

Rural Development and Strategies for Sustainable Agrarian Livelihood: A Case Study of Ban Huaxieng, Xaithany District, Vientiane Capital, Lao PDR

DEXANOURATH SENEDUANGDETH | National University of Laos

This research aims to explore how rural development under the policy of market-oriented economy affects local people in terms of economic, social and cultural practices, and how they adapt themselves to those changes to sustain their livelihood strategies through focusing on Ban Huaxieng of Xaithany district as a case study. This study analyzes both primary data and secondary data and applies both quantitative and qualitative analysis methods. Four methods are applied for primary data: household survey, participant observation, life history and in-depth interview. This research focuses on three main parts: first, Ban Huaxieng and policy implementation of rural development; second, livelihood diversification as new livelihood strategies; and third, changing social and cultural practices under development. As a result of analyzing this case study, two main findings are discovered. Firstly, diversification of livelihood is considered as new livelihood strategies under rural development along with the mechanism of market economy. Secondly, rural development can improve living condition but creates contradictions; particularly, development under the market mechanism has created unintended consequences, which can endanger some agrarian households' sustainable livelihood.

Keywords: Rural, Development, Agrarian, Livelihood, Market, Sustainable

Introduction

The majority of the population of Lao PDR (85% of total population of 5.6 million) lives in rural areas (World Food Program, 2008). According to the National Statistic Center of Laos, more than 80% of households of Lao consist of agricultural workers and about 94% of them produce for subsistence (National Statistical Center, 2000: 2). Rice is considered the staple of Lao people for 77% of all households in Laos. About 42% of rice planters farm have grown rice in the uplands on 199,000 ha (National Statistical Center, 2000: 4-5) and 58% of rice planters farm in the lowland. After Lao PDR was established in 1975, the Lao government has tried to develop the country, beginning with restoring its socio-economy after the war. The development strategy focused on rural areas in order to reduce the gaps between rural and urban areas as well as between the rich and the poor people. Therefore, many development programs such as cooperative and collectivization had been conducted in rural communities of Laos in the first decade of Lao PDR. In 1986, Laotian government introduced the Renovation Policy based on the New Economic Mechanism or Market Economic Mechanism (Phomvihanh, 1986, 1988); hence the rural economic system was reoriented from a subsistence system to a market demand system. In order to achieve this policy, many development projects have been conducted in the rural communities, including improvement of infrastructure and encouragement of agricultural production in terms of stabilizing shifting cultivation, irrigating paddy fields, reforestation, promoting cash crop production, promoting animal husbandry, etc.

Lao PDR has also received external support on a large number of projects dealing with agricultural and rural development.¹ Likewise, the Lao PDR has also received support from the European Community (EC), which focuses on rural development and health. These facts clarify that the Lao government policies on rural development are encouraged and supported by international organizations under globalization.

The Lao government policy on agricultural development is a main strategy for the development of the national economic base of Lao. Likewise, rural

¹ For example, Forest Management and Conservation Project financed by the World Bank, Germany's Rural Regional Development in Bokeo Province and Nam Ngum Watershed Management Project, Forest Conservation and Afforestation Project and Agriculture and Rural Development Project financed by Japan International Cooperation Agency, European Union's Luang Namtha Area Development Project and Rural Micro-Projects in Luang Prabang Area, and the Lao-International Rice Research Institute Project (Asian Development Bank, 1999: 5).

development in Laos is engaged with agricultural development, so rural development is a focal area of national development. Executed in the rural areas of Laos were some sub-policies of development such as the policy of food security and self-sufficiency which was first stated in the fourth LPR Party Congress in 1986, the policy of commodity production promotions, the policy of irrigation development² and the policy of promoting dry season crop growing, for instance.

All sub-policies of development were executed to encourage the main economic development strategy of market-oriented policy. This strategy resulted in some influential effects on the rural livelihood of peasants. Some effects clearly stood out in the form of improved infrastructure: Roads between urban and the countryside as well as among rural areas were built and improved, electricity was supplied to many rural areas and primary schools and hospitals were built and/or improved in many rural areas. These results led to the conclusion that reforms can improve people's standard of living. However, these reforms created competition in accessing natural resources for economic purposes, in selling products in commercial business and in markets, which led to changes in social relations and traditional cultural practices of rural agrarian livelihood as well.

This paper explores how rural development under the policy of market-oriented economy effects local people in Ban Huaxieng of Xaithany district as a case study in terms of economic, social and cultural practices, and how they adapt themselves to those changes to sustain their livelihood strategies.

For in-depth analysis of data, both data sources were applied, including primary data and secondary data. Preliminary observation of the research site was organized in the beginning through structured and unstructured meetings with the head of Ban Huaxieng and some elders, interviews about general information related to this research and general observations of local people's livelihood.

Primary data was collected during fieldwork, including quantitative and qualitative data on local history, socio-economic status, means of local livelihood, land use, local customs, tradition and social relation. Four methods of household survey, participant observation, life history and in-depth interview were applied to gather primary data.

² According to the Asian Development Bank (ADB), there are many ADB projects in Laos with the aim of boosting rice production and reducing deforestation, of which many are irrigation-building programs. About 70 irrigation systems were constructed by Community-Managed Irrigation Sector Project in mountainous central Laos PDR where irrigation is limited in the provinces of Vientiane, Bolikhamxay, Houaphanh and Xieng Khouang (Asian Development Bank, 1996).

The survey method of questionnaire was used to collect quantitative data at the household level, including socio-economic status, demographic condition, agricultural practices, land and forest use, etc. The structure of the questionnaire includes opened and closed question forms. The questionnaire consists of 6 major parts as follows:

- (1) What ways of living and agricultural practices are included in the socio-economic situation such as paddy-field farming, cash crop growing, wage labor, business, trade, service and mobility?
- (2) How do local people adapt themselves to the progress of national socio-economy in order to sustain their livelihood strategies?
- (3) How does economic development in the era of market-oriented mechanism affect social and cultural practices?
- (4) Which main factors lead to changes in the moral economy of the community?
- (5) How does moral economy transform in the community under market-oriented mechanism?
- (6) What social relations are included in relations among local people, particularly in terms of labor relation (e.g., reciprocity and hired labor), morality and relations between local people and outsiders?

