRICT

Nguyen Thang Long

1. Introduction

1.1. Katu is one of the ethnic minorities residing mainly in the western areas of Quang Nam and Thua Thien Hue provinces. During their settlement and development, they have found themselves their own traits and characteristics originating from the primitive form of livelihoods with a strong reliance on natural resources. These resources are reasonably exploited as the strict rules, regulations and traditional customs of the group.

1.2. In recent years, there has been numbers of projects being undertaken to develop new hydro-electricity plants and they are causing direct impacts on the livelihood of Katu people (2). They have to flee from their seem-to-be-permanent land to resettle and adopt themselves in a new area with unfavorable conditions, and the new environment. However, they still keep their traditions and customs in order to gradually get them into the new circumstances.

1.3. A study on the adaptation of Katu people was carried out in Kutchrun resettlement area, which showed the status of people from this group and hence propose some suggestions to assist them with a sustainable life basing on their characteristics

2. A Vuong Hydro-electricity plant and its impacts on Katu people

The construction of A Vuong Hydro-electricity plant began since August 2003 with the capacity of 210 MW. The reservoir has an area of more than 9 square km, which can cause flooding to a wide area. The plant has caused numberless obstacles for Katu residents in the area, who have been making their living along the bank of A Vuong River in Dang Commune (Tay Giang District), Mà Cooih Commune (Dong Giang District). Other villages namely Tà Rèng, A Đền, Trờ Gung, A Lua, Ka La…are also in the influential area of the plant and need to be moved to resettlement areas.

Many households affected by the reservoir have fled from the place and resettled in new areas such as A Lua, Ka La (Giang Commune, Tay Giang District), Kutchrun, Pache Palanh (Mà Cooih Commune, Dong Giang District).
Kutchrun resettlement area  currently consists of two major villages A Den and Tro Gung of Mà Cooih Commune. The place is the combination of A Đền and Trờ Gung villages as well as a small land portion of Ta Reng Village, which are on the highland, covered by Kut and Chrun streams.

The land area for resettlement is carefully chosen by means of democracy of local residents. Pache Palanh resettlement zone is located near the heart of Mà Cooih Commune with better cultivation land quality. Yet, the area is covered by regeneration forests which directly leads to the shortage of firewood for everyday life. Conversely, Kutchrun has a disadvantage in land quality but to make up, it has a wide range of wood varieties facilitating farming activities and natural resource exploitation.

Despite the advantages, Kutchrun people still have to experience hardships in the beginning moments of their resettlement period. Initially, unusual environment and terrains have caused difficulties for people to transform to wet rice farming and this lead to food shortage. Food being supplied by local government and A Vuong project is only sufficient for them to survive some of the very first days of their resettlement. They would have to make a living by themselves in the coming time to ensure a stable and long tenure livelihood.

In this paper, the authors focus on the study of the adaptation of 77 households in A Den village of Kutchrun resettlement zone in 2013.

3. Life adaptation of Katu people in Kutchrun resettlement area

With their long-term tradition of living by nature, Katu people found it easy to familiarize themselves with the new place. Fortunately, although Kutchrun people had to live in identical modern houses, they easily adapt to it as the surrounding environment is somewhat similar to their previous place. Yet, there are obstacles to overcome, they have to completely transform their usual farming practices into a new method which is wet rice farming. Furthermore, they do not have limited space for livestock, hunting and resource exploitation is unfree. These are the things that they have to accept and live with.

A majority of people of Ta Reng village chose to settle in the resettlement area called Pache Palanh (Mà Cooih Commune), only 19 households chose Kutchrun.

Wet rice farming has a long history in the mountainous areas, however, the people have not yet found their interest in it. Wet rice is only suitable with flat, plain areas or valley bottoms where there is an abundant source of water.

---

22 Kutchrun resettlement zone is the name for the intersection between the two streams Kut and Chrun. In a campaign of relocating residents in the area of A Vuong Hydro-electricity plant, the Kutchrun resettlement zone was one of the most successful models. Initially, the proposed area for the relocation was Tu Commune, Dong Giang District with favorable conditions; nonetheless, the rough path leading to this area made people changed their mind. Eventually, the two other locations being Pache Palanh and Kutchrun received the agreement of both the government and residents. Accordingly, these places were home of 5 villages relocating from the area near A Vuong hydro-electricity plant to Trờ Gung, A Đên, Tà Rèng, Azal và A Zớ villages.

23 A majority of people of Ta Reng village chose to settle in the resettlement area called Pache Palanh (Mà Cooih Commune), only 19 households chose Kutchrun.

24 Wet rice farming has a long history in the mountainous areas, however, the people have not yet found their interest in it. Wet rice is only suitable with flat, plain areas or valley bottoms where there is an abundant source of water. Meanwhile, Katu people normally dwell in mountainous regions with cassava, corn and dry rice cultivation taking the dominant part. In addition, wet rice farming requires time and efforts together with application of fertilizer and these are not the strengths of people in this area.
Meanwhile, Katu people normally dwell in mountainous regions with cassava, corn and dry rice cultivation taking the dominant part. In addition, wet rice farming requires time and efforts together with application of fertilizer and these are not the strengths of people in this area.

**Table 1: Livelihood of people at Kutchrun relocation area**

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<th>No.</th>
<th>Mode</th>
<th>No. Of households</th>
<th>Characteristics and person in charge</th>
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| 1   | Farming:                              | 77/77             | - Available land for cultivation is scarce since most of the land is protected forest, mountain fields are in great distance from where they live  
- Farming in resettlement area: Banana, ginger planting is done with support from World Vision project, Labor and Social Welfare Service,... |
|     | - Mountain fields                     |                   |                                                                                                                                                                                                                                     |
|     | - Wet rice                            |                   |                                                                                                                                                                                                                                     |
|     | - Banana                              |                   |                                                                                                                                                                                                                                     |
|     | - Gourd                               |                   |                                                                                                                                                                                                                                     |
|     | - Cassava                             |                   |                                                                                                                                                                                                                                     |
|     | - Tree                                |                   |                                                                                                                                                                                                                                     |
|     | - Ginger                              |                   |                                                                                                                                                                                                                                     |
| 2   | Livestock (Buffallo, cow, pig, chicken, duck…) | 70/77            | Livestock is in small scale                                                                                                                                                                                                           |
| 3   | Forest resource exploitation: Rattan, honey… | 40/77            | - Unstable and seasonal dependence  
- People who are in employment age                                                                                                                                                                                                     |
| 4   | Knitting                              | 7/77              | Only minor and for in-house purposes.  
Mainly the elder                                                                                                                                                                                                                         |
| 5   | Hunting and picking                   | 65/77             | Only minor. Including people from various age group                                                                                                                                                                                   |
| 6   | Others: Carpenter                     | 4/77              | Irregular, only done on demand                                                                                                                                                                                                     |
| 7   | Forest protection                     | 70/77             | - Divided into groups for inspecting and protecting forest resource. Allowances are given by A Vuong forest management board  
- People who are capable of performing the task                                                                                                                                                                                        |

**3.1 Agricultural activities**

*Planting*

One of the highly concerned issues of Kutchrun is the conditions for sowing wet rice. The total land area for rice cultivation of the place is 4.85 ha, however, until 2013, there were only 4 households afford to sow wet rice. At first, they yeilded less than expected therefore, most of the time, they relied on the aids provided by A Vuong project. The chief reason for this issue is the quality of land, it is mostly gravel with limited space. On top of that, Katu people are not experts in wet rice, therefore, they do not
have adequate experience as well as the techniques to do the job well.  

According to the policy, each household is provided with 400 square meters of building land and farming land. As for mountain land, each family receives about 1,2 ha, however, the actual area they get is greatly different from what the paper states. Farmers realize that the total forest land area they receive for farming is only 5 – 6 Sao (equivalent to 360 square meters). Some of the people return to their previous land near the reservoir to sow rice when there is not flooding because the amount of land they receive is not adequate. The area surrounding the electricity plant is under the management of A Vuong project management board, however due to the difficulties that farmers are experiencing, they decided to permit residents to return to the site where water cannot reach. Up to present, about 32 households have come back to the site to make a living. They make use of every piece of land for cultivation. The major crop they grow is short-term wood and other vegetations.

Through thorough examination, it is clear that wet rice farming is not the plausible approach for residents in this area since the the natural conditions do not allow the cultivation of wet rice. Another reason is that the farming of wet rice is not the strength of Katu people nor other ethnic minorities in the central region.

Katu people do not use modern methods to measure land area, they use their traditional approach.
Table 2: kinds of vegetations being grown in Kutchrun in 2013\textsuperscript{27}

<table>
<thead>
<tr>
<th>No.</th>
<th>Village</th>
<th>Wet rice (ha)</th>
<th>Forest rice (ha)</th>
<th>Banana (ha)</th>
<th>Cassava (ha)</th>
<th>Pineapple (ha)</th>
<th>Corn (ha)</th>
<th>Vegetable (ha)</th>
<th>Bamboo shoots (ha)</th>
<th>Tree (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tro Gung</td>
<td>0.70</td>
<td>22.5</td>
<td>7.3</td>
<td>6</td>
<td>3.1</td>
<td>3.4</td>
<td>1.5</td>
<td>0.5</td>
<td>25</td>
</tr>
<tr>
<td>2</td>
<td>A Den</td>
<td>3.15</td>
<td>22.5</td>
<td>8.4</td>
<td>8.5</td>
<td>4.5</td>
<td>1.0</td>
<td>2.0</td>
<td>1.0</td>
<td>35</td>
</tr>
</tbody>
</table>

Source: Ma Cooih People’s Committee, 2013

In 2013, Quang Nam Labor and Social Welfare Service aided 500 million VND for 5 resettlement villages including A Den and Tro Gung to grow bananas\textsuperscript{28} and ginger with new technologies. Each household register for planting a certain number of depending on the area of land and source of labor within the family. In addition, Dong Giang Department of Agriculture promised to ensure output for banana from these households.

The plantation of banana brings direct benefit to the farmers contributing to stabilize people’s live.

*Livestock*

Katu people have long been raising their animals by freeing to feed in the open field without having stables or cages but in the new place, there is not enough space for this, therefore they have to be familiar with the fact that animals would be fed and controlled in stables and cages. Stables are made up of conventional materials such as bamboo, wood,...to lock up their domestic animals.

Table 3: Number of domestic animals in Kutchrun in 2013

<table>
<thead>
<tr>
<th>No.</th>
<th>Village</th>
<th>Buffalo</th>
<th>Cow</th>
<th>Pig</th>
<th>Poultry</th>
<th>Goat</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tro Gung</td>
<td>2</td>
<td>22</td>
<td>48</td>
<td>32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>A Den</td>
<td>8</td>
<td>16</td>
<td>37</td>
<td>120</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Statistics from 2013

\textsuperscript{27} The actual farming statistics in A Den village is not as good as what has been shown in the report of its People’s Committee. According to people, most of the land they receive is in unfavorable conditions.

\textsuperscript{28} According to Katu people’s practice, banana are normally grown in remote areas. Therefore the plantation of banana near residents’ houses brings more benefits, saves time and reduces effort.
Kutchrun resettlement zone is situated at the foot of the mountain with limited space for grazing animals, thus the number of domestic animals being raised by people is also modest. It can be seen from the table that raising animals is merely a minor branch and does not have much influence on people’s income. In addition, the building area for each household is small. Thus, house design have to be “flexible” in accordance with the terrain causing great threat for environment pollution when raising animals.

Some households have tried digging ponds for raising fish, nevertheless, the lack of expertise as well as the bad water conditions failed most of their attempts.

### 3.2 Forest-economic based

Katu people are used to forest land, brooks,... therefore, the very first days in the new land are difficult for them. They do not have sufficient land and resources for farming, thus they had to hunt and exploit natural resources in the forest to make a living. As the result, only 2 years after the settlement of Katu people in the area, the forest coverage of the place reduced significantly.

#### Zoning forest land and forest protection

Every household is given a certain portion of forest land for self-management. At present, 70/77 households are willing to join the forest protection campaign. The management and protection of forest land is divided into 5 sub groups, each group is assigned to perform their protection duties alternatively. Each family needs at least a patrol a week. The chief work of the group is to prevent poaching and illegal logging. When forest land is given to the hands of people, it is well protected from deforestation and other worrying issues. In addition, the campaign also brings economic to the residents as each household receive 500,000 VND/quarter.

#### Exploitation of forest resources

The resettlement zone is constructed in the dense forest area of Mà Cooih Commune, thus, rare varieties of animals and trees are still abundant. In the begining times, many Kutchrun people exploited...
the “dot leaves” for making brooms and “may” trees for sale. “dot” trees are only available for exploitation in November and December when they are in blossom, old trees are of no use. “May trees” can be taken all year round. Besides that, Kutchrun residents can also benefit from mushrooms as this type of commodity is in abundance in the forest.

Hunting

Hunting is another job for Katu people to make a living. Kutchrun is located in the dense forest, which is a bless for this minority group as they have a long tradition of hunting so they are very experienced. One of the most popular mode of hunting is setting traps in the jungles or mountain fields...but this activity only generates little income for the whole family or some times even makes no profits. According to the tradition of Katu people, when someone traps a prey, he brings the animal home and celebrates with the presence of people in the village. This represents a strong bond among residents, however, each celebration costs a lot for preparation which hinders economic development.

3.3 Handicrafts

In the past, Katu people used to be very good at knitting as it was the immediate need of the people. Many equipments and tools for this job was wildly developed on request like baskets, bags, mattress, ...Nonetheless, many of those things are now made of modern materials, thus the popularity of traditional knitting goes down.

In Kutchrun, there are only few family that still keeps the tradition of knitting like baskets or mattress. In order to preserve and develop traditional handicrafts as well as create job opportunities for Katu people, in 2011 and 2012, Quang Nam Labor and Social Welfare Service opened knitting classes for young people in Kutchrun and others in the relocation areas. However, the results were much less than expected due to a low demand in the market.

The celebration lasted for the whole night with the participation of all members. Early morning, people hang the head of the animal to the top of the roof with exciting drums and dance (see Tran Duc Sang (2004), the sense of community in hunting practice of Katu people, Diary of the scientific seminar Arts and Culture of the central regions: Achievements and Problems, Vietnam Institute of Arts and Culture in Hue, Hue 2004).

4. Conclusion and Recommendations

Conclusion

With the exchange policy, compensation is applied to housing, crops, vegetations,...for those who have to be relocated to Kutchrun. The policy received great content of local residents. However, activities being carried out after relocation posed great difficulties for new residents, especially for people who are affected by hydro power plant construction projects, including Katu people. It is clear that poverty

31 With Katu people, hunting wild birds and other animals is a way of protecting their crops as well as a source of food. However, everyone knows the limit. People never encroach forbidden land for hunting or logging.

