

## LESSONS AND RECOMMENDATIONS FOR FOOD SECURITY OF ETHNIC MINORITIES IN THE UPLAND AREAS OF VIETNAM AND LAO PDR

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Situated in the upland areas of Southeast Asia, 4 villages of Thai and Khmu ethnic groups selected for the study by Project “*Coping Mechanisms of the Ethnic Minorities in Upland Areas of Vietnam and Lao-PDR as Responses to the Food Shortage: Strengthening Capacity and Collaboration in Studying between the Institute of Anthropology (Vietnam) and the Institute for Culture Research (Lao-PDR)*” share some similarities: All villages are influenced by monsoon tropical climate. In addition to rice cultivation (in wet or slash-and-burn land), villagers grow popular crops such as corn, batata, taro, cassava, bean; and livestock such as buffaloes, oxen, pigs, chickens and ducks. Natural resources still play important roles in ensuring their food sources. At present, formal social institutions of these villages are parts of the political systems of Vietnam and Laos under socialism. In each village, besides the village management board, there are other socio-political organizations, such as party cell and branches of the peasant association, women association, youth union, old age association, etc. Development programs and projects are all implemented through these social institutions. In the context of economic transformation, all villages are influenced by the market economy at various rates. However, in recent years, the governments of Vietnam and Laos have promulgated priority

policies for the development of ethnic minorities.

In addition to similarities, there also exist differences among villages selected for study, which have important impacts on food security. In high mountainous areas, terrain and climate characteristics are diverse. In Vietnam, although two villages of the Thai and the Khmu are only 3 km away from each other ‘as long as the crow’s flight’ and both are located alongside the national road and 2 km away from the district center, they belong to two different climate sub-regions. Discussions with community members show that there have been certain years when drought and heavy wind damaged crops of Khmu people, while the life of Thai people nearly remained intact. Regarding Thai and Khmu villages in Laos, there are fundamental differences in habitat and cultivation environment between them: the Thai (Taideng) reside in the valley and raise wet rice while the Khmu live in the upland areas and cultivate slash-and-burn fields. The environment and history of residence also lead to differences in agricultural cultivation: In both Vietnam and Laos, the Thai are more familiar with the tradition of gardening and animal husbandry, especially pigs and fish farming, than the Khmu. Thai people also have more advantages in language and exchanges than

the Khmu: In Vietnam, thanks to the enduring residence near the Viet (Kinh), many Thai people are able to speak the mainstream language; while in Laos, Thai is their national language, which greatly contributes to creating barriers to the market economy and differences in development policies between two Thai groups

Owing to similar and different natural, historical, economic, social and cultural conditions above, there are also similarities and differences in food security of the same ethnic group in two nations.

In two countries, food security of Thai people is better ensured than that of Khmu people. Regarding the Thai in Vietnam, 76% of households have sufficient food, while that of the Thai in Laos is 88.2%. Meanwhile the rates of Khmu households having sufficient food in Vietnam and Laos are only 8% and 29.6%, respectively. The high proportion of Thai households having sufficient food in both countries comes from their intensive rice cultivation (including wet field and slash-and-burn cultivation), commercial crop production (bananas or garlic), animal husbandry development (buffaloes, pigs, fish) and the diversification of income sources (from agriculture, handicrafts, services, and occupations in government agencies). Whether they have (as in Laos) or do not have (as in Vietnam) advantages in natural capital over those of Khmu people, they are able to utilize social and human resources to maximize their land potential. Among the Khmu in Vietnam and Laos, the rates of households in shortage of food are significantly high - over 90% and 70%, respectively. Main reasons for food shortage in this ethnic group are limited

investment on intensive cultivation of food crops; dependence on natural resource exploitation and employment; and undiversified income sources. Poor households' solutions for coping with food shortage are borrowing from relatives and the community, expense reduction and employment. Regarding the Khmu in Vietnam, the usury by private merchants is still common.