This research uses simple random sampling because almost all of the villagers are farmers. Based on Yamanae's formula (Yamanae, 1973) to calculate the sampling for this survey, 215 households out of a total number 464 households in the village were surveyed. Due to the fact that this survey was conducted during daytime, most respondents (about 70% of the total interviewees) were women. For most of the men who are head of families were busy with their work outside the home. The age of respondents can be divided into three groups: about 13% are between 21 and 30 years old, about 77% are between 31 and 60, and about 10% are over 60.

For their occupations, 77.7% are farmers, 6.5% are housewives, 5.6% are teachers, 3.3% are traders, 2.3% are gardeners, 1.4% are laborers, and the rest is categorized as other employees in government agencies, state enterprises, private companies, and other wage laborers (see Table 1). They have attained different educational levels, which most of them have attained only common school not vocational education: 26% are under primary school, 21.9% are primary school, 19.1% are lower secondary school, 10.2% are upper secondary school, 1.4% are secondary vocational school, 1.9% are under graduate, 0.5% is graduate levels, but 19.1% are illiterate (see Table 2). Almost all respondents respect Buddhism,

Table 1. Sex and Jobs of Respondents

		Jobs									
		Farmer	Gardener	Worker	Teacher	Doctor	Trader	Wage labor	House-wife	Other employee	Total
Sex Female	Count	125	4	0	9	0	5	0	14	0	157
	% within sex	79.6	2.5	.0	5.7	.0	3.2	.0	8.9	.0	100.0
Male	Count	41	1	3	3	1	2	2	0	4	58
	% within sex	70.7	1.7	5.2	5.2	1.7	3.4	3.4	.0	6.9	100.0
Total	Count	167	5	3	12	1	7	2	14	4	215
	% within sex	77.7	2.3	1.4	5.6	.5	3.3	.9	6.5	1.9	100.0

Table 2. Sex and Education of Respondents

		Education of Respondents								Total
		Illiteracy	Primary school	Prim-ary school	Lower secondary school	Upper secondary school	Secondary vocational school	Unde-rgra-uate	gradu-ate	Total
Sex Female	Count	36	41	35	25	13	3	3	1	157
	% within sex	22.9	26.1	22.3	15.9	8.3	1.9	1.9	.6	100.0
Male	Count	5	15	12	16	9	0	1	0	58
	% within sex	8.6	25.9	20.7	27.6	15.5	.0	1.7	.0	100.0
Total	Count	41	56	47	41	22	3	4	1	215
	% within sex	19.1	26.0	21.9	19.1	10.2	1.4	1.9	.5	100.0

Table 3. Sex and Religion of Respondents

		Religion		Total
		Buddhist	Animism	
Sex Female	Count	156	1	157
	% within sex	99.4%	.6%	100.0%
Male	Count	58	0	58
	% within sex	100.1%	.0%	100.0%
Total	Count	214	1	215
	% within sex	99.5%	.5%	100.0%

but 0.5% of them respect animism (see Table 3).

Ban Huaxieng and Policy Implementation of Rural Development

Physical geography and historical context of Ban Huaxieng

Ban Huaxieng is a large rural village that is located on the Vientiane plain with a total area of 1,992 ha. There is a small stream which supplies water for agriculture near the village, but usually only in the rainy season. The village forest is considered very important for Ban Huaxieng villagers' subsistence. However, the forest area has been decreasing while the residential and agricultural areas have gradually increased.

Ban Huaxieng is an old village — nobody knows exactly when it was founded. However, according to in-depth interviews, the life history of many village elders and observation of the village geography, it would be safe to assume that this village is a community built on an older community site that was deserted for a long time. Ban Huaxieng was built around the mid-18th century, after Lao people under King Anuvong (1826-29) were defeated in the war for independence from Siam. The village was first called Ban Khomkadao,³ but it was changed to Ban Huaxieng. This community was established and developed as slowly as other general Laotian countryside under the situation of Laos losing independence, which began with Siam, French Colonial Empire (1893-1954), followed by the civil war period under the American Empire's interference since mid-1950s to 1975 (Phothisanh and Phoummachanh, 2000). When the Lao kingdom was controlled by the French Colonial Empire, this village sometimes became involved in the war; particularly when Japanese military attacked and chased French military (one company) stationed near this village. The first dirt road from the No. 13 Road to the village was constructed in 1940s by the sweat of the villagers under French control; and then the road was reconstructed by a private construction company in 1968.

After Lao gained independence in 1975, Laotian government tried to organize and reorganize rural labor force in order to improve agricultural production as part of development of rural areas. An organized production program like agricultural cooperative was organized in this village in 1978. However, this organized working group failed after its implementation for a few years. In 1986, Laotian government introduced a new economic system which

³ Khomkadao is the name of a tree whose leaves and flowers can be used for consumption.

concentrated on the market mechanism under the Renovation Policy. Therefore, these villagers were introduced to the development of their household economies under the market mechanism.

Market-oriented policy implementation in local context

Market-oriented policy is the LPR party's main strategy for the economic development and Laotian government's Renovation Policy which was promulgated in 1986. This policy was supported by many sub-policies as mentioned above. Particularly, villages have often operated under district instructions, which follow provincial instructions and government decrees. The district level usually plays the role of making plans or projects based on provincial instructions and government instructions under government decrees. District instructions have often been promulgated at the village level through village administrators, particularly the head of the village. However, district authorities and technical staff were sometimes sent to the village to propagandize and execute some projects.

For the case study of Ban Huaxieng, many district instructions were promulgated by the district authorities and the head of village. Also, practiced in this village were some projects that concern local agricultural production for the purpose of encouraging local people to produce agricultural commodity. Some examples are digging great wells in 2002, which was funded by the Chinese government and operated by Chinese technical staff, and the project of organizing local capital credit called *Koum ngerm thone* (Savings Unit), which was organized in 1998 by the support of the Central Lao Women's Union and the Foundation for Integrated Agricultural and Environmental Management (FIAM). Following instruction No. 09 of LPR Party Central Politburo on the Developing Village and Village-Group in 2005, the villages were organized into developing village-groups, which were managed by the head of developing village-groups.⁴ Heads of village groups played the role of leading village administrators, making the village plans for socio-economic development including a three-year plan and projects for village development. Ban Huaxieng is part of the Huaxieng developing village-groups, which is the center of Ban Somsavanh. Under the direct instruction of the head of developing village-groups, the village administrators of Ban Huaxieng have planned several projects for developing the village such promotion of handcrafted commodity production and cassava plantation, which are going to be practiced in the next

⁴ Head of a developing village-group is usually the head or deputy head of the district office.

few years.