32 Within the time of conducting this paper in June 2013, we witnessed 2 wild animals being brought home as food. They were well cooked and equally divided to each member of the family, including us.

33 In the past, the matress of Katu people were made from wild pineapple trees, ground snail shells with the bark of “apang” tree to make red dye. Up to now, some households of Katu still keep the tradition of making matress in this way.
resulting from the shortage of farming land is a major problem of ethnic minorities in resettlement areas of power plant in central of the country. Meanwhile, the majority of available land belongs to private companies and the government.

According to a survey conducted in Kutchrun, besides the adoption of new customs, traditional practices remain dominant and stable which ensure food security for people. Thus, the study of the livelihood of ethnic minorities surrounding the area of the electricity plant must be done in accordance with their traditions in which local respects counts.

It is clearly shown that self-management of land can only be effective when it is connected with traditional belief of people like “the sacred area” or watershed forest. In fact, in mountainous areas, forest has become economicalized in stead of industrialized or others like services or wet rice agriculture.

This paper introduces the adoption of Katu people in a new environment and new space. However, people’s livelihood might change when concepts and the overall situation change. Therefore, the establishment of a sustainable livelihood for residents who experience a resettlement is a must so that they can stabilize their living and develop in various aspects of life that benefit the general development of the society while ensuring intact ecosystem and nature.

**Recommendations**

After quite a long time, Katu people in Kutchrun eventually adopted and adapted themselves to the new nests. Nonetheless, new strategies and policies must come into existence so that the sustainable livelihood of the local residents can be achieved.

Forest-economic based needs to be promoted depending on the cultural and economic aspects of local grassroots with the major focus on people’s self-management of forest land to bring a sense of tradition to the area.

The cultivation of wet rice should not be based on static factors such as land, irrigation, techniques,...in stead, it should be emphasizing on the exploitation of mountain fields, which is the strength of Katu people.

Developing new variety of trees, animals or occupations must be based on the inherent strengths, the characteristics of nature and land.

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34 People were excited with the exchange policy that the government offered, however, the actual area of land people received was much less than what was stated in the documents. Mr. Ariu Adô said, they said each household would receive 1,2 ha but in fact, we received much less than that.

35 In previous time, Katu people were engaged in activities relating to forest and nature with freedom. Now, their interference into forest land is much more limited.

36 See: Le Anh Tuan (2009), “ethnic minorities in mountainous areas of midland Vietnam: the historical portrait, the past and future illustration” Perception of central Vietnam in 10 year’s time, Vietnam Institute of Arts and Culture in Hue, Thuan Hoa Publisher, Hue, p270

37 In fact, farming is only sufficient for farmers to meet their basic needs without having saving. It is even more difficult for newly relocated residents as their usual activities are changed. Besides, they need time to familiarize with the new ground, new approach and environment. Hence, a study into the sustainable livelihood of people in those areas is of urgent need.
The protection of traditions should base on local customs and practices in production as traditional economic approaches is a substantial branch of the area.

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The significant economic improvements experienced by Vietnam, in the aftermath of the ‘renovation’ (doi moi) initiated by Vietnam Communist Party at the Sixth National Congress in 1986, appears to be a good model and lesson for poverty eradication, social inclusion and capacity building for disparate highland communities in North Eastern Region of India (NEI). Consequently, Vietnam is bracketed in the lower-middle income in 2009, with per capita income rising to US$1,755 in 2012 from $110 two decades earlier. The poverty headcount in Vietnam fell from nearly 60 per cent to 20.7 per cent in the past 20 years in 2010 with an estimated 30 million – almost the entire population of North East India – Vietnamese people who have been lifted out of poverty in the past 20 years. [38] Along with this Primary and Secondary school enrollments for the poor have increased to more than 90 percent and 70 percent respectively.

Yet, there are ‘Pockets of extreme poverty remain,’ with as many as half of the ethnic minority population in 2012 still estimated to be living below the poverty line.’ As Vietnam experiences high growth, inequality is rising and ethnic minority poverty remains persistently high, particularly among the Vietnam’s 53 ethnic minority groups who constitute about 15 per cent of the population but accounted for nearly 50 per cent of the poor in 2010. Thus, for every two Vietnamese living in poverty, one belongs to ethnic minority groups, and for every four Vietnamese living in extreme poverty, ethnic minorities account for three. [39]

North East India

Situated at the strategic tri-junction of East, South and South East Asia, eight provinces in the North East India (NEI), Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura share international borders with Bangladesh, Bhutan, China, Nepal and Myanmar and connected to mainland India through a narrow 29 kilometers strip. The NEI has 40 million population representing 3 per cent of India’s population, occupies 9 per cent of India’s geographical area and contributes 3 per cent to the country’s gross domestic product (GDP). The NEI region is characterized by extraordinary ethnic, cultural, religious and linguistic diversity, with more than 160 Scheduled Tribes listed in the Sixth Schedule of the Indian Constitution. [40] But it is estimated that more than 400 distinct tribal and sub-tribal or people groups inhabits the NEI region.

NEI has high incidence of rural population of more than 80 percent and one of the highest concentrations of poverty in the world. The World Bank estimates that the proportion of the population living in North East India below the poverty line is 34 per cent against the all-India average of 26 per cent. Whereas the proportion of people living below the poverty line in the NEI provinces has not altered, all-India average has dropped from 44 per cent in 1983 to 26 per


[40]. The Constitution of India, Government of India, 1999
cent in 2000. The impressive Indian economic achievements under the new economic regime and ‘Look East’ foreign policy orientations have little impact on the disparate communities in NEI. Provinces in North Eastern region of India, besides sharing borders with East Asia and South East Asia are handicapped by similar inclement terrain and hostile geography as in the upland, mountainous provinces of Vietnam.

Commonalities

The upland, mountainous provinces in Vietnam and NEI are inhabited by various tribes, ethnic and racial groups, linguistic and religious minority nationalities, with ‘little identification with the central regimes.’[41] Even after sixty years of post-colonial administration, there is ‘legitimacy deficit’ and tenuous relationship between the centre and frontier provinces which is compounded by difference in social, cultural practices and defiance of the central regimes. Geography, terrain and topography impinged on the diversities of people and culture of the Himalayan range as in the uplands of Vietnam in such a manner that the ‘variety in climate have had readily understandable effects on the population of the region. The ruggedness has tended to slow down population movement and has inhibited communication so that peoples living close together have remained relatively isolated and have maintained or developed cultural differences which easier access might have blurred.’[42]

The persistence of ‘attitudinal discrimination’ is a daily encounter by the upland communities in Vietnam and North East India who are pejoratively graded as Chinkis (slant eye), Junglees (forest dwellers) and Paharis (Mountain people) in India and moi (savage) or người Thương (highlanders) in Vietnam. French colonial administration adopted policies that distinguished the lowland Vietnamese and highlanders just as the British colonial administration imposed inner-line-permit and clear demarcation of the uplands of the present North East India as ‘excluded territory,’ thereby separating the hitherto, though limited, natural or ‘normal pattern’ of interaction among communities of the highland and lowlands. As a colonial hangover, any development programs and projects are often perceived as ‘civilizing project.’

Given the similar social, cultural, political settings and economic stagnation of NEI and uplands of Vietnam, it is argued that engaging peculiar issues confronting the ethnic minorities requires a different approach. In substantiating this line of argument a few indicators – culture, lack of capital formation, capacity building, communication, lack access and means to education – stands out. It is so, as no schema and regime of state, civil society and institutional intervention towards poverty eradication and inclusionary policy will bear result unless and until the endogenous knowledge and skill base is nurtured among the communities of the uplands. 43

Poverty alleviation regimes in NEI suggest that executing poverty eradication and developmental programs without generating appropriate knowledge and participatory capability of the disparate communities in the highland, frontier provinces experiencing cultural isolation, marginalization and alienation bear no fruit. In spite of India’s grandiose schemes, earmarking 10 per cent of every federal


43 During my recent visit to Sa Pa and surrounding areas in Lao Cai province of Vietnam affirms that despite the appreciable presence of governance what is apparently missing is the lack of skill, knowledge and capacity generation among ethnic minorities.
development funds for the development of North East Indian provinces, visibility of poverty eroding is on the contrary. Such dismal scenario may be due to the apparently contradictory policy of non-interference in the ‘tribal-way-of-life,’ or ‘national minorities.’ Along with cultural incompatibilities the ‘enforced’ dependence on norms, standards, policy and perspectives on the Centre that often ignores consideration and reflection of the local realities also aggravates the problems. Whereas, Vietnam has uplifted 30 million populations from poverty: which is almost the entire population of 40 million in NEI. But such remarkable achievements rarely envelop the ethnic minority of the uplands.

Political system seems to have no decisive impact on the poverty alleviation of the ethnic minorities in the highlands of NEI and Vietnam. [44] The impediments in bringing about overall development in the uplands is geopolitical isolation, lack of interaction with the outside world and other cultures which inadvertently contributed to minimal or no exposure to the chain of international trade thereby delaying self-generated capital formation.

The absence of capital formation engenders ‘lesser’ culture and stunted capacity building among the highland communities in both areas. In the case of NEI, many in the post-graduate programs are first generation learners, [45] who are extremely difficult to communicate and misperceptions overshadow proper perception of genuine issues and policies. Thus the hypothesis that “educational aspirations and expectations of poor youth are lower than those of nonpoor (sic) youth’ [46] are reflected in the selection of disciplines at the graduate and higher levels by students from the upland communities. The choices of disciplines are mostly on liberal arts and humanities, whereas science, management, engineering and medicine are rare as the cost for such courses are usually higher. Coming to the enrolment in higher education in Northeast India one can say that except in three provinces of Meghalaya, Mizoram and Manipur enrolment is less than all India average of 9.97. And enrolment in Science stream, with the exception of Manipur, is less than all India average of 20.0. [47] The North Eastern Region Vision 2020 reports that distance factor that is responsible for school dropouts are much higher in NEI than all-India average. It would not be wrong to assume that similar handicap such as lack of proper road to schools and long distance with no modern means of transportation is responsible for school dropout rates in Vietnam.

Subsequent well-intentioned efforts at development or ‘civilizational’ regimes are possibly perceived as systematic policy of exploitation and enslavement of ethnic minority. Moreover, in a social context marked by first generation learners,’ inability to distinguish private and public domain, lack of accountability and responsibility is another factor that divides, alienates and erodes community spirit. Ironically, the thrust on promoting ethnic minority education, preservation of culture and religious

[44], Author has made a comparison of intersperse communities inhabiting along the frontiers China and India in Rajen Singh Laishram “Knowledge and Development Disparity in the Frontier Provinces of China and India,” Perspectives: Asia-Pacific (Kolkata: Indian Association for Asian and Pacific Studies Proceedings of the Fifth Biennial International Conference,2012) pp. 514-530

[45], Based on random survey of students of M A Political Science students for the past fifteen years or so in Manipur University


[47], Ministry of Development of North Eastern Region, North Eastern Council, North East Vision 2020
beliefs with lip service peculiar minority history, vernacular, religious and folk literature which hardly equips the minority communities for effective participation in the process of change.

Some upland ethnic groups also perceive education as a way through which the colonial rulers also gained more power and legitimacy. Aphorizing education as a double-edged sword, Nagas in NEI laments that though education initiates a primitive community to knowledge of modern science and technology yet it also intrude in the people’s way of live, language, their worldviews and belief systems. The introduction of an ‘approved’ syllabus by the Indian state is seen as a process that ‘recolonized’ the Naga mind, to an extent where the Nagas have lost the ability to construct their own past objectively and critically. [48]

Absence of infrastructure, institutions, resources, cultural support and the increasing ‘digital divide’ which has denied and excluded communities in the frontier areas. To illustrate, we can refer to Tele-density in North East region in 2004 is 2.80 whereas at the all India level it was 7.02. [49] thereby indicating that there is a substantial risk that those without access to Information and Communication Technologies (ICTs) and use them effectively will be further marginalized. Similarly internet subscribers in the region were 66.64 per lakh people whereas all India was 3,260.78 per lakh in 2003. [50] The constraints to infrastructure development are not only related to ICTs. The lack of reliable electricity supply, especially in the villages of lower income countries is also a major problem in establishing network connectivity.

Political interference and insistence on the sons of the soil yelhou macha or con trai cua dat in the selection of teaching faculty, has capitulated on the quality of education. The genesis of erosion in the quality of state-funded schools and universities has roots to such method of recruitment.

Globalization and Ethnic Minorities

The onslaught of globalization with its stress on skills, knowledge and capital has evident proclivities that disparage local communities’ participation and involvement in the process of change. The extractive nature of global capital and industries, the profit-driven nature of such investments, wanton exploitation of natural resources, which comes largely from the frontiers provinces, without commensurate return and participation of the ethnic communities has led to disruption in the flight of natural resources and goods, increase in crime, human trafficking, sex trade, extortion and victims are mostly people of the uplands.

In trading activities and administration as well as top echelons of the law enforcing agencies in the frontier, highland provinces of Vietnam and NEI are commanded by the non-locals ‘other’ ethnic majority. A free reign and unbridle activities without a proper mechanism to safeguard local interest and ensure participation of upland communities can influence, in a negative way, the future course of events and even pose a challenge to the territorial integrity. In other words, real or imagined perception that there has been a persistent policy of ‘internal colonialism’ with regard to these


[49], Ministry of Development of North Eastern Region, North Eastern Council, North East Vision 2020

[50], Ministry of Development of North Eastern Region, North Eastern Council, North East Vision 2020
uplands should be erased through constructive endeavors.

Options

Prioritization of ethnic groups or categories that requires intervention, assuming that there are internal hierarchies or stratification within tribe or minority nationalities, must be tactfully combined with the apparently contradictory policy of non-interference in the ‘tribal-way-of-life,’ and ‘national minorities.’ The majority ‘Kinh-biased’ and mainstream Indian-biased policies and programs with stress on modern, skill and knowledge base along with ‘enforced’ dependence on norms, standards, policy and perspectives of the Centre that often ignores consideration and reflection of the local realities should maintain constant interface with local elements.