There are also similarities and differences in the trend of food security among ethnic groups in two countries. Challenges facing food security among ethnic groups include population increase and market fluctuation caused by limited natural capital and adaptability to the market among households in rural communities and ethnic groups. Regarding the Thai in Vietnam, their main cultivating material is sloping land with limited areas, while the reclamation of terraced fields, although still available, requires high expenses. In the case of the Thai in Laos, most of their wet rice fields allow only single-crop cultivation. Regarding the Khmu in both countries, although the area of slash-and-burn land per capita is still substantial, it is likely that the land will gradually degrade if people still maintain the traditional cultivation that necessitates gradual reduction of the time between two cultivation cycles on a given slash-and-burn land. Market fluctuation, especially in the recent prices of petrol, crop varieties, fertilizers, insecticides and food, also generates new challenges to food security among ethnic minorities in two countries. The market price fluctuation requires inhabitants to set up new strategies in production investment and business in

order to adapt to changes, or else they will fall into poverty again.

Through studies on the situation and strategies to cope with the food shortage among ethnic minorities in the upland areas of Vietnam and Laos, it is possible to generalize some lessons as follows:

*1. Food security of ethnic minorities in two countries must be included in the strategic goals*

Nowadays, food security is a burning issue worldwide, especially among ethnic minorities living in mountainous areas whose incomes are fundamentally based on agriculture. In the Vietnamese case, despite its position as the second largest rice exporter in the world (5 million tons in 2007), there are still approximately 50% of households among ethnic minorities in mountainous areas living below the poverty line, of which the number of ethnic minority households in shortage of food accounts for around 20 - 80% (Vietnam Development Report, 2004). Agricultural land resource, the important basis for food security guarantee, has become increasingly limited. Among communes in the program 135, agricultural land only accounts for around 10% of the total area and the area per capita is only 800 square meters. There remain few areas with potentials for wet-field reclamation while the agricultural land fund has almost run out. From the angle of sustainable cultivation, in Vietnamese mountainous areas nowadays, there are still around 280,000 households living mainly on slash-and-burn cultivation, the productivity of which is only about 1 ton of rice/hectare/year and the output is highly unstable. It is estimated that the average

food income of ethnic minorities in Northern mountainous areas is capable of satisfying only 67% of the food demand (Le Hai Duong, 2006, pp. 100-110).

In the case of the People's Democratic Republic of Laos, although the country has achieved self-sufficiency of food at the national level, there are about 52% of households living below the poverty line. Although science and technology have initially been applied in Lao agriculture, most of wet rice fields are suitable for only single-crop cultivation owing to substandard irrigation. Regarding upland ethnic minorities living on slash-and-burn cultivation, the food situation is even more unstable. In some localities, the annual average food output normally reaches less than 300 kg per capita ([http://www.nafri.org.la/documents/LSUAFR/P/fieldreports/03/0305\\_foodsecraintree.pdf](http://www.nafri.org.la/documents/LSUAFR/P/fieldreports/03/0305_foodsecraintree.pdf)).

In terms of development potentials in coming decades, in general, the livelihood of ethnic minorities in the mountainous areas of Vietnam and Laos still depend on small agricultural production, and it is impossible to solve the food shortage in the short term. As a result, it is necessary to have a realistic view on strategic goals for development in this region so that the guarantee of food security becomes the fundamental and long-term goal.

*2. Fostering the green revolution among ethnic minorities in the mountainous areas suitable to the people's abilities and cultivation traditions*

The green revolution is a stage of global agriculture that few communities can stand apart. The content of the green revolution, in fact, is the application of

science and technology. In recent decades, the green revolution has brought about remarkable changes in productivity and agricultural output, and saved a number of nations and millions of people from hunger.

The green revolution has been implemented by ethnic minorities in the Northern mountainous areas in Vietnam in the late 1960s and in Laos in the early 1980s ([http://www.eurekalert.org/pub\\_releases/2006-03/irri-tgr031506.php](http://www.eurekalert.org/pub_releases/2006-03/irri-tgr031506.php)). At the beginning the green revolution here was mostly the application of new rice varieties in the valleys. A number of other new food crops (corn, cassava, batata, potato, and vegetables), fruit crops (plum, peach, pomelo, and longan), and industrial crops (tee, coffee, cotton, and mulberry) were also cultivated. In addition to cultivation, inhabitants have applied new varieties in animal husbandry, mainly pigs, chickens and fish. While the application of new varieties in farming is normally associated with the use of fertilizers and insecticides, that in animal husbandry is associated with industrial food and disease prevention. The green revolution in this region is also associated with some mechanization in agricultural production, especially in cultivation (irrigation, land processing, and transportation).