Livelihood Diversification as New Livelihood Strategies

To cope with the national socio-economic changes which are affected by regional and global contexts, local peasants have flexibly adjusted themselves according to their different capacities. As a result, they have changed their livelihood strategies, including transitioning from subsistence to market-oriented agriculture, combining local knowledge and agricultural technology, developing a way to access water sources, developing access to capital credit, changing to non-farming activities for generating alternative income.

Changing local livelihood strategies

In general, most of the local people who live in Huaxiang village are farmers who worked in the paddy fields, in gardens, and in the forest. From the years before 1986 until today, more than 80% of the households are farming households. If a comparison is made between four periods, before 1986, 1995, 2005 and 2007, the farming households increased from 81.9% in the years before 1986 to 88.4% of the total households in 1995; then it declined a little to 86% in 2005 but increased a little to 86.5% in 2007. The survey found that 83.3% of them have ownership of their own paddy fields while 11.1% of them have to rent their paddy fields for farming through cash payment or farmed products. However, to adapt to the changing situation of national socio-economic development, the peasants in this local community have developed their livelihood strategies such as changing from subsistence to market-oriented agriculture, combining local knowledge and agricultural technology, developing access to water resources, developing access to capital credit, and changing to non-farm activities for generating alternative income.

Changing from subsistence to market-oriented agriculture

Since 1986 when Laotian government introduced the policy of Market Economic Mechanism, most agricultural producers gradually changed their concept of the purpose of productions from production for consumption to production for both consumption and the market.

Paddy rice production is a major activity of farming households that is often practiced in rainy seasons. Rather than depend on rice only for consumption as

Table 4. Comparison of Purpose of Paddy-Rice Production

Purpose of rice production	1985		1995		2007	
	count	%	count	%	count	%
No concern	35	16.3	28	13.0	32	14.9
For consumption	120	55.8	72	33.5	71	33.0
For consumption and market	60	27.9	115	53.5	112	52.1
Total	215	100.0	215	100.0	215	100.0

* Source: Survey in February 2008.

in the past, most farmers have tried as much as they can to improve their paddy-rice production based on their capacity to achieve the goal of “commodity production” to earn more cash income. As Table 4 demonstrates, nearly 56% of farming households produced rice for consumption while just barely 28% of them produced for both consumption and commodity in 1985. On the other hand, the number of farming households producing paddy-rice for consumption and market increased from nearly 28% in 1985 to nearly 54% in 1995; however, the number decreased a little in 2007.

In addition, comparison between paddy-rice products in 1985, 1995 and 2007 reveals that the number of farming households which could produce paddy-rice of more than 5 tons in 1985 increased in 1995 and continued to increase in 2007, while the number of households which could produce about 1-2 tons tended to decline in 1995 and 2007. However, many peasants still faced unstable production because most of their farms depended on natural conditions; the weather was too dry in some years, but it rained too much in other years, which led to flooding of the paddy fields. Some households could not harvest anything when their paddy fields were flooded. Furthermore, rice yield has not been too high in this area because the fields are not fertile enough. Based on this survey, nearly 73% of the interviewees reported that they could only harvest less than 2 tons of rice per hectare of paddy field, and only 5.6% of them could achieved quite high yield — about 3.1 to 4 tons per hectare in 2007. When a comparison is made of the rice yield between 1985 and 2007, about 37% of them reported that the yield has increased at present while about 30% of them said that it has remained steady; about 27% of them insisted that it has declined.

Raising livestock is an important everyday activity of the peasants in Ban Huaxiang. It plays an important role in the agrarian household economy, especially when it is used as a means of saving. Animals generally raised in this

community are oxen, cows, water buffaloes, pigs, chickens and ducks. Generally, these animals are usually raised in a natural way; particularly, cattle are raised on the fields and forest. Nowadays, about 72% of interviewed households raised livestock. The animal that was most widely raised in the past was the water buffalo because they were used in farming paddy fields. Because tractors have replaced water buffaloes in farming paddy fields, people have gradually changed to raising oxen and cows rather than buffaloes. At present, 26.5% of the respondents have raised only cows and oxen, while 12.6% of them have raised only buffaloes.

In general, each household has raised a small number of animals; when the number of animals goes up, they are sold as a way of earning income and of controlling the number of animals. According to the report of household representatives, the number of households raising animals for consumption and sale has steadily increased from 44.2% in 1985 to 47.4% in 1995, to 57.7% in 2005 and to 59.5% in 2007. In addition, if comparison is made of households raising livestock between the years 1985 and 2008, nearly 30% of respondents reported that the number of animals has increased, while 20% of them said that it is still stable; another 20.5% insisted that it has decreased. There are many reasons that led to a stable or decreased number of animals in these agrarian households. On the one hand, the methodology and conditions for raising livestock should be considered; and on the other hand, the terms of the subsistence economic system that still partly plays a role over rural society should be considered.

The economic system of subsistence agriculture still influenced this community. Although these peasants have tried to increase their household earnings, they still faced many problems, particularly the poor households. To survive or to improve their living standard, they need cash to buy some necessary agricultural tools, equipments, cloths, vehicles and to pay for their children's education and so on. In these cases some households had to sell their animals for cash income. Therefore, their animals sometimes are considered to be a means of temporary savings and they will be sold when the owners need cash income. To sum up, most agrarians in this community have tried to improve their agricultural practices, including paddy rice production and animal husbandry to increase their production for not only consumption as in the past, but for sale on the market as well. Yet some agrarian households that have low capacity to respond to the new socio-economic situation seem to find this transition difficult.

Combination of local knowledge and agricultural technology

For a long time, Ban Huaxieng villagers have applied their local knowledge in farming paddy fields. All of them have acquired their knowledge of farming within their village through actual practice. Each household owns all traditional tools needed for their field farming such as a wooden plow, wooden harrow, wooden yoke, hoe, shovel, dibble point (*loung*), sickle, harvest mat (*kla*), threshing crutches (*khorn diang*), flail (*khorn khor or mai fart khao*), winnowing fan (*vee/bai phat*), threshing board (*paen fart khao*), etc.

