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THE STRATEGIES OF HIGHLAND DEVELOPMENT IN THAILAND

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ABSTRACT

Highlanders in Thailand are diverse not only in ethnic origins but also in their endowment. Ecosystems, land, labor, capital, culture and experiences are sometimes very different, making highland development a daunting task. This paper highlights diversity among highland communities and needs for different strategies dealing with issues regarding technologies, markets and community development. Agroecosystem analysis and farm typology are some tools that can be used to differentiate socio-economic and biophysical settings as well as groups of farmers. Differentiated strategies based on differences in background environments are needed for highland development and can be derived through participatory process of learning and research as well as through programs for people empowerment. The design of highland development strategies should be made based on the principle of participation, differentiation and empowerment.

Keywords: highland, diversity, agroecosystem, empowerment, development strategies

INTRODUCTION

Diversity among highland and communities

Highland communities are scattered in 20 provinces in Thailand totaling around 1.0 million people in 3,829 natural villages in 2008 (Highland Research and Development Institute, 2008). They are very diverse in ethnic backgrounds. There are at least 15 ethnic groups in Thailand, the majority of whom are Karen, while other ethnic minorities include Hmong, Lahu, Akha, Mien, Yunnanese, Lawa, Lisu. Each community has their language and culture. Their farming practices are quite diverse with a variety of bio-physical settings. For example, the Hmong and Lisu are commercially oriented, formally living in previous opium production zones

while the Karen are normally rice production dependent and self-sufficient in their livelihoods living in lower altitude zones. Poverty and lack of social security have been long standing problems among the highland people. Many highland communities have long been exposed to development agencies—some related to opium replacement objectives, other to national and environmental security ones-- e.g. those from UN Drug Control Program, Australian Aid, USAID, the Royal Project, the semi-autonomous Highland Development and Research Institute (Public Organization) (HDRI) and various non-government agencies. Those agencies have their own orientation and strategies, making highland farmers' exposure to outsiders quite variable. As modernization accelerates, commercialization is rapidly rising in the highlands, making some communities better off but associated with it. Several environmental and health problems emerge such as deforestation, soil degradation, pollution, conflicts of land use and health hazards. These problems are more pronounced in some highland areas than others. The process of development happening in the highlands has increased the social and economic disparity among the people.

Highland women were found to be key actors for farm production, household well-being, drug abuse prevention, treatment rehabilitation and income generation (FAO, 1998, United Nations Office of Drugs and Crime, 2005). Ethnic women were also found to have certain indigenous knowledge for natural resource management and health care quite different from men (Nawichai, 1999, Thinrach, 2004). Kunstadter (1978) and Nawichai (1999) confirmed that Karen women in Northern Thailand were major actors to make use of non-timber forest products for food and their roles are crucial for highlanders' food security. They not only collected wild food plants but also propagated them in their home gardens. FAO studies (1998) found that women had a leading role in caring for and using forests. Women not only gathered food to feed their families but also fuel wood for cooking, fodder for livestock as well as collecting barks, roots and herbs to use as medicines. They managed forest nurseries for income, conserved valuable forest species, plant trees to prevent soil erosion and floods, and help to preserve forest ecosystems whose existence depends on biological diversity. Researching in Northeast Thailand, Price (1997) found women were marketers of wild food products thereby providing significant income to their households. Thinrach (2004) found highland men and women had differentiated roles in farm production but responsibility for household tasks rested mainly on women.

NEED FOR GOOD AGROECOSYSTEM AND SOCIO-ECONOMIC ANALYSIS

With diverse biophysical, socio-economic and cultural backgrounds of the highlanders in Thailand, there is a strong need to analyze these profiles systematically so that any plans for actions or interventions can be made appropriate to the biophysical and socio-economic conditions of the people. Agroecosystem analysis was proposed by Conway (1983, 1985) to systematically understand farming, ecosystem and communities both in terms of space and time. Later on, systems thinking was furthered developed and used in agriculture and together with participatory approach, emerged soft systems methodology to see agriculture as a whole with people rather than crops or trees or soil as the center (Bowden, 1991, Schiere *et al.*, 1999, Alrøe and Kristensen, 2002 and Tavella and Hjortsøb, 2012)