The green revolution in studied areas in two countries had been implemented for many years, its acceptance and success in different areas differed. In the case of Thai people, the application of science and technology in agricultural cultivation only succeeded in the Natoum Village of Laos. In the Pieng Pho Village of Vietnam, owing to sloping land conditions, the application of science and technology in cultivation still faced many

difficulties. In slash-and-burn cultivation, Pieng Pho villagers were still using traditional crop varieties and farming-tools. Only in animal husbandry had they used hybrid pig varieties, a portion of industrial food, as well as new fish varieties with high productivity. Regarding the Khmu in both countries, the application of science and technology in agriculture was generally with limited success, although local governments and projects implemented a number of agricultural and forestry extension programs and experimentation on wet rice plantation, high-valued commercial food and fruit crops, pigs and fish farming.

It was obvious that the guarantee of food security in studied areas depended on the application of science and technology in agriculture. The issue is: why did Thai people apply science and technology better than Khmu people? Besides the influence of soil and human capabilities, it is impossible not to mention the roles of authorities in implementing agricultural and forestry extension. In two Khmu Villages in two countries, normally agricultural and forestry extension activities, such as wet rice cultivation, fruit crop growing, hybrid pigs and fish farming were not associated with cultivating tradition. While guides were mainly ethnic majority people speaking the mainstream language, villagers were limited in that language proficiency. In addition, the locations for demonstrating new production techniques (in cultivation and animal husbandry) were not infrequently in district centers, too far for villagers' acquiring and applying new knowledge. It is possible to conclude that most of these agricultural extension activities for this ethnic group were unsuccessful, as they were inaccessible

to villagers and incompatible with their cultivating traditions.

*3. Diversifying incomes must be associated with giving priorities to activities generating high incomes*

Diversifying incomes is the nature of the small-agricultural economy, especially that of ethnic minorities in mountainous areas. Their incomes depend on cultivation, animal husbandry, handicrafts, hunting, gathering or even employment, trade, barter... Diversifying incomes requires land, labor, capital sources, knowledge and social networks. In this context, normally rich households acquire more income sources than their poor counterparts.

When the economy of ethnic minorities in mountainous areas is associated with the market economy, although income diversification is still important, it is necessary to give priorities to activities generating high incomes. Because the nature of the market economy is constantly changing with supply-and-demand, it is easy for investment on production to go bankrupt when dumping occurs if adaptation to change is lacking. The lessons of fruit and sugarcane farming for raw material from some ethnic minorities in Northern mountainous areas (Tran Van Ha and Le Minh Anh, 2006) and coffee growing from ethnic minorities in Central Highlands (Eva Linkog, 2005) in Vietnam are still worth considering. In those areas, when product prices went down and incomes could not compensate for expenses, peasants had to sell products at low prices or cut down their crops and replaced them with food crops. This pushed many households into poverty and hunger. However, despite risks the market brought about, there were

only limited opportunities for ethnic minorities in mountainous areas to escape poverty, if their small agricultural economy were not linked to the market economy.

The lesson here is, while diversifying incomes to prevent risks, it is necessary to specify advantages in facilitating the development of products by households and communities that can be linked to the market and generate high incomes. The production and trade of bananas in Pieng Pho Village, in Vietnam and that of garlic in Natoum Village, in Laos are applicable examples of giving priorities to generating high incomes. These crops were truly commercial, which could help households in poverty reduction and hunger elimination or even become rich. Meanwhile, in the two Khmu villages in two countries, villagers did not create any product that could be associated with the economy, which accounted for their limited incomes.