This community is not too far from the suburb of Vientiane Capital, so when new agricultural technologies are introduced in the suburb or even in the city of Vientiane, it sometimes can stimulate Ban Huaxieng villagers to favor those new technologies. Nevertheless, capital investment must be made to purchase modern agricultural tools, and so this is a challenge for peasants with low income. In early 1980s, therefore, the rich farming households of the village were the pioneers of the decision to buy modern tools like a tractor for farming their large paddy fields. Later, other farming households decided to replace buffaloes with tractors, including one-wheel tractors, two-wheel tractors and four-wheel tractors, depending on the availability of capital investment. The number of households with tractors rose from 1985 to 2008: only 1.9% of farming households had tractors in 1985; ten years later, the number of households that had tractors rose to 7.4%. From 1995 to 2005, the number of households rose steadily to 27.4% in 2000, 41.9% in 2005, and continued to rise to 43.7% in 2008.

The main reason that the farmers considered replacing buffaloes with tractors is that the natural condition for farming, particularly weather, had changed. During the farming season, farmers experienced water shortage — drought often follows plowing, and farmers hence need to accelerate the plowing process when it rains and to cultivate wet-rice as fast as they can. Thus, tractors were considered as a replacement for buffaloes. On the other hand, when the market economy was introduced to this community, it also brought a system of competition in production. Each household desired to produce as much as they can to create a surplus for sale in addition to the household's consumption. Therefore, many farming households have sold their buffaloes and bought new agricultural technology like a tractor. Approximately 90% of households use agricultural technology at present.

Agricultural tools often used by the villagers are one-wheel tractors, two-wheel tractors, four-wheel tractors, pumps, threshing machines, fertilizers and

Table 5. Use of Modern Agricultural Tools

	Using tractor		Using one-wheel or two-wheel tractor		Using threshing machine		Using pump		Using chemical fertiliser	
	Count	%	Count	%	Count	%	Count	%	Count	%
no	211	98.1	37	17.2	108	50.2	188	87.4	48	22.3
yes	4	1.9	178	82.8	107	49.8	27	12.6	167	77.7
Total	215	100.0	215	100.0	215	100.0	215	100.0	215	100.0

Source: Survey in February 2008.

insecticide. Table 2 reveals that 82.8% of households use one-wheel and two-wheel tractors, but only 1.9% use four-wheel tractors. In case of threshing machines, Table 5 shows that 50.2% of them have used a threshing machine. Actually, there are only two threshing machines in this village, so they have to pay the owners of the two threshing machines when they need to use them. Chemical fertilizers are widely used in paddy farming and vegetable gardens, but insecticide is not used often in paddy farming at present. Nowadays, only about 5% of farming households still use buffaloes for plowing and harrowing their paddy fields.

A combination of local knowledge and agricultural technology is not only considered a way of local farmers' adaptation to agricultural change but is also considered local people's response to national socio-economic development. Nowadays, however, most farmers are not independent farmers as they were in the past; farmers who do not have a tractor have to depend on the tractors owners; and most of those who do not have a threshing machine have to depend on the threshing machine owners in the local community. Furthermore, they have become gradually reliant on industrial products as well.

Development of access to water sources

Paddy farming is a system of cultivation that requires sufficient water. So, in general, paddy fields are often in use in rainy seasons to take advantage of natural rainwater. Some years there is too much rain, which leads to flooded paddy fields, but gradual lack of rain often resulted in drought in the middle of some periods of the rainy season in recent years. Most paddy fields in Ban Huaxiang are called *na nam fa* (non-irrigated paddy fields) today due to lack of irrigation. Only 2.3% of households have semi-irrigation with traditional semi-weirs from small streams nearby. The farmers in this village have tried to develop many ways of accessing water sources such as constructing semi-weirs

or mid-weirs, digging of wells by farmers and by external support.

Water from weirs consists of semi-weirs and mid-weirs. Semi-weirs including semi-weirs of individual households were built by the local people; the weirs are communal property of Ban Huaxieng and nearby villages. The first wood-and-earth weir that is a communal property of Ban Huaxieng was built south of the village with local knowledge around 1980. However, this weir could not supply enough water in dry seasons for farming and other activities. Between 1982 and 1983, the project of constructing mid-weirs in this community was carried out by district agricultural technical staff and villagers and government funding. A mid-weir called *Fai na khi tee* was then constructed through a combination of local knowledge and modern technique. However, this mid-weir only served the villagers for a few years and collapsed during a heavy rain and has remained a deserted weir since 2008. Nonetheless, weirs were again built by local people in 1986 including (1) the weir called *Bor ka that*, which was built by Huaxieng villagers, and (2) the mid-weir called *Bor sa nay*, which was built by the local people of three villages, including Ban Huaxieng, Ban Huasangbo and Ban Dongkuay. These weirs have been in use until now, but water supply is not sufficient for large paddy farming in dry seasons.

Water from wells is generally used in each household because this village and nearby areas is still short of water supply. However, the households have often used small or shallow wells because almost all wells were dug by hand to be a maximum of only 7-8 meters deep. These wells can serve enough water for household use such as cooking, washing, bathing and also for gardening, but not for large gardens. Large wells for big farming were also dug in this village in 2002 with support from the Chinese government — a total fund of 200,000 Chinese Yuan and Chinese technical staff. However, it seems that they faced the same problem of insufficient water supply for the area that they had supposed would be taken care of with the project. In addition, they also faced the problem of increased electricity bill for pumping water from the wells to irrigate paddy fields. A few households applied to irrigate an area of less than a hectare per household in the first year of irrigating paddy fields as a pretest of the project. Unfortunately, while only 100-120 kilograms of rice could be produce per household, the electricity bill for pumping water amounted to 3,000,000 kip.⁵ Even when they sold all of their irrigated rice products, they could not pay for the electricity, so they became debtors of the Lao Electricity Enterprise Company. Because the villagers did not pay for the electricity bill, the electricity company turned off the electricity service; therefore, the wells and the pumps in

⁵ The exchange rate is US\$1 = 9,000 kip on average.

the wells became abandoned after pretesting of only one dry-production season.