Attempts to classify Thai highland communities for better understanding were first made by Thong-Ngam *et al.* (1997). Thong-Ngam *et al.* (1997) identified the historical profile and changes in highland farming systems of Akha communities in Mae Salaep and Paka Sukjai areas in Chiang Rai. Diverse farming systems there were classified into three groups, based on

farmers' differential strategies and objectives. The three groups were further divided into subgroups. Type A farmers were cash crop-based, practiced market-oriented strategy with limited capital. Type B farmers were identified as upland-rice based, and practiced self-sufficient strategy. Type C farmers were paddy-based, practiced investments and market oriented strategy. Each group was facing different challenges and achieved different farm performances. They argued that Type A farmers seem by far the most fragile. Types A and B farming systems are equally at environment risk involving increasing soil erosion. Type B farmers will sooner or later have to give up upland rice farming, despite its crucial role in the Akha tradition. Upland rice self-sufficient farmers are unlikely to sustain their strategies and production system given increasing land pressure. After types of farmers were identified, it was possible for them to come up with their evolutionary trajectories against time. Four future trends in farming systems were identified. Trend 1: Farmers with a high investment capacity, market integration, and high diversity of activities. This group is composed of some Type C farmers + some of Type B farmers who are involved in the animal husbandry and off-farm activities. Trend 2: Autonomous farmers who are not very dependent on the market, exhibit a level of stability due to their working in the paddy fields. They consist of more conservative farmers among the Type C group. Trend 3: Farmers who are in a very insecure situation and very dependent on the land. They are probably involved and are insecure members of the Types A and B farmers. Trend 4: Farmers who stopped their farming activities due to land pressure. These are some Types A and B farmers who are being pushed out of agricultural production because of lack of sufficient land. Thong-Ngam *et al*. (1997) and later on Trebuil *et al*. (2006) explained how differentiation of highland households led to more inequalities in the highlands with certain groups of people still under the level of poverty and food insecurity. Differentiation of farmers helped to understand farmers' adopted strategies.

Ekasingh, Ekasingh and Promburom (2001) and Ekasingh and Ekasingh (2001) classified highland farm households in four Royal Project sites into five farm types. The first type belonged to the so-called subsistence farms, defined as having more than 75% of farm outputs produced for home consumption. The second type partially belonged to subsistence farms, having 50-75% of farm output for home consumption. The third type belonged to the partially commercialized farms, having 25-50% of farm output produced for home consumption and 50-75% for sale. The fourth type was commercialized farms, having more than 75% of outputs sold in the market, most outputs were from annual crops. Finally, the last type was long-term investment oriented farms, defined as having more than 50% of the output sold coming from perennial crops.

The study found that farming systems in Royal Project Development Centers were diverse. Many centers were found to be highly commercialized like Ang Khang and Nong Hoi. A mixture of annual cash crops was grown with perennial crops. Marketing of these crops were facilitated by the Royal Project. Some centers were still partially commercialized and partially subsistence like in Mae Hae and Prabat Huaytom. Nevertheless, in each center, it was found there was quite a disparity of income among the better off and the poor. (Table 1).

Table 1. Farm typology and distribution of sampled farm households by farm type.

	Royal Project Development site			
Farm type	Ang Khang	Nong Hoi	Mae Hae	Prabat Huaytom
Typology	Highly commercialized-annual and perennial crop oriented	Highly commercialized-annual crop oriented	Partially commercialized- annual and perennial crop oriented	Partially subsistence
Approximate average income per person per year in 2000 ($US)				
• The better off	4,847	4,170	3,542	3,247
• The medium	1,177	1,845	1,432	1,385
• The poor	588	1,085	495	500

Source: Ekasingh and Ekasingh (2001), Trebuil et al. (2006)

As these types of farmers have different resources and objectives, their strategies given their endowment, knowledge, and infrastructure will be quite different. Poor farmers had to rely heavily on non-farm income. A majority of subsistence and partially subsistence farmers were found to live under poverty line and had difficulty in meeting their food security needs. The study found that only commercialized farmers and long term investment-oriented farmers were able to escape poverty and enjoyed reasonable levels of income and living (Table 2).