*4. Constructing food support mechanism for ethnic minorities in mountainous areas*

The economies of Vietnam and Laos were transitioning from state subsidy to the market mechanism, of which Vietnam's economy is defined as the socialist-oriented market economy. During state subsidy, food was an important item, which led to the coupon-based food distribution to civil servants, while peasants mainly lived on self-sufficiency. Moving to the market economy, except the national reserves, fundamentally the state no longer controls the food market.

In mountainous areas nowadays, food markets are controlled by private traders, who are agents, distributors and small merchants. Owners of food agencies, who

normally stay in urban areas and have substantial capital, usually purchase food from not only the local market, but also the deltas when food shortage in mountainous areas occurs. Distributors operate in many places, even in the middle of villages, selling a number of goods, including food. Regarding small food merchants, they purchase food from agents or at the market then resell to consumers. The network of food markets in mountainous areas is mainly controlled by the majority people.

Private traders not only control food prices; agents and distributors may also become usurers. The situation of Khmu village in Vietnam was a typical example of this fact: all households were indebted to a rice agent in the district center. Some studies also show that this also prevailed in many other localities and ethnic groups (Vuong Xuan Tinh, 2001; Tran Van Ha and Le Minh Anh, 2006).

In the context of food price fluctuation at present, it is necessary that the government have policies of subsidy for poor ethnic minority households in order to ensure food security for ethnic minorities in mountainous areas. The support should not be limited to only food aid in cases of crop failure or hunger, but must be guaranteed through mechanisms that control and stabilize food prices in this region.

##### *5. Giving priority to investment in human resource*

Study results have shown that human resource plays an extremely important role in ensuring food security for ethnic minorities in mountainous areas. The case of Vietnam is an obvious evidence for this conclusion: While

fundamentally sharing the same conditions in land, geography, climate and opportunities to access programs and projects of hunger elimination and poverty reduction, most of Thai households could satisfy their food demands while most of their Khmu counterparts were in shortage of food. In the case of Laos, although the Khmu were not in shortage of land and had better opportunities to access the market than the Thai, their food security was much more unstable than that of the Thai, the profound cause of which was the difference in human resource.

There are many factors constituting human resource, the most important of which are educational standard, production capability and management, and the ability to integrate into the market economy. These factors are based on many conditions, one of which is the intimate relation with the inhabitants' traditional culture, which are significantly expressed through lifestyle, a relatively sustainable element. The Thai and Khmu belong to two different cultural traditions: the wet rice cultivation and the slash-and-burn cultivation, which have great influences on their production strategies.

The success of development programs and projects concerning food security among ethnic minorities in mountainous areas, to a great extent, depends on the acceptance by the subjects, i.e. the beneficiary. Consequently, among investments on food security in this region, investment in human resource must be given top priority.

From the above lessons, we have put forward recommendations to ensure food security among ethnic minorities in mountainous areas of Vietnam and Laos as follows:

1. In development programs and projects for ethnic minorities in mountainous areas, it is necessary to set aside a suitable provision for production in order to generate incomes. In Vietnam, in the 1<sup>st</sup> phase of the Program 135, the investment capital for production, only 2 - 4%, was too small.

2. Establishing agricultural and forestry extension programs suitable to natural conditions and cultivating traditions of ethnic groups to improve the forestry extension system at commune level, in which native agricultural and forestry extension staff should be given priority.

3. Supporting households and communities to promote local potentials to achieve diversified incomes in order to help villagers develop commercially advantageous products and increase their incomes.

4. Supporting villagers to establish and develop the community's food security fund based on aids from the state and households' contribution. The state should establish food agencies at district level to be responsible for selling food at supported prices to poor ethnic minority households when food prices increase.

5. Improving educational standards for villagers, especially children of school ages, as well as for village and commune (Vietnam) and section (Laos) cadres.

6. Creating favorable conditions for villagers to access vocational training opportunities, and improving their skills in using investment capital and business to better adapt to market changes.

7. Supporting villagers with health care services, firstly improving the fresh water supplying system and latrine; increasing

investment in village medical stations to improve their disease prevention capability and common disease treatment; and to increase medical check-ups for the poor.

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