Development of access to capital credit

In rural Laotian communities, agrarian households prefer to save rather than spend money, but they do not save money in the bank. In terms of market economy, capital is the main factor for all economic activities, including agricultural activities. For example, some farmers want to buy agricultural tools such as a tractor or a pump; someone wants to buy chemical fertilizers; some households need capital for hiring a tractor for plowing and harrowing the paddy fields; or someone needs capital for buying seeds and so on. So many farmers have tried to have access to capital sources in different ways. Most of the poor households often ask to borrow from the rich, with the promise of paying monthly interest to the lender or someone asks to pay with rice after harvest. Someone, but rarely, asks to borrow capital from an agricultural bank to invest in the household production. In these cases, the peasants have to pay quite high interest, and hence they continue to pay the interest for a long time in some cases when their farming encounters a problem like no harvest due to flooded paddy fields and the borrowers cannot pay back the cash they borrowed from the rich or the banks.

To overcome this problem, local administrators have tried to organize local capital credit. The first local capital credit was organized by the support of Central Lao Women's Union and FIAM under the Semi-Project of Rural Development in 1998 called *Koum ngern thone*, which consisted of less than 30 members with a total capital about 1,000,000 kip.⁶ The Unit administrators were all women; however, village administrators and elders played the role of consultants to the Unit. There were many reasons as to why most of villagers could not make the decision to join this local Savings Unit. One reason is that because Capital Credit was still new to them, they just stayed away from taking a risk on the Savings Unit. In addition, they were not confident that they would be able to abide by the rule of putting more cash into their account every month. Furthermore, they were less interested in joining this Savings Unit because they still kept themselves independent in improving their household economy as was their customary practice. Moreover, one more important factor that made them less interested in savings is the insecurity of Lao currency kip, which went through inflation in Southeast Asia since 1997.⁷

⁶ Exchange rate in 1998 was US\$1 = 4,800 kip on average.

⁷ In the short term, Thailand, a main trading partner of Lao PDR, faced the problem of inflation; the

However, the Savings Unit could improve its capital after fluctuant and confusing practice of a few years, and the number of the Unit's members has increased from 72 in 2001 to 530 members in December 2007. In early 2008, the Savings Unit has 573 members with a total capital of 1.3 million kip. Nowadays, many peasants pay attention to this Unit, including rich, middle and poor households. In its nearly ten years of operation, the Savings Unit could solve many problems concerned with capital. Finally, after considering becoming a member of the Savings Unit, a household could borrow some cash money from the Unit to pay off the debt of old creditors. Even though they now became borrowers of the Saving Unit, they could repay old creditors because the Unit's interest rate is lower than that of individual creditor's rate — the Savings Unit's interest rate is only 5% per month, while individual creditor's interest rate is about 10-20% per month of the total debt.

Changing to non-farm activities for generating alternative income

To improve household income, most agrarians have many income patterns rather than only the agricultural practice. Each household has many income patterns including agricultural terms and other non-farm activities such as wage work, trade, etc. Based on the survey, about 56% of the members of interviewed

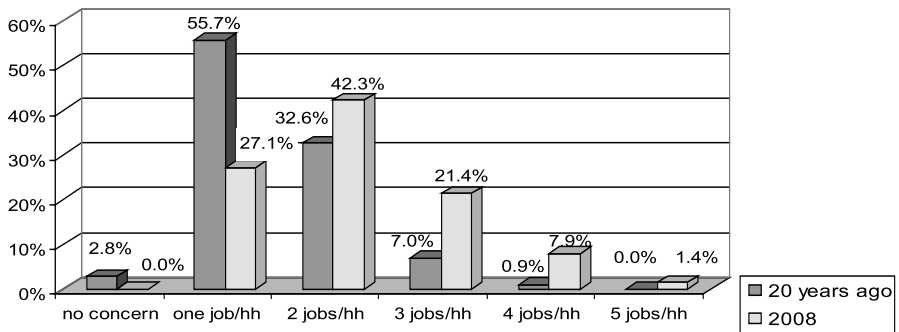


Figure 1. Comparison of Household Members' Jobs.

Source: Survey in February 2008.

value of the Thai Baht declined by 64% from July 1997 to July 1998. Likewise, the value of the kip plunged even more, from 978 kip/US\$ in December 1996 to 2,060 kip/US\$ in December 1997; in September 1998, the exchange rate was 4,800 kip/US\$. Domestic inflation increased by 103% from July 1997 to July 1998 and by 89% from December 1997 through July 1998. Money supply (defined as the monetary base) increased by over 60% by March 1998 over March 1997, and in 1999 was over 9,000 kip/US\$ (Ministry of Agriculture and Forestry, 1999: XI).

households had only one job per household, including 53% of farmers, 1.4% of gardeners, 0.9% of workers, 0.5% of traders, and 0.9% of wage laborers, twenty years ago. At the same time, 32.6% of the interviewed households had two jobs, 7% of them had three jobs, and less than 1% had four jobs. Figure 1 demonstrates that the trend of a household with many jobs increased while the trend of households that have only one job decreased from 55.7% twenty years ago to 27.1% in 2008.

Likewise, a comparison of the income sources of households of twenty years ago and today reveals that there were less income sources for each household in the past but they have increased at present. In the past twenty years, 72.6% of households whose income source was only from the agricultural sector, but 47% of households nowadays have an income source from the agricultural sector only. On the other hand, some income sources which were unavailable twenty years ago like working in Vientiane city and working in Thailand are now available. In addition, 7.4% of the households had two income sources of agriculture and trade sectors in the past, but now the number increased to 12.6% of the households, while 5.6% of the households had two income sources from agriculture and wage labor twenty years ago, but the number increased to 10.7% at present.

Furthermore, trade is one of the non-farm activities peasants of this village prefer to improve their household income. If the periods before 1986 and the present are compared, the number of households practicing trade as a way of supplementing household income has risen. Based on the survey, only 2.3% of the households interviewed earned income through trade before 1986, but the number has increased to 12.6% at the present. Likewise, there were 25.1% of the households whose members worked as wage laborers in the years prior to 1986, but the trend has increased to 40.5% today. However, some of these people work as wage laborers as their primary job, while some of them work as temporary jobs. On the other hand, comparing wage work as primary job between the two periods of years prior to 1986 and the present reveal that wage labor as primary job at the present increased twice over the previous time, while wage work as second job has increased from 18.1% in the previous period to 25.6% at present.