Table 2. Net farm income and total income in different types of farming systems in 2000 in 4 highland sites.

Type of farming system	**Net farm income**	**Total income**
	US$ per labour and per year	
A. Sales < 25% total gross farm product	9	172
B. 25< sales < 50% total gross farm product	44	185
C. 50< sales < 75% total gross farm product	98	196
D. Sales > 75% total gross farm product	251	328
E. Fruit production > 50% gross farm product	258	452

Source: Trebuil et al. (2006), Note: Poverty line was at US$240 per person in 2000

Trebuil *et al*. (2006) compared seven case studies in the Thai Highlands and concluded that agricultural commercialization was a very unequal process. The lack of citizenship and land rights were cited as some of the factors underlined in this unequal process. United Nations Office of Drugs and Crime (2005) also confirmed this. Such situations also gave rise to risk of natural resource degradation and depletion. Forests, water, soil are at risk when there are competing demands from various stakeholders in the process of intensification and commercialization (Turkelboom and Trébuil 1998, Turkelboom 1999).

In a similar picture, Teerakul *et al*. (2017) investigated the quality of life of eight highland communities in four provinces of Northern Thailand and found a wide disparity of socio-economic conditions among them. Cash cropping has enabled Hmong farmers in Nan to earn an average annual household income as high as 353,420 baht per household (approximately US$ 9,872) or 74,806 baht per person per year (approximately US$ 2,089) in 2015 while Karen farmers in Tak with difficult infrastructure and poor access to market earn around 31,456 baht per household per year (approximately US$ 879) or 6,609 baht per person per year (approximately US$ 185) on average. Poverty rate for those in Nan was 15.3% while those in Tak 96.7%. This is in comparison of 7.2% poverty rate for the national level (2,644 baht per person per year (or approximately US$ 73.9) being the national poverty line) and 8.78 %for the Northern region (2,377 baht per person per year (or approximately US$ 66.4) being the Northern poverty line) in 2015 (Thailand National Economic and Social Development Board, 2017a, b)

In terms of food security, Ekasingh *et al*. (2017a, b) found that food security varied widely among the highland communities. Using food expenditure as approximating food security level, food security can be as high as 93% in Khun Satan (Hmong) areas in Nan or 30.8% in Pang Daeng Nai ("*dara-ung*" ethnic groups) areas in Chiang Mai. They reported that a variety of strategies/activities/crops promoted by the Highland Development and Research Institute (Public Organization) were working well with good results although more attention on food security problems was needed.

NEED FOR PARTICIPATORY APPROACH TO HIGHLAND DEVELOPMENT

Participatory approach to research and rural development has gained its momentum since the 1980s. Neef *et al*. (2013) outlined the evolution of participatory approach to research and development since its onset. They argued that participatory approach became more common in development projects and programs than in research. Participatory approaches have since become popular in rural development and participatory methods and tools are commonly practiced throughout the developing world. Development programs and projects would be rarely funded unless they contain a strong component of community involvement in their design, implementation, monitoring and evaluation stages. In Thailand, participatory approach to watershed management was adopted in the late 1980s-1990s following *Doi Sam Muen* Model and later expanded to other highland watersheds (Hoare *et al*., 2002). Nevertheless, institutionalizing the participatory approach to development is more difficult than initially thought. Moreover, in research, there are many critiques that participatory research and researchers in national research systems tended to follow more conventional lines with a few exceptions (Neef and Neubert, 2010, Neef *et al*., 2013). Neef (2003) and Cook and Kothari (2001) warned that the participatory approach per se may neglect a wider social and political issues of inequality and injustices and it was not a substitute for good governance. Participatory

approach is the beginning of and facilitates development process. It is necessary but not sufficient in itself for development.