Ways Out

Perspective planning and polices for upland ethnic communities or nationalities development has been largely based on modern western learning and experiences whereas the need and requirements of the upland people may be more meaningful if the whole journey is anthropologically-driven. How well do we understand the fear, isolation and feelings of the excluded? Entrenched prejudices against the minorities ‘eccentricity’ should be juxtapose to enable us introspect and relate to the realities. Geographically, ecologically needs requirements of the uplands cannot be imposed from the lowland. Because no meaningful and effective development or poverty eradication regimes will be successful unless and until upland communities are prepared and nurture to stand on their own and articulate issues and negotiate development or any problems by themselves Therefore strategic planning and tactical interventions becomes imperative. Investments or inputs in education cannot be expected to achieve results in decadal manner as expected in other investments. Reports of donors withdrawing from investment in education and development of ethnic minorities in Vietnam need to reconsider as miracles cannot be expected from communities who have been geographically, culturally and historical memories have excluded them for centuries. Insistence on transparency, accountability along with designing possible seepages on the investment can serve ethnic minorities in Vietnam and North East India in the long run.

If all ‘in-egalitarian social systems require a coercive state apparatus’ [\textsuperscript{51}] then how does Vietnam embeds its upland ethnic minorities will be a good starting point. The Vietnamese style of handling issues of development to usher in equitable growth may portend how to handle ethnic issues of the highland people in NEI. Geographically, ecologically and culturally, the needs and requirements of the uplands cannot be imposed from the lowland. Because no meaningful and effective development or poverty eradication regimes will be successful unless and until upland communities are prepared and nurture to stand on their own and articulate issues and negotiate development or any problems by themselves Therefore strategic planning and tactical interventions becomes imperative. Investments or inputs in education cannot be expected to achieve results in decadal manner as expected in other investments. Reports of donors withdrawing from investment in education and development of ethnic minorities in Vietnam need to reconsider as miracles cannot be expected from communities who have been geographically, culturally and historical memories have excluded them for centuries. Insistence on transparency, accountability along with designing possible seepages on the investment can serve ethnic minorities in Vietnam and North East India in the long run.

1. Introduction / Good Practice

Benchmarks

The Indigenous and Afro-Ecuadorian Peoples Development Project (PRODEPINE), was part of a World Bank initiative started in 1993 in Latin America, designed to build pro-poor forms of social capital and promote Indigenous Peoples’ development. The project represented an effort to apply such concepts as ethno-development, and development with cultural identity, social and human capital, and “community-driven development to address marginalization of Indigenous Peoples.  

The project demonstrated what can be achieved when governments decide to invest in Indigenous Peoples’ development. These groups often have strong cultural, social, and natural assets, but suffer from lack of economic opportunities. The project provided many lessons learned to all actors involved, including the Government of Ecuador, the World Bank and the IFAD. These lessons include the benefits of inter-institutional collaboration, participatory approaches, and the need to build self-sufficiency by strengthening the networking and collective bonding of individuals living in communities while at the same time promoting income diversification.

2. Project Description

A combination of favorable factors led to the project preparation in the mid-1990s.

First, Indigenous Peoples’ level of organization and capacity for social mobilization had grown substantially. Second, in 1994 the Government of Ecuador (GoE) created the National Secretariat of Indigenous and Ethnic Minorities (SENAIME), and initiated a series of contacts with donors to request support for SENAIME and its proposed operations to benefit Indigenous Peoples and Afro-Ecuadorians. Third, partly in anticipation of the United Nations International Decade of the World’s Indigenous Peoples, the World Bank started its own Indigenous Peoples Development Initiative in 1993. Thus, the institution was relatively well positioned to respond to requests for support to Indigenous Peoples. Fourth, the Bank Poverty Assessment (1995) indicated the existence of a strong relationship between poverty and indigenous ethnicity, which stressed the need for a targeted poverty intervention focusing on Ecuador’s Indigenous Peoples and Afro-Ecuadorian population. The fact that other rural development projects had difficulties reaching out to this population further emphasized the need for a new approach.

PRODEPINE at a Glance

PRODEPINE invested in: a) local capacity building, b) small-scale demand-driven rural subprojects, c) land tenure regularization, d) cultural heritage activities, and e) institutional strengthening of the Consejo de Desarrollo de Nacionalidades y Pueblos del Ecuador (CODENPE) and the Corporacion de Desarrollo Afro-Ecuatoriano (CODAE), the official institutions dealing with Indigenous Peoples and African descendants.

Project components: 1) Institutional Strengthening of IP Organizations; 2) Support for Regularization of Land and Water Rights; 3) Rural Investment and Credit; 4) Strengthening of CODENPE and CODAE.

Financing: $25 million (World Bank), $15 million (IFAD), $10 million the Ecuadorian Government and beneficiary communities and organizations.

Duration: 1998 – 2004

Indigenous Peoples in Ecuador

Indigenous and Afro-Ecuadorian peoples together represent almost 20 percent of the population, although estimates vary widely. There are thirteen officially designated non-Hispanic ethnic groups or nationalities in Ecuador. The largest nationality comprises the highland Quichua or Kichwa speakers (who identify as Runacuna), that constitute more than 90 percent of Ecuador’s Indigenous Peoples. However, the Quichua speakers are culturally diverse, as demonstrated by the contrasts between subgroups such as the Otavalo and Saraguro, or the Chibuleo and Cañari peoples.

3. Process of Social Assessment, Consultation and Community Support

One of the first project challenges was to identify the Indigenous Peoples and Afro-Ecuadorians who were the intended beneficiaries. The two principal questions were: (a) whether the mestizo (Non Indigenous Spanish speaking) population living in the same areas would be part of the project’s target population; and (b) how to settle the politically contentious issue of defining who is indigenous.

To tackle these questions, the project adopted an approach that combined quantitative methods and geographic location with the notion of self-identification and community affiliation with second-tier organizations. To obtain figures on the level of poverty by ethnicity, census information on indigenous and Afro-Ecuadorian population at the parroquia (parish) level was combined with data on poverty (an index of unsatisfied basic needs). Additionally, the project collected information on the self-identification of communities as either indigenous or Afro-Ecuadorian, and membership in a second-tier indigenous organization. This information was then represented in an Indigenous Peoples poverty map.

The quantitative analysis gave an idea of which parroquias had a majority indigenous and Afro-Ecuadorian population and which ones had a minority presence of those groups. Once the parroquias were known, it was possible to identify the second-tier indigenous organizations

53 Indigenous Peoples’ Organizations often give higher estimates while Ecuador’s Integrated Social Development Indicators (Sistema Integrado de Indicadores Sociales del Ecuador 2003) puts the figure closer to 10 percent on the basis of census data.

54 First-tier organizations are grassroots or community-level member organizations. Second-tier organizations are associations of community-level organizations.
that were operating in such areas. The project then formed an alliance with these organizations for implementation purposes. The project included the mestizo population to the extent that they were members of the second-tier organizations. This analysis allowed the project to target about 815,000 people who were members of indigenous and Afro-Ecuadorian communities in rural areas, and around 180 second-tier organizations operating in the 288 parroquias in which indigenous and Afro-

Ecuadorian populations are concentrated.

The original project proposal was the result of a consultation process carried out by SENAIME among indigenous grassroots organizations. Initially, SENAIME requested World Bank support for a very ambitious, yet conventional, rural development project. During consultations, the indigenous umbrella national organizations and World Bank experts adopted a simple project design. Following the provisions of the World Bank's Indigenous Peoples policy (OD 4.20, now OP 4.10), the draft project proposal was submitted to the national indigenous peoples' organizations for their review and formal support.

4. Implementation

The project was designed as a community demand-driven operation (CDD). It implemented participatory planning methodology, including capacity building interventions for community members on basic conceptual and methodological tools (such as participatory diagnostics and planning), and instructions on how to submit relatively simple project proposals. As a result, participating communities held a series of meetings to prioritize their own needs and aspirations in areas relevant to the overall project. Communities relied on local customary decision making processes to come up with project proposals. This approach served as evidence of community support for the project.

The project financed investments to enhance human development, financial management, and natural resources conservation and management in these communities. The project intended to strengthen Indigenous Peoples organizations and their grassroots communities in three different ways. First, the existing communal linkages and institutions (such as agricultural associations, community governments and small commercial and artisanal groups) would be complemented effectively by new ways of organizing and addressing communal needs (i.e., strengthening pre-existing water users associations). Second, when the internal community organization and linkages were weak, projects would be designed to bring in new ways of internal cohesion and managerial capacity—which in most cases promoted collective management and solidarity among members. Third, the project stimulated the gradual extension of the original forms of networking and organization into new fields, higher levels of sophistication or types of cooperation (e.g., women’s solidarity credit associations, which have no equivalent in traditional Andean communities).

The project relied on empowering local governments and on self-management as a tool to retain a strong sense of project ownership on the part of Indigenous Peoples and Afro-

Ecuadorian organizations. Investments in various types of capital, coupled with the focus on participatory planning and self-management as the basic principles for the project’s operational procedures, formed the conceptual framework of the project.

Under Component One, Institutional Strengthening of Social Organizations, the project aimed to improve the institutional capacity of second-tier organizations, particularly where social capital was not strong. Activities included support for building managerial capacity and technical capacity such

55 Second-tier organizations are usually based in small towns accessible to their community-level member organizations, know local needs and demands, and provide services to their communities.
as project preparation. The project also helped organizations to obtain legal status, if needed. To emphasize the focus on ethno-development or development with cultural identity, the project supported activities that strengthened the identity and cultural heritage of indigenous and Afro-Ecuadorian communities and their organizations.

To increase the available pool of indigenous professionals, the project established a partnership with 27 Ecuadorian Universities and High Schools to provide formal education at high school and college levels for indigenous students. The curriculum included disciplines that were relevant for the second-tier organizations, such as community development, accounting, anthropology and communications. In order to increase the probability that students would remain in their communities and organizations after completing their education, the formal education program placed heavy emphasis on distance learning.

By the end of 2002, 1,080 high school students (335 graduated) and 850 college students (67 graduated) had received fellowships from the project, 77 persons had received courses in irrigation, soil conservation, agro-forestry, and other topics, and 496 young men and women had benefited from an internship program in agro-ecology.\(^{56}\)

Under Component Two, Support for Regularization of Land and Water Rights, the project financed a land titling and regularization program in collaboration with the National Agrarian Development Institute (INDA). Given the sensitivity surrounding land property rights, the project trained paralegals of indigenous and Afro-Ecuadorian communities to execute the program. In collaboration with CARE, the project supported a training program that aimed to reach about 100 paralegals and to establish a professional network. Given their local background and knowledge of participating communities and organizations, paralegals were in a much better position than outside government officials to effectively facilitate the resolution of land conflicts. The cooperation agreement between the project and INDA explicitly recognized the integration of paralegals in INDA’s operational procedures for land titling and regularization.

By the end of 2002, about 122,685 hectares of land had been titled for 71 grassroots organizations and 97,312 hectares were being processed. In addition, 160 paralegals had finished their training program. Furthermore, in order to help communities regularize water tenure and use, 458 community irrigation systems were studied, corresponding to 2,647 km and 37,194 users.\(^{57}\)

Under Component Three, Rural Investment and Credit, the project financed a substantive program of small-scale rural investments identified through a participatory planning process at the community level. Investments with a public goods character were financed through matching grants. Investments with a private goods character were financed on a credit basis. The use of traditional collective labor (Minga) was accepted as the counterpart contribution of the communities for financing particular rural investments. Community enterprises were also financed under the project. These enterprises were typically some sort of small-scale agro-business venture owned by the community and operated by community members. After covering all relevant costs, including salaries of personnel, profits were ploughed back into the communities and invested in social infrastructure (e.g., school, health clinic, etc.). While these agro-business ventures might have been seen as private firms that should have been financed with credit,

\(^{56}\) (World Bank 2002).

\(^{57}\) (World Bank 2002).
indigenous communities viewed them as public ventures, since the communities owned them and profits were used to finance public goods. The project accepted the latter definition, and so community enterprises were financed on a matching grant basis.

After about four years of implementation, PRODEPINE had supported the preparation of 210 local development plans, 1,918 subproject proposals and 830 pre-investment studies. It had also financed 654 small investment operations at over US$12 million, which had involved an estimated total of $4.5 million in additional community contributions. As a special activity targeting indigenous women, 547 community banks had been created, benefiting 14,022 members.

Under Component Four - Strengthening of CODENPE and CODAE the project supported: a) the formulation of national and local development plans; b) the preparation of draft legislation on issues of interest to Indigenous Peoples and Afro-Ecuadorian communities to be presented to the Legislature, and c) the decentralization, training and equipment acquisition for the above official entities and their staff.

5. Good Practices and Lessons Learned

In its general project evaluation, IFAD stated that “PRODEPINE is considered a highly replicable and successful project, both because of its relevance within the socio-economic context in Ecuador and because of its effectiveness setting up an operating structure at the national level. Above all, it was achieved in the midst of a serious economic crisis, social upheaval, and far reaching institutional change.”58 The lessons learned of PRODEPINE facilitated the preparation and implementation of the Indigenous Community Development Project in Argentina.

Below are some observations of an external evaluator of the project:

“Several design features of the project seem particularly relevant for replication in other similar operations. First, the design should reflect the capacity of Indigenous Peoples and ethnic or racial minorities to mobilize social capital and include efforts to consolidate and strengthen this capacity, including its cultural dimensions. Second, the design should incorporate a range of complementary inputs, including the formation and strengthening of human, environmental and physical and financial capital. The exact specification of interventions in these fields should take into account how they interact with and complement existing forms of social capital. Third, to ensure relevance of the activities, the project’s investments should reflect priorities established in local development plans elaborated in a participatory fashion. Fourth, to ensure ownership and ultimately the investment’s sustainability financed under the project, institutionalizing self-management should be a guiding principle for project implementation” (Doughty 2003).

A field review of the project carried out as part of the Forest Peoples Project (FPP) study confirmed that the project was bringing real, tangible benefits to target communities in health, education, and community irrigation schemes. The key project elements are: the project’s relative autonomy; shared decision making which gives communities and indigenous spokespersons genuine involvement in project management, transparent procedures and flexible operations. The project’s “ethno-development” and “self-management” approach (Griffiths, 2000).

One of the most innovative features of PRODEPINE was that the beneficiaries participated in all stages of the project, from the preliminary agreements, to preparation and implementation.

Some of the main lessons learned include:

Importance of clear role definition of participating institutions. The roles, functions

58 (IFAD, 2005: 9).
and relations among CODENPE, CODAE, and the Project Implementing Unit were clearly defined in order to avoid politicizing the project. CODENPE and CODAE had a policymaking role, while the Project Implementing Unit was in charge of the implementation of these policies, based on the following guidelines: (i) a participatory approach to avoid the exclusion of beneficiaries and their representatives; (ii) an agile structure and procedures to ensure project efficiency and efficacy; and (iii) acknowledgment of the different ways indigenous and Afro-Ecuadorian nationalities and peoples are organized.