Moreover, the types of wage work between periods prior to 1986 and 2008 seem to have stayed the same, but the number of household members who work as wage laborer has increased for each type of wage work. The opportunity for peasants to find wage work nowadays is easier because there are more factories in the suburbs, more construction work in the village, near the village and in Vientiane City. The places that the villagers have often worked as wage laborer are in the village, nearby villages, the suburb of Vientiane, Vientiane city

and Thailand. Comparison of the places of work between the periods prior to 1986 and present shows that members of each household work as wage laborer in many places. While the number of wage laborers working in nearby villages has only decreased from 4.7% before 1986 to 3.7% in 2008, the number of wage laborers working in the village, nearby villages, and Vientiane city has increased from 1.4% prior to 1986 to 5.6% these days. In addition, the number of wage laborers in this village working in Thailand has increased from 0.1% before 1986 to 2.3% at present.

Both men and women, but more men than women, work as primary wage laborers. Between the years prior to 1986 and the present, it seems that the number of both women and men working as wage laborers has increased. When the trend of increase in wage labor between men and women is compared, it seems that the trend of female laborers has more rapidly risen than male laborers. This shows that women have gradually paid more attention to the works of wage labor than in the past to earn household income. As a result of creating diversification of earning household income, many households have different patterns and levels of income based on their different capacities. However, agricultural production is the main source of household income, of which paddy cultivation is the optimum income source for the households; cash crop cultivation and animal husbandry are also optimum sources of some household income. In addition, wage work and trade are also important for some households. As Figure 2 displays, 65.6% of the respondents report that the most advantageous income source of their household is rice cultivation, while 14.4% of them said wage labor is the optimum income source for them; 13% insist that trade and services are the most significant income source for them. Likewise, 3.7% of them said that other sources such as a salary are optimum sources for them because some members of the household work in government agencies, some are teachers and some work in state enterprise.

Even though the tempo of socio-economic development of this village is

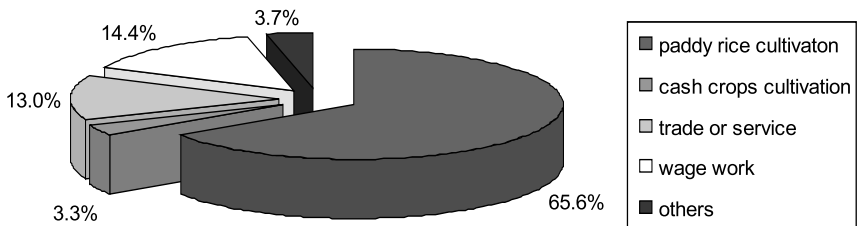


Figure 2. The Optimum Sources for Household Income at Present.

Source: Survey in February 2008.

not as quick as other villages in the suburb of Vientiane, many local people felt that their local socio-economy has developed quite quickly, and they could not adapt themselves to the change, plan or predict their future optimum sources of income. As they reported, 43% of them could not predict the most possible sources of future income, while about 37% thought that the optimum income source for them would be rice cultivation and about 7% thought that trade would be the most important. In contrast, only about 2% said that wage work might be the best possible source for their future income.

New choices and new challenges

In order to cope with socio-economic changes, most peasants have improved their income patterns by diversifying choices. However, as they create new choices, they have often faced new challenges as well.

New crops with new risks

Because most of their paddy fields are non-irrigated fields, the farmers can grow rice only in the rainy season. Therefore, cash crop cultivation to earn extra income in the dry season is a new choice for them. Cash crops grown in this village are chili, melon, cauliflower, beans, maize, pineapple, sugarcane, coffee, lettuce, etc. Chili is widely grown for market in this village, bringing cash income to about 28% of the households. The trend of chili production has increased from 1985 to the present. In 1985, most of the households who grew chili could produce approximately 100 to 200 kilograms per household, but most of them could produce approximately 100 kilograms to 1 ton per household in 2007, with a maximum of 10 ton. Melon is a cash crop which many households have cultivated, but only a few percent of households favor growing it for the market.

In addition, suggestions were sometimes made to the peasants of this village to grow new crops for market as traders need like Job's tears, tea and cassava. However, local peasants were not familiar with or have experience in growing some of these crops. For instance, in mid-1990s Job's tears was the first cash crop that was introduced for growth, and tea was the second suggested for growth by outsiders. Some agrarian households had tried to grow these without experience, and so they did not have a good harvest in the first and second seasons. In addition, all of them finally stopped cultivating these cash crops when the market could not provide a stable price for them. However, the trend of cash crop cultivation has continued to increase. As reported, only 19.1% of

the respondents grew cash crops in 1985, but the percentage of households growing cash crops increased to 26% in 2006 and 29.3% in 2007. Nowadays, Indochina Company is gathering data for estimating the possibility of growing cassavas as a main cash crop in this village in the dry seasons, in which many villagers are interested. This situation can be classified as some local peasants still being interested in trying to grow new cash crops in hopes of finding better income to sustain their way of lives even though some peasants had confronted problems with new cash crops, including technical and market terms.

Landlessness

While population had grown, land area did not increase with the peasants' needs. Therefore, it seems that the land for agricultural practice particularly, land area for usage as paddy field has gradually decreased and became rare. Nowadays, about 88% of farming households cultivate paddy fields on their own farms, while about 12% of the households are tenant farmers. The survey demonstrates that nearly half of the farming households have about 1-2 ha of paddy fields per household. Only about 2% of them have paddy fields of over 5 ha per household. However, each household has not only paddy land, but most of them also have other types of agricultural land such as a garden, including tree garden and fruit garden, and short-term agricultural land. More than 75% of the households own agricultural land in between 1 to 4 ha per household, and there is even a village household that owns the largest area of 17 ha. In contrast, a small number of households have no area for agriculture, and thus, these households garnered income from non-farm activities.

When sufficiency of agricultural land for households in the village is compared between two points of time, the trend of insufficiency of agricultural land for the households has increased from 17.7% in 1986 to 30.2% at present. Many reasons led to insufficiency of agricultural land. Aside from increasing number of household members as pointed out above, one more reason is outside interference. Nowadays, some paddy fields in this village belong to outsiders, and some areas became tree gardens of outsiders. For instance, one garden with an area of 10 ha belongs to a company named Thorlanong Agriculture Cooperation Co. Ltd., where rubber trees and agar-wood trees (*ton keth sa na*) are grown. The second garden is nearly 10 ha of agar-wood trees, a popular tree and most expensive one in Laos at present. These areas belong to outsiders, but most laborers working there are local people who work as wage laborers. When this case is taken into consideration, it seems that local people were not excluded out of their land, but rather, were excluded out of their

property right on land.