NEED FOR BETTER GENDER AND MARGINAL PEOPLE EMPOWERMENT

Attempts towards highland development cannot avoid the efforts to enhance gender and ethnic minority empowerment. Empowerment implies increasing local people's capacity to transform their lives for the better (Bechstedt, 2005). Sturgeon *et al*. (2013) however argued that racialization, environmental enclosures and state legitimation based on drugs, environmental protection and national security had shaped Thai policies towards mountain minorities thereby marginalizing them with social and land insecurity. Neef and Ekasingh (2007) also asserted that institutional constraints were the underlying causes of a vicious circle of resource degradation and vulnerability of livelihoods for the uplands of Thailand and Vietnam. Lack of permanent and secure land use rights, limited access to formal credit and other financial services, an agricultural research system that does not recognize local people's priorities and practices and top-down government policies that limit the scope for action of highlanders and continue to control a large share of natural resource base were the four interlinking factors underlying such a vicious circle. While empowerment of the marginalized is essential, oftentimes, actual development project implementation lacks radical and transformative content. People's participation per se as earlier mentioned, is not adequate. What is needed is a more critical view of structural elements, such as social relations, and in particular power and class relations, and of institutional and administrative constraints (Bechstedt, 2005).

The Thai local administration has started the process of decentralization but the process is often slow and with many obstacles. With decentralization going hand-in-hand with the overall democracy movement in the country, the general process has more or less halted in the last five years with the 2014 Thailand coup d'état. Nevertheless, the process can be strengthened in a case-by-case basis within the framework of the institutions that work with the highland people especially when they are semi-autonomous or belonging to non-governmental agencies. Empowered village administration and effective village planning are crucial to long term and sustainable highland development.

NEED FOR DIFFERENT STRATEGIES TO ADDRESS HIGHLAND DEVELOPMENT

Given the different stakeholders, their characteristics and orientation, highland development strategies need to be sensitive to their needs. In the 1990s, gender awareness trickled donors to development projects to give attention to the roles of women. Women sensitization programs and projects were initiated and implemented. The UN millennium development goals have also brought attention to girls' and women's development vis-à-vis boys' and men's. Many programs and projects have paid attention to the poor and the vulnerable groups. More attention is needed to address food security problems. It must be recognized that different strategies will be effective to address different groups of people. Programs and projects need to be more responsive to the disadvantaged, the poor, the food insecure and women. This means that they will need to find ways to gain access, listen and to learn from them.

The most effective ways to build programs and projects for different groups of people are the bottom-up, participatory approach where local people are consulted before a program or project

is initiated. Gone should be the universal, "one size fits all", or top-down approach to project or program initiation. Communities should be strengthened in village planning. Nevertheless, back-up technical assistance and appropriate budgetary allocation should also be forthcoming.

The Thailand Highland Development and Research Institute (HRDI) (Public Organization) was established as a semi-governmental department in 2006 to be an agency to work on highland development. It works in some 638 natural highland villages throughout Thailand. Although it has a mission to support the Royal Project Development Centers, it has adopted a more broad-based approach than that adopted by the Royal Project. The strengths of HDRI work include 1) integrated agricultural development using fewer staff but broad-based 2) team-oriented 3) the staff has close relations with villagers and engage in long-term collaboration 4) use knowledge from many sources 5) emphasis on villagers' participation 6) work with other partners in the project areas and 7) focus on environmental friendly and indigenous knowledge based options (Ekasingh, et al 2017b). Each development site has taken on different strategies dependent on the local needs of the people. The institute has enjoyed a degree of success for broad-based environmental friendly development. This is in contrast with the Royal Project Development Centers which are more agricultural research intensive with cash crop and market oriented. The two approaches have well complimented each other. Many new crops and animals as a result of intensive research and market support have been extended to villagers. Diversity of crops, animals, market outlets are now options to highland farmers. These have been results of long-term commitment and a variety of strategies to highland development by many agencies involved.

CONCLUSIONS

To recognize highlanders' diversity in terms of their ethnicity, gender, class, objectives, resources and other socio-economic characteristics will be an important strategy in sustainable highland development. There must also be a recognition of complexity of communication processes and power relations as well as costs of participation. Such a diversity among highland people demands that there are a wide range of options available to them so that they can select what is best for them. To design strategies for highland development to fit diverse sets of stakeholders and their needs is of course more demanding compared with the top-down, one-program-fit-all approach but it will be more rewarding and sustainable. Participation, differentiation and empowerment will be key concepts in highland development in Thailand.

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