A clear and well-defined Participatory approach. The experience of PRODEPINE demonstrated a need to promote participatory planning for local development, to respond appropriately to the country’s decentralization process. The project trained grassroots communities to organize their own research, systematically interpret their realities, propose the best solutions to their problems, and actively participate in building their own future and controlling their own destinies.

Community empowerment and self-development. PRODEPINE built a culture of development based on social participation, empowerment, and accountability.

Strengthening of human and social capital. The experiences generated by PRODEPINE contributed significantly to the formation and improvement of local social capital, and demonstrated the importance of institutional strengthening for improving management capacity. This made it possible to include community demands on the agenda of local governments, promote institutional alliances, and form networks aimed to solve concrete development problems.

Diversification of sources of income. The survival strategies of indigenous and Afro-Ecuadorian families lead them to combine various sources of income: agricultural activities, temporary labor, and migration. The economic viability of rural areas is not solely related to traditional agricultural production and farm wage labor, but also relies on the formation of microenterprises for production, promotion of different rural services, and in general any sector where men and women participate in employment—and income—generating activities.

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**Annex: Background and reference documents with available links:**

- World Bank 2012 Vietnam Poverty Assessment (chapter 5 focuses on ethnic minority poverty) English, complete report, Vietnamese, complete report

The above links will lead to the full versions of the reports. Executive summary of these reports are at this link: https://www.dropbox.com/s/mo5kf8j4s806zch/UNDP%20papers.zip

- ISEE research papers: https://www.dropbox.com/s/n21bf2bxcc88t8s/iS_EE%20papers.zip
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  - UN Women Briefing Note on Situation of Ethnic Minority Women in Viet Nam, November 2013 https://www.dropbox.com/s/g4ahil4xlN4w5e6/UN%20Women%20papers.zip
CRITICAL ISSUES IN ACHIEVING SUSTAINABLE DEVELOPMENT OF ETHNIC MINORITIES IN VIETNAM

The Ethnic Minorities Working Group (EMWG)

Vietnam’s record on economic growth and poverty reduction over the last two decades has been remarkable. The expenditure poverty headcount fell from 58% in the early 1990s to 14% by 2008, and 20.7% in 2012. However, Ethnic Minority (EM) groups are vastly overrepresented among people living in poverty and suffering from related deprivations in Viet Nam. Although EM groups make up less than 15% of the population, they accounted for 47% of the poor and 68% of the extreme poor in 2010 and the gap between minority populations and the Kinh majority continues to widen. The task of poverty reduction and achievement of inclusive growth will remain incomplete unless poverty among ethnic minorities is given sustained and focused attention. The Ethnic Minorities Working Group (EMWG) is a network of development agencies and professionals working on ethnic minority (EM) issues in Vietnam. Based on the programme experiences of group members, this paper examines six issues that EMWG identifies as critical to the sustainable development of the EM in Vietnam:

A lack of representation and participation of ethnic minority in policy formation: Mainstream development strategies, plans and policies focus on the growth engines and tend to focus on areas surrounding deltas. These strategies and policies normally ignore the local knowledge, the diversity and different kinds of needs and vulnerabilities within the EM groups. This prevents the mainstream policies from successfully addressing ethnic minority development issues, providing appropriate income generation opportunities or mobilizing the community strength in development.

The EM policies are often designed with little participation of EMs, in need identification, program design, decision making, management, implementation, and monitoring. Very often, EMs are only considered as “target groups” of various programmes and policies, but not the active players with the potential to contribute. EM women face a double challenge for representation and participation in formal and informal decision making structures at family, community and national levels.

Recommendations:

At policy design level:
- Revisit the SEDP planning process at national and sub-national levels and make sure the EM and gender equality sensitive elements are included and considered in all socio-economic aspects; the participatory SEDP planning processes should be harmonized and institutionalized at national level.
- Further discuss in the National Steering Committee for Poverty reduction to factor the required action of ‘mainstreaming EM issues in national and sectoral plans’.
- Introduce the anthropological/cultural approaches in formulating and evaluating social economic development policies.
- Applying a “village-centred approach” in formulating/designing any poverty reduction project/programme in ethnic minority areas.

59 If using the GOVN income poverty line for 2011-2015, the poverty reduced from 14.2% in 2010 to 9.6% in 2012.
61 IWGIA, Voices of indigenous women from Asia Pacific, 15 June 2012
At policy implementation level:

- Identify measures and mechanisms for community empowerment to transform social norms that perpetuate and condone gender inequalities, ensure diversity enhancement and EM sensitive support; maximize Government Degree number 88 on Grassroots Democracy to increase participation of EM in consultation and planning processes;

- Formulate and implement a coherent MDGs acceleration plan for EM groups and communities taking into consideration gender gaps and special measures to address most vulnerable groups lagging behind in the targets’ achievement.

- Strengthen M&E and conduct more researches to learn from possible social impact of the development policies on EMs; paying attention to gender inequalities and the differences within EM sub-groups.

- Seek pioneer factors in poverty reduction, identifying channels for dissemination of best practices for replication in ethnic minority communities following the “Asset Based Community Development” approach.

1. A fragmented policy framework and lack of coordination

There are more than 30 poverty reduction policies and programs with more than 120 components; counting only those that have EM people/communities and mountainous areas as target groups, there are 187 different resolutions, decrees and decisions issued by the Government on EM poverty reduction support. However, the policy environment is fragmented, overlapping and thinly resourced. This contributes to weak transparency on both goals and achievements.

In terms of institution arrangements, CEMA has the mandate to provide policy and technical advice to the GOVN’s line ministries, agencies and local governments on EM development policies. However, in light of their limited institutional capacity and weak support mechanisms, the mainstreaming and advocacy for EM perspective are very difficult to achieve. The large number of EM poverty reduction policies and programs issued and implemented by many different line ministries/agencies creates unmanageable demand for coordination.

Weak capacity is observed not only in the field of coordination, but also in social services delivery systems. For instance, EM women often do not seek health care services due to the remote location of health centers, poor quality of health care, inability to pay and preference for female health care workers. Policy implementation would therefore benefit from careful consideration of inclusive approaches for the EM on both national and provincial level.

62 Of these, 45 are on production, transportation, credit and resettlement support, 14 on vocational training and local cadre training support; 7 on education and training support, and 13 on health support, and 9 on culture support.

63 For example, Resolution 30a budgets called for VND 3,000 billion for each of the 61 poorest districts but actual allocation in 2009 was only VND25 billion and 20 billion in 2010. In addition, very few development partners are involved and the number is decreasing (for example a group of 7 DPs providing budget and TA support to the Program 135 during the previous cycle compared to only 2 at this cycle). Mapping EM Policies, CEMA-UNDP 2012.

64 For example, CEMA currently lacks gender mainstreaming capacity.

65 Nicola Jones, Double Jeopardy: How gendered social norms and ethnicity intersect to shape the lives of adolescent Hmong girls in Viet Nam, August 2013

66 135P/NTPSPR reviews/evaluation; Situation of Human resource development in EM areas, CEMA-UNDP, Dec 2010, EM poverty CEMA-UNDP2010, etc.
While the Government policies are not inclusive enough, there’s an absence of effective decentralized plans at sub-national level with specific targets and resource allocations, which prevent the request and application of transparent resources for EM development. **Recommendations**

- Enhance cross-sector coordination, set a clearer mandate for the lead agency to coordinate.
- Enhance the leading role and capacity of CEMA system and National Assembly/Ethnic Council
- Support the review of EM policies to reduce fragmentation and enhance the coherence, inclusiveness for the most vulnerable groups within the EMs and efficiency of existing targeted poverty reduction and social development policies.
- Make sure the resources are pooled and made available for the poorest EM areas as well as for the most vulnerable groups within the EMs such as children, women and the elderly...

2. **Discrimination and Stigma**

Amongst various issues, inequality is significant for EM women, who have a very high workload in agriculture and family care, and enjoy much less access to services and social activities of the communities. The intersection of gender-based discrimination and economic deprivation means that women from poor households represent a particular category of social exclusion, facing greater discrimination in meeting their basic needs than men from poor households and that they are more likely to slide into greater poverty in situations of crisis. Nonetheless, many infrastructure development projects have not taken into the account the adverse effects of these on the local/EM people, their livelihoods, living environment, cultures and tradition; In the post-2015 consultations in Viet Nam, the consulted EM groups felt “left out” from mainstream development, increasingly vulnerable as the result of rapid (but not sustainable) economic development and as the result of impacts of economic shocks and climate change, and “diminishing” in the strengths of their community coherence, cultural values and traditions.

**Public perceptions** of EM are often prejudicial and contribute to inequity of opportunity. There is prevalence of gender bias and stereotypes that further burdening women. For instance, most Hmong girls have limited space for participation at all levels of decision-making processes that affect their lives as gender hierarchies constrain their options for forming and expressing their own opinions. Existing stigma, coupled with the lack of a comprehensive legislative framework to guarantee non-discrimination, has internalized economic differentials and inequalities, hampered the effective use of public services, and prevented the introduction of new or better approaches to working with these communities.

**Recommendations:**

- Organize policy dialogues, particularly dialogues with the most vulnerable subgroups including EM women
- Empower and build participation capacity for the EM to have meaningful participation and leadership in the decision making process

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70 Portrait of ethnic minorities on printed news paper, ISEE

71 Gender Justice: listening to Vietnamese Hmong girls’ aspirations and priorities, HG briefing paper, June 18

Mobilize the experiences and network of NGOs/CSOs/CBOs in building capacity for EM in different community-based projects in the process to promote EM participation.

Conduct perception study about female leadership; raise awareness to change community perceptions and solutions to transform traditional gender norms

Adequate implementation or revision of women participation quotas\(^\text{73}\) in the local government, at all levels; hire women from EM groups to serve in offices; and any measure to empower the voice of women with the aim to engage female EM leaders in advocacy and community mobilization to reform local legislation and customary law\(^\text{74}\).

3. Education

Human resources development is a key issue in poverty reduction, narrowing inequality and sustainable development in EM areas. In our experience, a focus on kindergarten and primary school is an essential and most effective component of human resource development. When children are exposed to risks at early age, there will be long-term impacts on their schooling and overall development path. This often leads to inequality and has impacts on opportunities into the next generation.

A World Bank survey in 2010 found that in around 30% of EM households at least one child had dropped out of school before the completion of a grade, compared to 16% for the Kinh. EM girls experience the lowest enrolment and attendance rates of any group, highest repetition and dropout rates, lowest primary school completion and lowest transition rates from primary to lower secondary schools. The main reasons for this situation include the following:

**Language barrier remains a key obstacle to the attainment of quality education.**

Over 90% of EM children speak their own ethnic language at home, and many of them may have little or no exposure to Vietnamese before they arrive at primary school, but all school reading materials are in Vietnamese only. As a result, EM children often fail to develop fluency and comprehension in Vietnamese.

**Teachers often have limited capacity and awareness about child development and teaching methodology**

While EM children should learn Vietnamese as second language, teachers are equipped with traditional teaching methods and take for granted that ethnic children, like Kinh children, can understand what they are saying. Majority of teachers come from Kinh group, who can neither speak children’s language nor understand children’s culture. Therefore, they fail to make children comprehend the lesson appropriately.

**Irrelevant teaching/learning materials and understanding of ethnic minority cultures:** The curriculum and textbooks are rarely adapted to the local contexts, resulting in poor learning outcomes. There is no mechanism in the community or in education system to promote teacher or community to participate in the developing or adapting teaching and learning materials.

**Low awareness of children, parents and communities on child rights:** Although children’s participation has been largely recognized as a key child right in Vietnam, it is seldom observed in any meaningful sense. Children are not routinely consulted on issues concerning them, and their capacity to participate in the wider process of development is limited. EM children are even more vulnerable because of their back ground, cultural and language differences with the Kinh majority.

\(^\text{73}\) Quotas should avoid the current tendency to combine all the requirements in one person (e.g. young woman from EM), instead of complying with the spirit of diversity of representation.

\(^\text{74}\) UN agencies, Breaking the silence on violence against indigenous girls- a call to action, May 2013
Lack of accountability mechanism: Consultation of people’s and children’s views in terms of planning and managing school and monitoring of children learning is not popular in Vietnam where people think commonly that the education is the job of “technical experts”. Parents associations exist in theory but mostly function as “transmission channels” for directives and practices from government. There is no mechanism in the place to promote the cooperation between the community and education officials to ensure the appropriateness to the EM context in school management as well as quality of teaching.

Poor infrastructure and the lack of teaching and learning facilities: In most of remote areas where EM groups reside, school infrastructures are in poor state of repair, with insufficient number of classrooms and boarding facilities. In many cases, ethnic children have to learn in temporary classrooms made of wood. The lack of hygienic latrines and clean water make ethnic children vulnerable to pneumonia.

Recommendations:
- Build capacity for teachers, increasing child participation and promotion of engagement by parents. Government should continue to invest in kindergarten and primary schools with a focus on quality education. Most importantly, these initiatives must focus on recognizing and preserving the unique cultural heritage of ethnic minorities.
- Changes in communication and propaganda agenda: not only focusing on participation as right to participate, but also holding decision makers to be accountable with decisions made.
- The school planning should be developed in participatory manner with participation of children, especially girls, parents and community and be integrated to local SEDP process.

5. Livelihoods

Many EM communities depend on and will continue to depend on subsistence agriculture. We need appropriate policies that recognize and support this form of agriculture. However, often government programs promote agricultural models and techniques that are not relevant and/or appropriate for upland areas; while investments in effect often favor the well-off farmers. Food security for EM communities critically depends on small-scale agriculture, their integration into small-scale commercial agricultural networks and cash crop markets, and off-farm labor opportunities. Thus, the promotion of high-value crops and mono-cropping must therefore carefully considered.

The expansion of livelihood options is central to any rural development strategy – both on and off-farm opportunities, but also through migration. Supporting access to and development of pro-poor value chains has tremendous potential. EM communities are already taking advantage of such economic opportunities. However, capacity of local government needs to be strengthened to develop such opportunities. These require attention to both physical and institutional changes.

A number of valuable ideas have been proposed on how to develop the wider rural economy, as for example the ‘one village one product’ concept. However, the implementation of such approaches needs to be comprehensive and address the various barriers that prevent EM from taking advantage of such opportunities. This includes access to credit, language barriers and cultural norms. The number of EM migrants is increasing; they require support in social integration. Access to better information is critical aspect. The private sector can play an extremely important role. Public policies and goods remain important in rural development strategies, especially in supporting remote and disadvantaged areas.