Access to market labor and illegal risks

Generally, the incentive for in-migration and out-migration of population is socio-economic factors. Nowadays, many rural laborers often migrate to look for work in cities. The main factors that lead local laborers to migrate from rural to urban areas include push factors and pull factors, of which most are economic factors. As Vilaysom indicated, the main factors of migrating from rural areas to the Vientiane capital are poorness of the family, large household, inability of parents to fund children's study, desire not to work as farmers and the desire to gain experience working and living in a refined society of the city. Likewise, the main pull factor is the economic disparity between rural and urban areas. While rural areas lack off-farm employment, cities have a lot of demand for unskilled, cheap laborers in factories and industries (Vilaysom, 2007: 40).

For the peasants of Ban Huaxiang, one of the non-farm activities that they favor is migrating to work in other villages, in Vientiane city and in Thailand. The villagers often migrate to do wage labor in construction, factories and companies as workers in construction shops, guards, etc. Comparing two points of time — the years before 1986 and the present — the number of migrants working in other villages, in Vientiane city and in Thailand has increased by more than double. Based on the survey, 7% of the respondents migrated to work in other villages, in Vientiane city and in Thailand in the years before 1986, but 14.4% of them have migrated to work in those places at present. Comparison of workplaces they have migrated to reveals a similarity between the years before 1986 and the present. Nonetheless, it is observed that the percentage of migrants working in Thailand has increased from 0.5% to 2.8%. Likewise, the percentage of respondents who have migrated to work in Vientiane city and in Thailand has also increased from only 0.5% in the years before 1986 to 4.7% at present.

Following a former head of the village (1982-2000), about a hundred people migrate to work in Thailand nowadays. Many age groups including youth and middle-aged people, both men and women but more women than men, migrate to work; some of them are still young or in school; some are married and all family members of some families have migrated for work in Thailand. The number of migration to work in Thailand has gradually increased. The main reason that lead them to consider migrant work in Thailand is generally acknowledged to be economic reasons, particularly

because of joblessness or lack of capital in their local area. However, another reason known as social value in psychology or in social sciences is considered as a main reason leading to migration work in Thailand. As the former head of the village revealed,

“The main reason leading to consideration of migrant work in Thailand is not only because they have no work here; some migrants who have paddy fields and gardens here also migrated to work in Thailand.... Most of them just followed others who are relatives or friends that have experience in migrant work; although most that have migrated to work in Thailand can improve their household income as much as others who have worked in our hometown, only a few of them that can really improve their household economy.”⁸

Migration for working in Thailand is a way of diversifying non-farm activities for peasants living in rural areas of Laos along the Mekong River, particularly in the central and southern parts of Laos due to uncomplicated conditions for migrating and working in Thailand. Firstly, Lao PDR shares a long border with Thailand; secondly, Thai economy is more developed and there are more choices of work for wage laborers. Another condition is similarity in the two languages, which allows Laotian people who have never studied the Thai language in school can learn to listen and speak from television. Therefore, they can migrate and look for work without going through recruitment companies. However, because of uncomplicated conditions of informal migration, some of them migrate to Thailand indefinitely, thereby entering the labor market which ultimately leads to the risk of becoming illegal. Prior to the MOU between the government of Lao PDR and the government of Thailand on employment cooperation of migrant workers dated October 18, 2002, Laotian immigrant workers to Thailand were illegal. Some crossed the border without documents; some used tourist visa, overstayed and continued to work in Thailand. After Laotian and Thai governments signed an MOU on this issue, there was erratic registration which enabled illegal Laotian workers to work legally in Thailand.

When migration to Thailand to work became legal, it seems to have encouraged Laotian laborers to migrate to work in Thailand. Some migrants crossed the border with passports, and some of them crossed the border by way of border-pass documents. It is noted that a border-pass document is a way for

⁸ Interviewed in Ban Huaxieng on February 24, 2008.

migrants to apply for an easy way to migrate to Thailand; however, it is also considered to be an illegal risk. Because a border-pass document is easier to apply for and also cheaper than a passport, migrants who have experience of migrant work often apply for it. Nonetheless, a border-pass document can be valid for only three days, and migrants became illegal migrants after the third day; thus, some migrants were fined by Thai police in Thailand and Laotian immigration police when they return to their homeland.

Changing Social and Cultural Practices under Development

In the past, almost all villagers were farmers who practiced paddy rice cultivation as main activities and some households practiced shifting rice cultivation. In addition, most of the households planted cotton, weaved textile cloths, and made many kinds of clothes by themselves such as bed sheets, shirts, Laotian skirt (*sin*), loincloth (*pha khao ma*), kerchief, etc. Moreover, they also made agricultural tools for paddy field production such as a wooden plow, wooden harrow, wooden yoke and harvest mat, for instance. Additionally, many kinds of handicraft tools used in everyday life at home had also been produced by themselves such as a bamboo rice container, bamboo basket for streaming glutinous rice (*houat*), bamboo basket, bamboo tray and bamboo fish-container, for instance. Most of the agricultural and handicraft productions, and other practices were mostly made for consumption purpose rather than for the market. Yet, NTFP gathered for consumption and for the market also to earn cash income for purchasing some necessary goods from the market. Yet, as socio-economy changed, local people have also improved their living conditions. As a result, local people have changed their traditional lives as much as they have improved their practices.

Changing from reciprocity to hired labor

Traditionally, labor cooperation in agriculture and other social works in the local community were generally a form of reciprocity. In agricultural terms, they regularly applied a form of reciprocity in a group of relatives rather than among villagers. After attaining independence in 1975, Laotian government introduced new forms of cooperation in agricultural practices, was a form of reciprocity in a group. Yet, a form of cooperation among relatives still played the role of reciprocity in the village, which led to a combined traditional cooperation among relatives with organized co-operation in agricultural practices in the

period of pre-market economy. In addition, the villagers often applied a form of reciprocity in general among the villagers for social works in the village like organizing a traditional festival, organizing *kong boun* festival (ritual festival), organizing *Boun heuan dee*,⁹ organizing wedding party, building or rebuilding temples, constructing road, building weirs and building houses, for instance.