Recommendations to the NTP-NRD
- The scope and ambition of the NTP-NRD is huge. It is important to clarify the various elements under the NTP.
- Strengthen the development of “soft ware” like information, knowledge, empowerment and association.
This has significant implication on the planning and budgeting process – both at the time of the investment and for subsequent maintenance. For this reason, the NTP-NRD must be anchored in the local SEDP planning process.

- Participation of communities and people in the planning and implementation will be vital.
- Most importantly, the new NTP-NRD must build on good practices and innovations in other poverty reduction programs. For example, P135-II has developed good practices of involving communities in infrastructure work and making communes owners of investment projects. 

Land Rights

Land is a critical asset for poor and marginalized people and communities. It is a source of food security and livelihoods. Effective and equitable use of land can expand and diversify livelihood options. For many people, especially ethnic minority communities, land and forests are part of their identity and culture. Land reform has played a crucial role in contributing to Viet Nam’s impressive poverty reduction record.

Today, land is coming under increasing pressures, and is thus more contested. Loss of agricultural land without due process, proper compensation and alternative livelihoods pushes people back into poverty, even destitution.

Land policies and their implementations have shown deficiencies. The current policies often operate at the expense of small-scale farmers and benefit investors. It is poor and marginalized people who are exposed most and who are most vulnerable to corruption and abuse. How a nation manages access to and equitable use of land resources in the context of rapid economic development and increasing resource constraints is critical for sustainable growth, poverty reduction and social stability.

We welcome the Government’s initiative to address these challenges. The approval of the revision of the Law on Land (2003) is a critical step the Government has taken to address land issues. While the revision of the law is crucial, other policies and their implementation will also need to be reviewed. People, communities and their organizations must play an integral role in this process.

Recommendations:

- The poor need access to multiple resources - most importantly access to and control over land and forest resources - implementation of land and forest allocation policies that ensure sufficient and effective access to and benefit from land/forest resources by ethnic minorities.
- Reviewing and reallocating the land which have been allocated to the state agriculture/forest enterprises but not used effectively to communes, households or individuals, who lack land to maintain or improve their livelihoods. The priority is to recover and reallocate land with good livelihood potentials, close to residential areas, and suitable for production practices of the local beneficiaries and communities, especially poor EMs.
- Eliminating all forms of land allocation contracts which are practicing by the state agriculture/forest enterprises. The State directly allocate agricultural and forest land to the local households or individuals who are being contracted by the enterprises.

Further improving the legal framework to ensure effective and equitable management and use of forest resources as a basis for EM livelihoods enhancement: amendments of the Law on Forest Protection and Development (recognizing forest owner’s rights, enhance the active participation of people and their communities, specific guidelines on the benefits enjoyed by forest communities)

Annex: Background and reference documents with available links:

- World Bank 2012 Vietnam Poverty Assessment (chapter 5 focuses on ethnic minority poverty) English, complete report, Vietnamese, complete report

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GENDER-BASED VIOLENCE -ISSUE OF SUSTAINABLE DEVELOPMENT AND ETHNIC MINORITY POVERTY REDUCTION

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ABSTRACT

Gender-based violence (GBV) is fundamentally influenced by unequal power relations between men and women and deep-rooted attitudes about gender relations, roles and potentials. Research has demonstrated that GBV severely limits women's contributions to social and economic development. The desk review by CARE International in Vietnam has showed the prevalence of physical and sexual violence; emotional violence and economic violence among Ethnic Minority Women 8% to 35%, 48.8% and from 1.2% to 90.3% respectively. Remote Ethnic Minority (REM) women are more likely to be poor because of their isolation, and more likely to be marginalized because of their lower social status in comparison to ethnic minority men. Violence makes REM women more vulnerable to poverty. It affects their productivity and earnings and prevents them from participating fully in social and economic activities. To effectively reduce poverty, programs should incorporate gender and health issues such as GBV into their planning for sustainable development.

Key words: GBV, Ethnic minority, sustainable, poverty reduction, unequal relation, CARE.

Introduction

CARE is an international humanitarian organization fighting global poverty and social injustice, with a special focus on working with women and girls to bring lasting change in their lives and communities. CARE works in 84 countries around the world. In Vietnam, CARE started its activities in 1991 and has completed more than 150 projects in Rural Development/Poverty reduction; Health care and Disaster Risk reduction and Climate change in 23 provinces/cities throughout the country. CARE activities have been addressing root causes of poverty and vulnerability of the most vulnerable and poorest communities.

CARE Vietnam’s Strategy identifies GBV as one of the barriers to achieving significant and lasting change for marginalised and vulnerable groups of people, among those are Ethnic Minorities.

CARE has conducted a secondary analysis GBV to investigate how it affects groups who have been traditionally neglected, such as REM. The intention of this research was to inform the design of appropriate interventions for this marginalized group. An in-depth desk review and mapping of GBV data, policies, and strategies was taken in 2013 and has provided understanding of GBV incidence in ethnic minority groups and the legal framework of the governments and other organizations in response to the problem.

From our experiences working in poverty reduction in mountainous area in Vietnam, we strongly believe that it is not only the distance, the isolation and discrimination that causes poverty for ethnic minority people but also gender norms and stereotypes. Due to this, REM women are doubly at risk of poverty.

II. GBV and the occurrence in mountainous areas

2.1 GBV and occurrence in mountainous areas

GBV is violence directed at an individual, male or female, based on his or her specific gender role in society [1].

In CARE’s GBV related work, we support an understanding of GBV as any harm done to another, against that person’s will, based on gender: in other words, violence sanctioned by social norms about appropriate behaviours, characteristics and roles of women and of men [2].
GBV includes physical, psychological, sexual and economic forms of violence. It can occur to women and men, girls and boys, by intimate partners or family members, acquaintance or strangers, at home or in any other settings. Although boys and men might be victims, most survivors of GBV are women and girls.

GBV is fundamentally influenced by unequal power relations between men and women and deep-rooted attitudes about gender relations, roles and potentials. While gender relationships are expressed differently across ethnic groups in Vietnam, a common theme is the significant disadvantage experienced by ethnic minority women, especially those who are isolated geographically and marginalised already by their ethnic status and gender role in society. As a result, REM women risk exploitation and violence; lack equitable access to basic services and economic opportunities; lack social and legal protections; and lack a voice in society [3].

2.2 GBV prevalence

The desk review conducted by CARE Vietnam revealed GBV against ethnic minority women by a male partner or husband has occurred in different forms: physical and sexual violence, emotional and economic abuse and controlling behaviors in one UN study [4]. The current prevalence of physical and/or sexual violence for ethnic minorities ranges from > 35% (for the Muong) to 8% (for the Hmong) in the National Study [5]. The most common acts of physical violence reported by EM women in the UN study was being slapped (33.7%), being hit with a fist or something that could hurt (13.9%), pushed and shoved (12%) or having something thrown at (10.2%). In the survey, about 22.3% of ethnic minority women reported having experienced unwanted sex by partners during their lifetime. Regarding current prevalence (i.e. in the past 12 months) the overall figure is 13.3%. The prevalence of lifetime sexual violence is higher among women in the ‘identified ethnic groups’ of which 75.7% reported having experience of unwanted sex and 100% having been physically forced to have sexual intercourse by partners.

Prevalence of emotional abuse

The overall (lifetime) prevalence rate of emotional abuse against EM women by a husband was 48.8%, in which the current (past-year) occurrence is 28.9%.

Economic abuse

In the UN survey, 87.3% women reported of having their own decision on earned money and only 1.2% of women are subjected to economic abuse. These results are quite different from the findings of a survey conducted by CSAGA (2011) [6] based on 192 questionnaires distributed among households in two districts of Nghe An province, which shows 90.3% respondents reported of being subjected to economic violence.

Little is known about GBV against ethnic minorities in the public sphere. Several recent studies note incidents of sexual abuse involving ethnic minority women and girls. For instance, a study in the East-West Economic Corridor (EWEC)—running through two mountainous districts of Quang Tri province in central Vietnam [7]- found that the development of routes has influenced the social habits of affected communities in unexpected ways such as prostitution and drug use. Nguyen Thi Huong et al. (2011) observe the occurrence of non-consensual bride kidnapping in the group of White Hmong in Ha Giang province. An ethnographic study recently uncovered myths of the prevalence of sexual violence among some Northern ethnic minorities [8].

Although the data is extracted from different studies, GBV is a serious issue among ethnic minorities and an impediment to a community’s growth.

III. GBV economic toll on the people and the country

GBV is not only a serious public health problem and a violation of women's human rights, but also has large economic costs—
affecting productivity, earnings, and taxing health care and judicial systems.

Research has demonstrated that GBV severely limits women's contributions to social and economic development. Violence affects savings, investment and growth. [9].

GBV is also a major cause of ill health among women and girls, an impediment to the accumulation of human capital, and a major factor in the inter-generational transmission of violence from parents to children.

Large parts of the country or community’s resources are spent on GBV prevention and response, resulting in decreased productivity, increased absenteeism and lower earnings at national, community, and household levels.

Various studies have calculated the annual financial costs of GBV to national economies. Most of the comprehensive studies have been done in countries of the global north: A$8.1 billion in Australia [10]; £23 billion in the United Kingdom; between US$8.3 billion [11] and US$12.6 billion in the United States[12].

In Vietnam, a GBV costing study revealed that both out-of-pocket expenditures and lost earnings represent nearly 1.41% of the GDP in Viet Nam that stood at 2,536,000 billion VND in 2010. More importantly, regression results for estimating productivity loss due to violence indicate that women experiencing violence earn 35% less than those not abused. An estimate of overall productivity loss comes to 1.78% of GDP [13].

The World Health Organization has recognised that, if we fail to address violence against women, many of the targets of the Millennium Development Goals will be compromised [14].

IV. The gap in research and intervention to address GBV with ethnic minority in Vietnam

Although CARE’s study found data on GBV among EM in Vietnam from different research, information on each individual ethnicity is lacking. In a national survey on domestic violence against women [14], some larger EM groups like H’Mong, Muong, and Hoa were mentioned separately, but other smaller groups were categorized under ‘OTHER’.

Regarding policy programs, action plans geared toward EM of CEMA—a government agency at ministerial level—does not mention GBV in general or DV in particular. In other words CEMA’s tasks of assisting the government in designing and implementing EM policies do not go beyond measures aimed at ‘preserving and promoting culture’ and strengthening solidarity among the nationalities. The lack of coordination among government bodies in developing a legal framework on DV shows that not enough attention has been paid to the problem.

At another level, one can suppose that, from the state’s perspective, matters considered to be of individual and family concern such as DV among ethnic groups could be set aside to give precedence to other tasks higher on the priority list of the state agenda.

In linking up this finding with the large body of work on sexual violence against women, an analogy that could be made with the risks of rape disclosure, which is bound up with the idea of family honor, with assumptions about kinship, social belonging and shared responsibility in a collective society such as Vietnam.

V. Conclusion and recommendation

Despite many achievements in poverty reduction and economic growth, Vietnam still faces certain challenges of which, persistent pockets of entrenched poverty mostly correlated to remote mountainous areas and certain ethnic minority groups and gender violence and discriminatory practices are considered key.

It is clear that, GBV is not only a problem for individuals, rather it is the issue for society and the economic toll of GBV should be an alarm to any poverty reduction or sustainable programming.
To address poverty and add to sustainable development in mountainous areas, GBV must be addressed through integration into poverty reduction programs in the lens of gender equality.

To address the issues such following activities should be considered:

1. More in-depth research on the prevalence and on the cultural and social causes of the GBV must be carried out.

2. The program design should be consulted with gender or GBV experts

3. GBV prevention or response might be a part of the program or be integrated in major components
IS VIETNAMESE COFFEE FIT FOR FAIR?

Nguyen Vu Hanh Dung

ABSTRACT

Vietnam has consistently been the first or second largest producer of coffee in the world for the past decade. Yet very little of its coffee is certified and sold as Fair Trade. To arrive at an answer on whether Fair trade could possibly be a route for Vietnamese farmers to achieve higher income from coffee, I examined both the realities of the demands of Fair trade and the supply in Vietnamese farms in this paper.

Fair Trade movement and its literature has focused largely on providing solutions for Latin America as millions of Vietnamese coffee farmers were living in debt and poverty. Working with Fair Trade buyers, I found it is relatively easy for a cooperative to get certified as “Fair Trade” as long as they fulfill the labor conditions imposed by the Fair Trade certification organizations. However, it is difficult for farmers to sell certified coffee at the promised Fair Trade price because buyers tend to select and pay higher prices for the highest-grade coffee that Vietnamese farmers do not produce. This presents a barrier for Vietnamese coffee, which has a notorious reputation for low quality and a high percentage of defects.

Through research, I found that the main reasons for the low quality in Vietnamese coffee is farmer’s lack of financial resources, low technical capacity, and lack of civil society support. Though quality issues have been resolved by participating in Fair Trade in other countries, Vietnamese farmers are jaded by years of Socialist collectivization are not ready to take on the risks of this foreign model.

Despite these difficulties, two companies in Vietnam have managed to establish successful Fair Trade partnerships with cooperatives through innovation and initiation. These entrepreneurs have managed to translate the Fair Trade model into an operating system that is more understandable for Vietnamese farmers. In doing so, these initiatives were able to increase coffee quality and enhance local income and community development.

These examples show that entrepreneurs can and should pursue small-scale initiatives that apply Fair Trade elements in order to bridge Vietnamese coffee production with foreign buying practices.

SUSTAINABLE POLICY FOR POVERTY REDUCTION IN ETHNIC MINORITY, MINORITY STATUS NORTHERN MOUNTAINS AND SOLUTIONS

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ABSTRACT

I. Assessment of the status policy implementation of ethnic towards sustainable poverty reduction the years ago

2. Implement Results
   2.1. Results of the implementation of poverty reduction policies and implementing effective policies and projects in direct support to the poor:
      2.2. The results support the education policies for the poor:
      2.3. Results support the implementation of health policies for the poor:
      2.4. Poor policy support for housing, land and water production:
      2.5. The training and retraining of staff capacity building work to reduce poverty
3. Shortcomings and limitations
3.1 The rate of poverty reduction is not really sustainable
3.2. The income gap is still high
4. Causes of shortcomings, limited
4.1. Production practices and activities, consumption
4.2. Capability, qualification and ability to implement organizational policies
4.3. Investment resources
4.4. Shortcomings in policy formulation for sustainable poverty reduction

II. Solutions
- Strengthening leadership, direction, inspection of the Party committees, governments for sustainable poverty reduction.

- Solution raise awareness about sustainable poverty reduction
- Solution training of human resources for sustainable poverty reduction
- Staff management leadership
- Staff and experts
- Awareness of people about sustainable poverty reduction

2.2.2. Promote advocacy for change and cognitive change in poverty reduction.
2.3. Develop policies to reduce poverty
2.3.1. Develop systems to sustainable poverty reduction policies most common
2.3.2. Identify policy beneficiaries
2.2.3. Implementing democracy in policy development and poverty reduction
2.2.4. Strengthen inspection and supervision of policy implementation
2.2.5. Disclosure of sustainable poverty alleviation to people.
2.4. Raising capital implement sustainable poverty reduction policies
2.4.1. Mobilize and integrate multiple sources of capital, enlist more support resources, investment and unified management, rational use of funds for poverty alleviation goals.
2.4.2. Training policy, human resources development.
2.4.3. Support of the means of production:
2.4.4. Reviews of the implementation of policies for sustainable poverty reduction

MALIENG MINORITY’S LIVELIHOODS IN TUYEN HOA DISTRICT, QUANG BINH PROVINCE (DINH THI YEN-THU DAU MOT UNIVERSITY)

ABSTRACT
In recent times, mountainous inhabitants and ethnic groups, including Ma Lieng minority, have been considered by Vietnamese government and non-government organizations as the very subject to invest as well as to launch many plans and projects of development. So, people in certain areas could get ready access to such aids to invest and enlarge their stable livelihoods. Nevertheless, it was for some reasons that plans and projects’ effects were relatively low and insufficient to resolve the original causes of hunger and poverty; Ma Lieng minority as well as lots of ethnic minorities had to depend on one-way exploitation economy on available natural resources. This way to earn a living has exhausted natural resources and failed to completely eliminate poverty issues. Thus, the situation poses an essential need to replace old projects with long-term strategies of stable development on every side of the living, which mountainous community may benefit from.
By multi-discipline approach in ethnology, we are expecting to study the reality of using resources for Ma Lieng minority’s livelihoods so as to provide information for investment plans for stable livelihoods development. This is the most important goal – a basic standard of development strategy in Quang Binh province, in Viet Nam and in most of countries to improve people’s income without causing harm to the environment.

ETHNIC MINORITIES H’MONG IN DIEN BIEN PROVINCE WITH POVERTY ALLEVIATION MOVEMENT

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ABSTRACT

The reduction poverty movement has been a issues of concern of many countries in the world. The country, which wants to be equal to others one in the world first very one has to be comfortably and lives in comfort, satisfy essential needs. Wealthy people, strong country. But in that task in Viet Nam is included other problem, it is ethnic minorities.

Viet Nam is a country, which has many ethnics. In that one, H’mong people as to be an important member in Viet Nam ethnic minority people community. They live in a place has 800-1500 meters high above sea level. It’s an extensive area, include provinces along Viet – Trung, Viet – Lao border from Lang Son to Nghe An, mostly in North, North – West of Viet Nam such as Ha Giang, Lai Chau, Son La, Dien Bien…

According to the total of population census and accommodations in 2009, H’mong people in Viet Nam has population of 1.068.189 people, in Ha Giang has about 231.464 people among them, account for 31,9 percent populations in that province. In Dien Bien has population of 170.648 people, account for 34,8 percent population in that one, and account about 16,0 percent the total of H’mong people in Viet Nam. In Son La has 157.253 people, account for 14,6 percent population in that one.

Conclusion poverty reduction movement is a great challenge to the human development. It requires everyone in the world try their best in the war against poverty. Viet Nam in general and northwest in particular, reduced poverty is a great policy of Party and government. This problem is to be concretized in many policies, it is positively affected in poor people. However, reduced poverty in North – West (Dien Bien province) has been to face with many challenges such as high poorness rate in H’mong people, it will come back whenever…Therefore, this problem requires many attempts and expenditure. The reason of poverty is very complicated, it is necessary to have many suitable method in each of people, each of locals to effected ease poverty – alleviation quickly and unshakeable.

THE FOLKTALES OF VIETNAMESE ETHNIC MINORITIES AND THE PERCEPTION OF HARD FACTS

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ABSTRACT

Little work has been carried out with respect to the perception of reality in the folktales of Vietnamese ethnic minorities. This study proposes to fill the gap in culture and literature of the ethnic minorities studies by staking out the landscape of the perception of hard facts in the tales of the ethnic minorities. Applying a mix of method from folklore, literary criticism and socio-cultural approaches, I
seek to discover some kinds of hard facts mentioned in the tales minorities. The ending of the tales is not actually happy as people thought. Through content analysis, I find out the reflection violence, poverty, the battle of life, the role of money, the power of the rich and inequality of societies in the tales. Facing rough conditions in daily life, the characters are forced to use all their abilities to overcome to survive. These tales thus also deal with the question how to solve the hard facts and how to earn a better social position leading to a happier life. To dig out the layer meaning of these tales and put the tales in social-historical contexts, I aim to discover the relation between social reality and folk literature. Folk literature reflects reality and influences reality as well.

Keywords: ethnic minorities, hard facts, content analysis, folk literature

APPROACHING AND QUANITATING SUSTAINABILITY IN AGRICULTURAL LAND USE BY ASIA CASE STUDY IN THE RESETTLEMENT COMMUNITY MUONG BU, MUONG LA DISTRICT, SON LA PROVINCE, VIETNAM

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ABSTRACT
This paper presents the results of the analysis and synthesis of approaching and creation methods in research on sustainable development and sustainability quantification. Especially, this paper introduces the approaching, creating, and building of indicators to quantify sustainability in agricultural land use in Vietnam (ASI: Agricultural land use Sustainable Indicator). The indicator set was built by the author. ASI is open and, flexible set (Indicator and number of indicators in the indicator set can be changed). It can be applied to various areas. A case study for applying ASI to assess sustainability of agricultural land use in the resettlement community Muong Bu, Muong La district, Son La province, Viet Nam has shown an indicator set consisting of 17 indicators. It is divided into 3 parts. Part 1: Pressure indicators, Part 2: State indicators and Part 3: Response indicators. There are five sustainable levels, ranging from unsustainable level to sustainable level. Muong Bu gets 30.71/100 scores, at poor sustainability level. To use land towards sustainability, community should apply solutions to improve scores for indicators: population growth (PI2), changing soil loss by erosion (SI3), Using organic nutrient sources (RI4)...

COMMUNITY-BASED ASSESSMENTS OF FOREST PROVISIONING ECOSYSTEM SERVICES IN VO NHAI, NORTH VIETNAM

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ABSTRACT
Local communities - as direct users and managers of ecosystems - acutely do know about the provisioning services of forests in their area. Their assessment can support policy-making and strengthen the capacity to manage these services and natural resources on the local scale. Hence, the research investigates local people’s assessment of forest provisioning ecosystem services (FPES), focusing on their demands, uses and evaluations of the resource supply that contributes to their well-being. Methods of data collection are group discussions and household interviews in two ethnic groups of Vo Nhai district, North Vietnam. The FPES category includes timber, fuel wood, food (vegetables, bamboo shoots and wild animal meats), honey, medicinal plants, bamboo and ornamental species. The questionnaires were designed according to the conceptual framework and appropriate indicators of provisioning ecosystem
services in the Millennium Ecosystem Assessment, taking account of the local context. The research illustrates that local people have high demands concerning forests for domestic use purposes, especially, requirements of timber for stilt-house building, fuel wood and water supply. Although the local demands have changed over time, these services are still of major concern. FPES supplies were evaluated to be at low level and limited in quantity and quality. Local people highly relate the role of forests to their income and their daily lives which indicates their considerable dependence on forests. Based on local people’s assessment and awareness of FPES, policy makers and managers could be enabled to perform more effective targeting and forest management interventions.

Key words: ecosystem services, forest management, local demands, ethnic groups, Vietnam-north

ETHNIC MINORITY POVERTY REDUCTION IN MOUNTAINOUS REGIONS AND ECONOMIC GEOGRAPHY IN VIETNAM

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ABSTRACT

Vietnam is the homeland of many nationalities (54 are recognized by the Vietnamese government), among them there is up to 53 national minorities, representing around 11 millions (over 13%) who live in remote and mountainous areas from the North to the South of the whole country (estimated 2/3 natural areas of the country).

Ethnic Minority Poverty reduction in mountainous regions is one of vital problem because this is the country’s most centralized region in poverty. In the past years, The Government of Viet Nam has begun to give priority to poverty reduction programs for these areas such as development projects, rehabilitating rural roads, environmental protections, educational programs for ethnic peoples that contribute to improve in social welfare and raise living standards in poor areas. However, some programs have not met the desire of all areas, especially, some certain programs were not based on the geography economic geography of each area. Therefore, the effect of these programs were not highly appreciated and unsustainable.

According to this, the Vietnam government should introduce policies that based on the economic geography of each areas, especially for Ethnic Minority and Mountainous areas. The policy must be consistent with each geographic region, ethnic characteristics. This is a vital issue for contributing to sustainable and stable development in Vietnam.

SOLUTIONS FOR IMPLEMENTATION OF PROGRAM “RAPID AND SUSTAINABLE POVERTY REDUCTION“ IN BAC KAN PROVINCE

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ABSTRACT

Reducing poverty and hunger is an important policy of our Party and the Government with the aim to continuously enhance the living standard for the poor, especially ethnic minority people living in the mountainous area. In 27th December 2008, the Government issued Resolution No. 30a/2008/ND-CP about the fast and sustainable poverty reduction program in 61 poorest districts throughout the country.
This Resolution was adopted to apply on two districts of Bac Kan province, Ba Be and Pac Nam, which are mountainous area with high percentage of poor household (more than 50%) and large ethnic minority populations. In the same area, there is a combination between the mentioned above program and other reducing poverty program such as the government program 134, the government program 135-II, the government program 167, medical projects, and the program of providing credit for the poor. Consequently, there is a considerable result in quickly reducing the poverty rate, increasing the standard of living, and improving local infrastructure. Meanwhile, during the operation of the fast and sustainable poverty reduction program there is limitation on a number of points such as: limited capacity, disbursement process, the mechanism of program combination, the management system, etc. By conducting the scientific research in the area of the mentioned above districts and using the previous experience, we propose practical solutions to stimulate the implementation of the fast and sustainable poverty reduction program and expand this model to other districts.

ACADEMIC ADVISING FOR ETHNIC MINORITY STUDENTS AT UNIVERSITY TEKNOLOGI MALAYSIA

Nguyen Thuy Van*, Hamdan Saida, Tee Tiam Chaia, Norashuha Tajuddina, Noriadah Abdul Karima, and Mohd Rustam Mohd Ramelia

ABSTRACT

This study investigated the experience of ethnic minority students studying at one Research University in Malaysia, Universiti Teknologi Malaysia. The study examined the challenges and coping strategies used by the ethnic minority students to overcome those challenges and the roles of academic advising in ensuring that the students from ethnic minorities can complete their studies. The study used an in-depth interview to collect data from ethnic minority students. The interview was recorded and transcribed verbatim. The qualitative data were analyzed in the form of thematic analysis using NVivo10. The analysis revealed that ethnic minority students experienced many challenges and problems during their studies. The students commented that limited ability in communication skills is considered the root of their problems. In battling those challenges and problems they have to resort to various coping strategies. The study indicated that academic advising plays a n important role to the ethnic minority students. These students require additional helps and support from their academic advisors.

Key Word: Academic Advising for Ethnic Minority, Challenges Experienced by Ethnic Minority, Coping Strategies for Ethnic Minority

THE COMMUNICATION CHANGES THE ACCESS TO LIVELIHOOD SERVICES IN SAN CHI ETHNIC COMMUNITY

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ABSTRACT

In view of the theory of sustainable livelihood by the Department for International Development - UK (DFID) in 1999, an individual or household’s socio-economic situation can be understood as the aggregate result of the access to five groups of economic assets, including human, natural, material, financial and social assets.
The survey was conducted in 2 villages: Khuoi Be and Na Lay in Boc Bo commune, Pac Nam district, Bac Can province, with the questionnaire results from 40 households. The place chosen for the survey is the gathering area of San Chi community – the ethnic group migrating from China to Vietnam. Their traditional customs and livelihood is mainly based on agriculture production with outdated cultivation methods, and limited thinking. Restrictions on education, particularly language – Vietnamese is considered as the biggest barrier that affects the access to livelihood services of San Chi people.

RAISING ACCOUNTABILITY FOR REPRODUCTIVE HEALTH CARE AND FAMILY PLANNING: THE CULTURAL BARRIERS IN ETHNIC MINORITIES IN LAM DONG PROVINCE

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ABSTRACT
Apart from improving quality of health care in some projects on increasing quality of this service, raising accountability is also paid attention to: reforming supervision capacity in the health care systems at all local levels and ensuring people’s voice aiming at strengthening their access to the services. However, what problems does the process of enhancing the bottom up accountability in accessing and giving feedback from ethnic minority communities in remote areas face? In this article, we will analyze the cultural barriers in accessing and giving, feedback on reproductive health care services and family planning in Lam Dong province as below:

+ Some cultural barriers affect the access to the reproductive health care services and planning family: Demand of having many children which is influenced by labor demand and “maintaining kinship” ideology; economic circumstances, labor conditions, local knowledge.

+ Barriers in giving feedback, information response: Relations between patient – doctor, “prejudices” from health care service providers, language difference, accessing to people from local unions and authorities, “informal” feedback channels (through kinship, religious networks).

+ Recommendations: The potential for raising accountability: The role of local unions, civil organizations, the role of the “informal” feedback channels, etc.

KEY FACTORS DETERMINE THE FAILURE OF POVERTY REDUCTION STRATEGIES IN RURAL NIGERIA, AFRICA

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ABSTRACT
Nigeria is considered as one of the 25 poorest countries in the world although it is an abundance of natural resource country (crude oil, minerals resource) (Hassan, et al 2012). The government has already initiated several strategies aimed at combating poverty scourge in the country. However, such attempts have not produced the expected result. (Joseph O 2013).
The purpose of this essay is conducting a literature review of poverty reduction policies in rural Nigeria. Particularly, this essay will identify factors determine the failure of such policies, including the inconsistency of policy (trade policy and subsidy policy); widespread corruption, the failure of top-down model in policy formulation and implementation process (lack of the women participation, for example) (Hassan, et al 2012). In particular, this essay will focus on the issue of the poor governance of local government (weak capacity and the lack of accountability) in community management (Eboth 2010).

In the final section, this essay provides some suggestions for tackling with such issues. These recommendations are primarily contributing an integrated approach (Tacconi 2012) such as: institutional reform (Chamber 1995), enhancing local government capacity (delivering short training modules) (Kolstad & Søreide 2009); corruption combating by Press and Media strengthening (World Bank 2000), empowering people by involving them in participating in decision - making process, promoting gender equity by improving women’s participation during the policy formation and implementation process (Twyman 1998). In addition, promoting the role of the international organisations is also very important for the weak country like Nigeria (Grindle 2007).

SUSTAINABLE DEVELOPMENT OF ETHNIC MINORITY AND MOUNTAINOUS AREA IN QUANG NINH PROVINCE - RESULTS AND THE CURRENT RAISED ISSUES

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ABSTRACT
In 63 provinces and cities in Vietnam, Quang Ninh is one of the provinces has important strategic position about defence-security and brings economical, cultural, social characteristics. In recent years, Quang Ninh initially gained important achievements in developing economic and society of ethnic minority and mountainous area. The overall picture about ethnic minority and mountainous areas of the province had evolved plain thanks to the efforts made to implement the investment program of economic infrastructure facility, new rural construction and support policies people in economical - social development. Although ethnic minority and mountainous areas were invested in the development many fields, they still exist many difficulties and challenges that require mechanisms and policies to suit the practical situation.

The fundamental problems of the ethnic minorities in Quang Ninh province in sustainable development are: The quality of human resources are low; basic political systems are lack and weak; the social settings are varied and complex; economical thinking brings bold characteristic of small farmers; ethnic culture was eroded .... The above issues are always obstacles, negative impacts to sustainable development. Therefore, the province should focus on whole development and sustainable development of economical - political, cultural - social and defense - security sectors.

ASSESSING THE IMPACTS OF CLIMATE CHANGE ON LIVELIHOOD OF COMMUNITIES IN BA BE NATIONAL PARK BASED ON INDIGENOUS KNOWLEDGE OF ETHNIC MINORITIES
Truong Thi Anh Tuyet, Thai Thi Ngoc Tram, Robert Nurick, Michael Dine, Ha Hay Hoang

ABSTRACT
Vietnam is among the countries that will be worst affected by the impacts of climate change. Changes in climate can have serious implications for economic development, especially in the agricultural sector, due to its direct exposure to and dependence on weather and other natural conditions.
This report documents the findings of two weeks of community engagement in villages in Ba Be National Park, Vietnam. The focuses of the report were environmental changes and the impacts of these changes on the ability of local people within the National Park to sustain their livelihoods. The result of study showed that under the climate change effects, rainfall patterns are less predictable today, with rain falling at all times of year. The climate appears to be getting warmer: hailstorms no longer occur, drought is a more frequent phenomenon than in the past and the cold spells during winter are more severe than in the past. Such changes have affected considerably on the livelihoods of Ba Be landslide communities. It results in the prevalence of pests and the decrease of hybrid varieties’ yields and the death of many livestocks. Furthermore, observations of local people also showed the decline in environmental quality and the increasing pressure on rural livelihoods is accentuated by changes to weather patterns. Current and future adaptation strategies were also the subject of the engagement process.

Key words: climate change, livelihoods, communities, Ba Be National Park

PROMOTING THE ROLE OF WOMEN IN LIVELIHOOD CHANGE AND HOUSEHOLD ENTERPRISE DEVELOPMENT IN THUONG TRACH COMMUNE, BO TRACH DISTRICT, QUANG BINH PROVINCE

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ABSTRACT

Up to now, woman plays a vital role in building a happy home and develop the household enterprise. With regard to female of the ethnic minorities, most of them are put at the greatest disadvantages because of not having chances to take part in social activities, improve their awareness, etc. In terms of climate change, females of the ethnic minorities, which mostly belong to poor households, may become a high injury subject. Thuong Trach is a mountainous commune in Bo Trach district, located within the Phong Nha – Ke Bang Nation Park, one of the World Natural Heritages. It is a poor commune with a lot of difficulties, the total number of females (over 18 years-old) is 526 people. In recent years, along with the support and propaganda of government, Women’s Union and Farmers’ Union, etc in the district, women have been great efforts in expand the household enterprise. However, a very few household could maintain the economic growth model, the others have failed. Within the scope of this report, the writers would like to analyze the causes of success and failure in deploying the models in which women have participated; thereby determine the role as well as the proposed solutions to promote their role in the growth of household enterprise.

CONSERVATION AND DEVELOPMENT THE TRADITIONAL CULTURE OF COTU PEOPLE IN HOA VANG DISTRICT, DA NANG CITY: CHALLENGES IN THE CONTEXT OF URBANIZATION

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ABSTRACT

Co Tu ethnic minority is the 26th in the list of ingredients table of Viet Nam Ethnicity. Geographical distribution of ethnic group including the mountainous areas of Quang Nam province, Da Nang city and
Thua Thien Hue province. Cotu people in Danang is a branch on the path of ethnic segregation of Cotu people in Quang Nam province. During the existence and development, they also built the unique cultural values, diversity and contribute to richer Cotu ethnic culture in the Truong Son mountain area. Compared with Quang Nam and Thua Thien Hue province, urbanization rate in Da Nang city is occurring more stronger and being on all aspects of city. The Cotu people in Danang city is immersed in the process of urbanization here, and also accesses gain to the most favorables about economic - social; alternating residence status, closed settlement and exchange in all aspects of life between ethnic groups. This reduces the vast distance between the plains - the mountains; between the religious and the Kinh people in the region. But because of the Cotu communities in mountainous Hoa Vang district, Da Nang city remained a low base compared with the average in Vietnam, so did occur perturbations traditional culture of ethnic people, in the context of urbanization speed going strong here. So, how do the Cotu people in Hoa Vang district, Danang city maintains the integration and development of the region, and still keeps the presence of their traditional cultural values. This article would like to mention and analyze the challenges that the community are facing in the preservation and development of their traditional culture.

MIGRATION AND NATURE RESERVES ISSUES IN CUC PHUONG NATIONAL PARK

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ABSTRACT

In 08/01/1966, cuc phuong national park was established by decision no 18-qdln of forestry head department. cuc phuong national park was upgraded from cuc phuong preserved forest and cuc phuong national park has functions: management, protection and to attend to scientific research, tourism and study.

cuc phuong national park areas is 22.200 ha which belong to 3 provinces: ninh binh, hoa binh and thanh hoa. when national park was established, population lived in national park was low with 250 persons in cuc phuong commune (nho quan district, ninh binh province) and 500 persons in thach lam commune (thach thanh district, thanh hoa province), yen nghiep, an nghia communes (lac son district, hoa binh province). at this time, local people impacts to ecosystem in national park is not serious although local people was subsidiary to nature resources.

but from 1976 – 1986, management and protection activities were become complicated and had many difficulties because population in park increased quickly. cuc phuong national park management board has a plan to adjust population in national park core zone, move some communes to outside national park. this plan was one of project that was solved difficulties of ecosystem protection activities and improved local people life quality.

the article focuses on the study progress and assessment of the effectiveness of moving population out from the cuc phuong national park in terms of economic (poverty reduction), social and nature conservation.
ETHNIC MINORITY POVERTY: WHAT CAN BE LEARNT FROM THE SUCCESS AND FAILURE CASES?

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ABSTRACT
The paper goes to analyze the poverty situation of ethnic minority groups in Vietnam using data sets from Phase II of the Program 135. It aims to answer the following questions:
1. How have the standards of living of the ethnic minorities changed during the period 2007-2012?
2. Which group is the most successful in poverty reduction and which is the least successful group during the same period?
3. What are the main reasons behind the success and failure stories of those ethnic minority groups?

The research outcomes serve as instrumental input for policy dialogue and recommendation for adjusting the current policies and designing upcoming poverty reduction programs and policies for the ethnic minorities. To answer these questions, the study employs descriptive statistics and decomposition methods to analyze the factors that contribute to household welfare. Data source used in the study comes from a panel data of 6000 households in 400 communes of 43 provinces throughout the country; these data sets were collected in the Baseline Survey 2007 and the Endline Survey 2012 of Program 135 Phase II.

THE SYSTEM OF RICE INTENSIFICATION (SRI) – A SUITABLE TECHNIQUE, A NEW APPROACH AND BRIGHT PERSPECTIVES FOR SMALL RICE FARMERS IN THE SOUTHEAST ASIA COUNTRIES TO ENSURE FOOD SECURITY AND ADAPTATION TO CLIMATE CHANGE

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ABSTRACT
The System of Rice Intensification (SRI) is becoming known as a sustainable ecological rice farming approach, which not only raises production but also brings many benefits to small rice farmers. Its advantages have been shown under a variety of conditions of land and weather in more than 50 countries as well as in 29 northern, midland and mountainous provinces of Vietnam.

By transplanting young single seedlings at optimally reduced density, with suitable weed control and water management, and with increased organic amendments, the genetic potentials of rice plants are better realized, and beneficial microorganisms in the soil support the growth of better root systems, more tillering, and more grain filling. Such management creates better microclimates in paddy fields which reduce the development of pest populations and increase the harvest index. These dynamics result in higher yields, in reduced costs of production and labor requirements, also in increased other benefits for farmers like protecting the environment and reducing the negative effects of climate change.

SRI methods help farmers save 70-90% of their current seeding rate, 30% of chemical fertilizer, up to 50% of the labour for transplanting and 40-50% of irrigation water, with no herbicides use and less
need for insecticides. According to our evaluations, with these methods rice yields are increased by 13-29% and net income is increased from 8% to 32%. SRI can apply for all conventional or hybrid varieties, non-photosensitive or photosensitive, and on irrigated or rainfed lands. SRI supports rice plants more tolerant of the negative impacts of climate change such as cold and cloudy weather and less rain. SRI is found to be easy to practice; it supports farmers’ working in groups; it reduces hard work for women; and it is suitable for the New Rural Development Program in Vietnam. Based on evaluations done in Vietnam, SRI is seen as a suitable technique and ecological/social-based development approach for small farmers in the Southeast Asia countries to ensure their food security and adaptation to climate change.

SOLUTIONS FOR SUSTAINABLE DEVELOPMENT AND POVERTY REDUCTION IN LAM BINH DISTRICT, TUYEN QUANG PROVINCE

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ABSTRACT

Lam Binh district is a mountainous district, far from Hanoi capital 160 km, its natural area is 78,495.51 hectares, in which agricultural land accounts for 90.91%. The district's population in 2013 are 31,473 people, rural population account for 100%. There are 10 ethnic groups, Tay ethnic group accounts for 61.4% of the district's population. Lam Binh has 6,994 rural households, agricultural households account for 89.93%. The total production value is 358,422 million VND, while value of agricultural sector accounts for 63.4%. The topography of Lam Binh district has mainly high hills, physical and spiritual lives of the people are difficult, needy, with uneven educational level. Poverty reduction is a matter of special concern for Lam Binh district in particular and Tuyen Quang province in general. The Party, the State and Tuyen Quang province has had a number of mechanisms, policies and measures to reduce poverty in Lam Binh district, but up to now, poor households still account for a high rate and even tends to re-poverty, with an average rate of 53.81%, Lam Binh is the poorest district of Tuyen Quang province. With the current situation of poverty in Lam Binh, it is necessary to have appropriate solutions to accelerate the process of poverty reduction, gradually stabilize the lives of poor households, and thus create favorable conditions for households to escape from poverty and not re-poverty. This is a problem needs to be researched and resolved, then offered solutions to effectively implement sustainable poverty reduction in mountainous district of Lam Binh, contributing to growth and development of the district.

Keywords: Development, sustainability, poverty reduction, Lam Binh, Tuyen Quang

BIO-ORGANIC FERTILIZER PRODUCTION MODEL FROM IN-SITU RESOURCES OF ETHNIC MINORITY GROUPS IN LAO CAI

Dang Van Minh, Nguyen Duy Hai

ABSTRACT

In the framework of upland livelihood development with the support of DANIDA, Denmark, project of building processes to produce bio-organic fertilizers from in-situ organic resources such as straw, coal sludge and wastes from by-products of farming and livestock was carried out in the regions inhabited by ethnic minorities in Lao Cai province.

The project was carried out in 2 phases: Phase 1 from 2009 to 2011, mainly researching processes and developing models in 2 communes Coc San (Bat Sat) and Son Hai (Bao Thang) San, Phase 2 from
2012 to 2013 to expand the model to other villages in 3 districts (Bao Thang, Bat Sat and Bac Ha) in Lao Cai province.

With the participatory approach, the farmers in the upland of Lao Cai was directly involved in all the activities from researching processes and developing bio-organic fertilizer production models from local in-situ resources to using that fertilizer for crops.

The project has been very successful with the construction of 32 bio-organic fertilizer production models at households and production of hundreds of tons of fertilizer. The project also provided training for over 300 households, providing them documentation and effective organism to produce fertilizer by themselves. Furthermore, the project held two field seminars for provincial extension officers and farmers to participate and learn.

The most successful lessons of the project is to help ethic minority peoples in the upland have the knowledge and awareness in the use of available organic fertilizer to fertilize their fields. On the other hand, it is also important solution to save production costs and help protect the environment, increase soil fertility. Farmers produce bio-organic fertilizers by themselves instead of purchasing chemical fertilizer.

**THE ROLE OF ETHNIC MINORITY COMMUNITY IN LOCAL CULTURE CONSERVATION AND SUSTAINABLE TOURISM DEVELOPMENT IN NORTH WEST REGION**

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**ABSTRACT**

Sustainable tourism development has been an urgent issue towards the number of developed tourism regions and a compulsory requirement for the strategies and the plan of tourism development in potential tourism regions.

At present, along with developing tourism products to attract tourists and generate high profits from tourism activities in ethnic minority regions which has been seen as an effective solution of poverty and hunger reduction. Tourism environment protection and natural resources exploitation to serve generations in the future without causing any problems are debated, besides tourism development without spoiling cultural values. However, these questions have been questioned and no relevant reasons to explain, these issues raise difficult solutions in order to decrease poverty and hunger and develop sustainability in ethnic minority regions including North West.

In order to have deeper understanding of these problems and explain reasons in line with effective solutions to preserving local culture values in the process of developing sustainable tourism, community is viewed as an important element which plays a key role in sustainable tourism development.

**STUDY ON THE IMPACTS OF CLIMATE CHANGES AFFECTED TO PLANT STRUCTURE IN YEN BAI PROVINCE IN THE PERIOD 2010 – 2020**

Asso, PhD Cao Van – M.A. Nguyen Tai Nang
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**ABSTRACT**

Climate change has been a global concern, urgent towards humanbeings. In the context, Viet Nam is one of the most vulnerable nations caused by climate change. Perceiving the serious causes towards the
entire economy, environment and natural resources, Viet Nam are attempting effectively to cope with and decrease impacts of climate change.

Yen Bai is a hilly province situated in the mainland, in spite of not having effected directly by sea level, Yen Bai is also affected in different aspects.

According to the statistics collected in five decades shows that Yen Bai is coping with signals of climate change and it has been affected increasingly to agriculture in general and planting in particular. Conducting research and evaluation of climate change towards planting in Yen Bai is very important in order to face positively with negative impacts of climate change.


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ABSTRACT

With the knowledge economy at present, nations are focusing on developing human, because human development is not only a mean but also target of sustainable development. In reality, life of ethnic minorities in Viet Nam is hard, weak economy, disadvantageous transportation to approach public health care. Furthermore, in ethnic minority lifestyle traditional medicine made from plants are various, they often gather to eat and drink daily. Gradually, these practical experience of using plants as medicine become traditional knowledge, and existed as common rules. Thus, doing research to preserve traditional knowledge of medicine in order to protect and cure in ethnic minorities is necessary to contribute the development of combination between traditional medicine and modern medicine in Viet Nam. This paper is the result of conducted research in three ethnic minorities such as Thai, Dien Bien; Dao in Lao Cai; Muong in Hoa Binh to identify the situation of traditional medicine and health care of family and community in the mentioned regions, through that research, contribute to care for health people and create sustainable development of these ethnic groups.

SUSTAINABLE DEVELOPMENT AND POVERTY REDUCTION FOR ETHNIC MINORITIES IN PHONG NHA-KE BANG QB. SITUATION & SOLUTION

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ABSTRACT

Phong Ba – Ke Bang Region is residential locality of many ethnic minorities, mainly Chut and Bru-Van Kieu ethnic, in which the most notable is A Rem, Ruc, Sach (Chut) and Van Kieu, Khua, Tri, Ma Coong (Bru-Van Kieu). Those are peoples who have the most backward socio-economic development in Vietnam. Since living in the isolated regions in small groups, they do not have capability for self-development. The underdeveloped economic situation and GDP is very low, hunger is persisted, labor force is divided unevenly. Therefore, sustainable poverty reduction for ethnic minority is a urgent requirements with significant importance.

The article mentions to two problems:
- Status of sustainable development and poverty reduction for ethnic minority in Phong Nha-Ke Bang area in recent years (Situation, results, causes, limitation, etc)
- Proposal of specific feasible solutions contributed to promote sustainable development and poverty reduction for ethnic minorities in the near future:

  + Raising awareness, capacity development such as awareness propaganda, information provision, knowledge and technology technique transfer, mobilization of funds and community involvement with sustainable development and poverty reduction for ethnic minority practically and effectively.

  + Developing and conserving indigenous knowledge, progressive customary law (beekeeping techniques, honey, cattle breeding, cultivation method of rice cultivation, water rice, biodiversity conservation, crafts weaving, milling, grinding, recovery and development of Poi rice, Dooc alcohol to bring practical economic value for serving the development of production, employment, village management, environment protection and build sense of community, etc.)

THE ROLES OF WOMEN IN THE ETHNIC SAN DIU’S PEOPLE TO CONTROL THE ECONOMIC RESOURCES OF THE RURAL HOUSEHOLDS TODAY. (RESEARCH IN HOA TRUNG TOWN, DONG HY DISTRICT, THAI NGUYEN PROVINCE)

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ABSTRACT

One of the purposes and solutions for both sustainable economic, cultural, social and environmental development and justice and social progress, is gender equality and women position improvement. When evaluated from gender’s opinion, sustainable development is required the complete participation and equality of women in all levels. In this paper, the role of women in San Diu ethnic minority is initially sketched out in monitoring economic resources of the rural families currently. Based on gathered information, the gaps in gender researches and the role of women, especially women of ethnic minorities are presented. The paper aims to propose several perspectives, orientations and solutions to certain Northeast and ethnic minorities in general for enhancing the role of ethnic minority women in household economic development, consequently making rapid poverty reduction and sustainability of ethnic minorities and creating favorable conditions for ethnic minority integration in the flow of country development process which is implementing industrial chemical and modernization for wealthy people, strong country, just and civilized society as soon as possible.

MODEL OF LOCAL TRAVEL ASSOCIATED WITH THE DEVELOPMENT OF THE BROCADE WEAVING CRAFT VILLAGES IN MAI CHAU DISTRICT- HOA BINH PROVINCE

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ABSTRACT

Mai Chau is a mountainous region located in Hoa Binh Province, approximately 135 km from Hanoi (3.5 hour drive) and 65 km from Hoa Binh town with an area of 564.54 km2 and a population of 55,603 people. Mai Chau brings a different image about Vietnam, inhabited with minority groups of North-western part of Viet Nam such as Thai, Dao, Muong, H’mong, mainly Thai people, accounting for almost 90% of the district’s population. People live in rural areas and depend mainly on agriculture, so the rate of the poverty is still high, with nearly 6.5% (2010); people’s cultural standard is still low and their life has many difficulties. In these regions, Thai people live concentratively and preserve the unique of
cultures and customs, especially the custom of living in stilt houses. In Mai Chau valley, there are various cultural monuments, landscapes and archaeological sites. Mai Chau also attracts tourists by brocade weaving craft villages bearing deep national identity, of which preservation and development have been restored and focused in some villages. Brocade products have not only met the needs of local people but also become goods favored by a large number of consumers. In recent years, Mai Chau has attracted thousands of domestic and foreign tourists visiting each year that was voted by the U.S. magazine “Business Insider” to be one of the 10 tourist destinations giving visitors interesting experiences. Currently, a number of travel companies have been bringing tourists to Mai Chau, but have not fully exploited the potential of the locality. Therefore, the economic benefits from tourism are not very high.

Moreover, the forms of tourism and the production of brocades have also been occurred individually in a certain number of places in the area, and have not been organized with good quality in a large scale. Therefore, the deployment of local travel patterns associated with the development of the traditional brocade weaving craft villages might be one of the most effective options for sustainable poverty reduction for ethnic minorities. This would be an integrated solution supporting local people out of poverty, accessing to the market economy, developing tourism and providing a stable source of income for people in remote mountainous areas as well as remote areas of ethnic minorities.

LANGUAGE STUDY OF ETHNIC MINORITIES IN THE CONTEXT OF INTEGRATION IN SOUTHEAST REGION

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ABSTRACT

It is in the context of integration of many languages of ethnic minorities in Vietnam that the Southeast (SE) region has been in the process of formation and development of more integrated values and rich cultural diversity. With its favorable geographical location, adjacent terrain of many regions of the country particularly the eastern region is considered a dynamic economic potential as the country moves toward a market economy.

Along with its fast growth and comprehensive development, the SE is considered a region where population shifts and is associated to the highest in the nation’s local area. This has changed the language situation of ethnic minorities in the SE.

Derived from the actual situation as well as the results of research in foreign language and ethnic minorities in the eastern part, many articles have approached the problem from the structural changes in the population to learn the research both local language structure (including phonics, vocabulary, semantics, grammar) and social contents (the situation changes, multi-language status, language education, culture language) of this region. These are the current situation issues raised in the study of the language of minorities in the Southeast.

In the study of social sciences, the size and structure, and the population growth as well are considered as prerequisites. It is the crystallization of the socio-economic factors which is the measure of decision on the existence and development of society. Language is a social phenomenon and resources to the development of the country which is a factor that constitute the nation's cultural identity.

In regard to the development of key players, human and structural elements are always considered the main issues raised in terms of research on sustainable development of the region. The objective was to find out the factors that promote or hinder change and point out the priority areas for policy advice to regional development.
Considering the field of language, the construction of a suitable language policy for the people, the language situation of a nation must be placed on the platform to fit into two (2) angles (i) in accordance with the overall general policy, and (ii) consistency with expectations of the people in the regional and national levels. Fishman (1966) states that: the ethnic minority communities who have a large number of residents are not encouraged to express, maintain and develop the elements of political, cultural and economic development, hence, no development occurred.

In the multi-ethnic country with multi-language, language problems and ethnic issues are always placed on political, social, cultural complexity and sensitivity. The ethnic composition has changed due to the shift of population flows in and out of the territory with no small influence on the language situation. This is due to the population which is one of the determinants of the nature and position of language, and the dominant social function in relation to other languages within the region and inter-region of the country.

**EXPLANATION ON CAUSES OF POVERTY OF ETHNIC MINORITIES FROM THE PEOPLE’S PERSPECTIVE INCLUDING SOME SOLUTIONS FOR THE DEPLOYMENT AND EXPANSION OF MODELS OF WORK FOR SUSTAINABLE POVERTY REDUCTION**

*Dr. Giang Khac Binh, Faculty Ethnicity*

*Ethnic Schools Officer*

This report includes four events:

a) **Basis of poverty in ethnic minority**
   - Presentation of data systems on the status of ethnic minority poverty.
   - Analyze and evaluate the effectiveness of the investment policy for ethnic minority areas and prior to innovation MN (1986) to the present.

b) **Causes**
   Analysis of causes from the management perspective and from the perspective of the cause, assess the views of the people.
   + Causal analysis from the perspective of managers: the difficulty of the terrain, the decline in arable land, occurrence of extreme weather, passivity, dependence to properties of the people...
   + From the perspective of the people: the impact of programs and policies that distort economic and cultural status, changing production practices, the impact of erosion of urban culture to the minority community, the difficulties of integrating the community, find new business practices, poor adaptability in a changing environment, vulnerable by factors extraneous ...

c) **A number of urgent measures for the alleviation of life**
   Conduct of research and surveys, grouped objects. For each of the above groups, there should be appropriate support measures, firstly to stabilize their lives, then up to the construction and application of models for sustainable poverty reduction: Support from production, to create favorable conditions for the people to have access to capital from banks, propagate, disseminate and guide new ways to do business, communication, advocacy, instruction methods, and ways to enhance the ability to adapt to the changing environment.

d) **A number of solutions for the deployment, improvement, and building a model for sustainable poverty reduction**
   The report did not provide the model of sustainable poverty reduction because in reality there are many models that have been developed. The report aimed to implement effective models with some directions as follows:
   - Promoting the role of prestige in the community,
   - Disseminating information, and
   - Developing the community...
COMMUNITY TOURISM - TOOLS POVERTY REDUCTION FOR ETHNIC MINORITY IN NORTHERN MOUNTAINS

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ABSTRACT

Community Tourism is one of the tourism type by community organizing, management, master themselves in order to bring economic benefits and environmental protection by introducing to visitors the features of local (the ancient villages, explore the natural forest mountains, ethnic culture, ...).

With an area of more than 101,000 km², the mountainous province Northern Vietnam (Cao Bang, Ha Giang, Lao Cai, Lang Son, Bac Kan, ...) have rugged terrain, separated by several mountain blocks and limestone mountains that make up the winding along the spectacular natural landscape, untouched. Besides, it is also the home of many ethnic minorities with the unique culture and diversity, vibrant regional cultural identity, is favorable for the development of various types of tourism, including tourism's community.

In the guidelines for poverty reduction through tourism by The World Labor Organization ILO has also confirmed the general travel and tourism community in particular had three major impacts to the poor: extra income; local economic development and people's livelihood; the impact on the natural environment – their culture. As such, those featured on the natural environment and humanistic environment of the ethnic minorities, the Community Tourism is seen as a tool of poverty reduction and sustainability.

IMPROVING CAPACITY TO AMELIORATE THE LIFE OF THE POOR ETHNIC MINORITY COMMUNITY IN LANG SON PROVINCE

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ABSTRACT

The program "Community Action Lang Son city" in 6 pilot village of Tay ethnic Phase 3 Mai commune, Hoang Dong and Quang Lac from 2009 to 2012, with the aim to arouse all and capacity building for local people on site, so they can self-develop its process.

The program uses methods provide participants, the guiding principle is to promote people's initiatives, including the steps of: (i) identify the issues that most people in the village are also interested in; (ii) identify issues in mind pimp stakeholders can work together to resolve; (iii) discuss community to find solutions to the root position and the process of decision-making.

Activities were people choices made in the past year include roads, construction of gravity water tanks to serve the needs of living and organizing community savings groups.

The program has created a marked improvement on the role of the people and the government in improving the lives of ethnic minorities, people from passive always looking for caring of government at all levels you become proactive planning, offer solutions, is considered to improve the operations of its own and requires only partial support from the government.

Keywords: community action, participatory methods, community initiatives, capacity building
IMPROVING SANITATION IN THE ETHNIC MINORITY AREAS IN THE NORTHWEST MOUNTAINS SITUATIONS AND SOLUTIONS

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ABSTRACT

The author presents the content investigated by the survey form and in-depth interviews in two communes Xim Vang and Lang Chieu of Bac Son District (Son La province) and two communes of Toa Tinh and Pu Nhung at Tuan Giao district (Dien Bien province). Through check processing by SPSS software and analytical results, the authors give some outlines of environmental sanitation situation in Bac Son district (Son La province) and Tuan Giao districts (Dien Bien): clean water, productive activities affect environmental sanitation, building latrines and waste water collection, waste ... Through state sanitation research in ethnic minority areas in northwest region, the specific research sites in Son La and Dien Bien, the author draws a number of issues to note in improving sanitation. The author has given 5 solutions to improve environmental sanitation conditions in ethnic minority areas in northwest region: raising awareness; reviewing and developing mechanisms and policies related to environmental sanitation; enhancing the application of science and technology in improving environmental sanitation; enhancing resources for improving sanitation conditions; building models to improve sanitation in accordance with economic conditions, culture, ethnic society in each region.

AGRICULTURAL EXTENSION AND SILVICULTURE FOR ETHNIC MINORITY IN THE MOUTAINOUS REGION

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ABSTRACT

Ethnic minorities in Vietnam live mainly in mountainous areas - the region accounts for about 2/3 of the country's natural area, where the terrain is diverse and difficult of access. Poverty and sustainable development are the major issues and are concerned with in this region. More than 10 million poor people live in the mountainous area and almost of them are ethnic minorities. There are over 80% of ethnic minorities and mountainous people based mainly on agriculture and forestry sector for their income. Their lives depend heavily on natural resources. Due to the Government's efforts through pro-poor policy as well as development programs which aim to support poverty areas, the poverty rate have significantly reduced. The hunger is no longer basically but the poverty rate is still high. Possibility of returning poor situation is quite big and it is difficult to solve this problem in short time.

The report shows an overview of policies and agricultural extension programs related to community of ethnic minorities in mountainous areas that have been deployed in Vietnam in recent years and the results have achieved. The paper also raises obstacles and difficulties in implementing the policies as well as shortcomings that need overcome in order to achieve the goal of sustainable development for this community in the future.
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