Nowadays, a form of general reciprocity is rarely practiced in the village. Many elderly people insist that a form of reciprocity should be practiced for some social works concerned with ritual practices like organizing village and house ceremonies or works that concern temples. However, almost all materials and tools must be commonly paid for in that cash has gradually played the role of the means of social cooperation and has controlled the socio-economic system in the community. As already mentioned, the number of wage laborers in the village has increased, which could explain the decline in traditional labor cooperation in the form of reciprocity and its replacement by a new labor cooperation or division of labor in the form of hired labor. Many reasons induced change in traditional labor cooperation; however, it is noted that the main reason for this change is a mechanism of market-oriented economy.

Changing morality and ritual practices

Basically, almost all villagers believe in Buddhism; only 0.27% of villagers believe in animism. Although they believe in Buddhism, they also believe in superstition as their ancestors had practiced. For Buddhist ceremonies, they have performed almost all *Heed sip song* (Twelve Traditional Practices)¹⁰ as other Laotian Buddhist people have done. In addition, organized in the community are many customary social ceremonies such as the *Ork kam* ceremony,¹¹ wedding party, *Heuan dee* ceremony, *Baci* or *Soukwan* ceremony,¹² etc. as in other Laotian villages. They have also shown respect for many kinds of spirits such as the house spirit, ancestor spirit, village spirit, field spirit, pond spirit, stream spirit and forest spirit.

As time went by, however, the socio-economic system continued to develop and change. Therefore, local people's morality and ritual practices have changed

⁹ A ceremony of merit for the dead on the day of the funeral.

¹⁰ *Heed Sip Song* means traditional Laotian ceremonies that Lao Buddhist people perform each month per year.

¹¹ A celebration of the birth of a newborn baby.

¹² *Sou-khwan* is a ceremony that ties white cotton strings on the wrists of people or something to warm the spirits of people for farewells, honoring achievements, giving thanks, and to celebrate animals and other spirits in which they believe.

as well. Particularly, morality in terms of economic practices has changed in many cases since the introduction of market-oriented economic system into this community. In the past, surplus food like mushrooms, bamboo shoots and wild vegetables they could gather from a nearby forest had often been given to relatives and neighborhoods; in some cases, surplus of fish hunted from ponds and streams had often been given to their relative and neighborhoods. When the market mechanism appeared in this community, surplus food gathered from the forest or streams became goods. The reason is that cash income is a necessary thing for every household so that they can buy other goods they do not produce. Because they have learned that surplus food or surplus products is a means of earning cash income, collecting a lot of surplus food or surplus products would be a means of earning much cash income. As a result, the traditional system of food exchange or products exchange in the form of reciprocity is decreasing, while a system of collecting surplus food or producing surplus products for market has been increasing in the community.

Due to the fact that change in morality is not linear, machine-like or tangible, but it is intangible, complex and flexible, some people have not been well aware of this change. As the survey shows, 34% of the respondents still insist that morality in their livelihood has not changed between the years before 1986 and the present. However, 66% of them insist that the trend of morality in local people's livelihood has been changing if a comparison is made between the two points in time. Almost all house owners have to hire laborers to construct although some households build their own. Yet, they sometimes ask relatives and the neighborhood to help build small houses. As the survey shows, 87% of them report that the villagers built their houses through reciprocal form of labor in the years before 1986, while only about 13% insist that they used both forms of reciprocal and hired labor. In contrast, 95% of the respondents report that villagers nowadays construct houses through hired laborers, while only 5% assert that they apply both reciprocal and hired labor for building their houses.

Considering the incentives in changing morality, the mechanism of market economy is considered as key factor in driving traditional morality to a new form. As already mentioned above, individual freedom in the mechanism of market economy may create conflicts among relatives and different economic groups as well as social injustice, because everyone in the market system mainly focuses on economic benefits and carries out many activities for commercial profit. In contrast, market economy will not flourish under traditional morality because its lenient aspect may result in low benefit. Nevertheless, when a socio-economic system is developing and changing, local people's ritual practices change as well. Many rituals such as the ritual practices for paddy field spirit

called *phee ta hack*, *sou-kwan lao-khao* (a small house for storing rice), *sou-kwan* for buffaloes, belief in house spirits, etc. which were practiced 20 to 30 years ago have gradually declined and are rarely practiced at present. Conversely, many ritual practices such as *Boun Pha Weth* (Weth Buddha festival), *Boun song nam Pha* (festival of pouring water over Buddha) and *Boun bang fire* (fire-rocket festival) have been practiced until recently. Belief in some rituals for spirits have become more serious today, particularly, the belief in *Ya phor xieng ngam*, who is believed to be the great village spirit.

Aside from these, the way of practicing rituals often changes with the usage of modern materials and machines for convenient organization to attract people's interest and to have them join the ceremonies as much as possible. For example, traditional musical instruments were used to entertain people who take part in the ceremonies or parties in the past, but modern musical instruments are often used by hiring a music band to entertain ritual partakers. One more point is that ritual practices today clearly differ from the past in that it has become more complex than ever before. Nowadays, they often organize ritual festivals with concern for entertainment value and marketability. Many types of goods and games are often served by small businesses at the festival site because people are often more consumptive than in the past. Moreover, the practice on a Buddhist holy day has also changed a little. Nowadays, they still practice the custom of not working on the Buddhist holy day only in relation to main works such as working in the paddy fields and milling rice, but some of them work on other things instead. This practice has changed because some of them are involved with official work while some have concerns with companies or factories that work on an official timetable and stop only on the weekends, not Buddhist holy days.

Social differentiation and consumerism in the village

In the years before 1986, almost all households had similar socio-economic status. Most of the households practiced paddy rice cultivation, while others practiced both paddy field cultivation and shifting cultivation. Even though some household members worked as government employees, retailers or laborers, the main task of households is paddy rice cultivation. The difference between the rich and the poor, however, is not related to the size of land.

Throughout the development process, socio-economic conditions have improved on both levels including national and local contexts. Particularly, when the market mechanism was introduced to the rural area, rural economic system was reoriented from a subsistence system to a market demand system. As

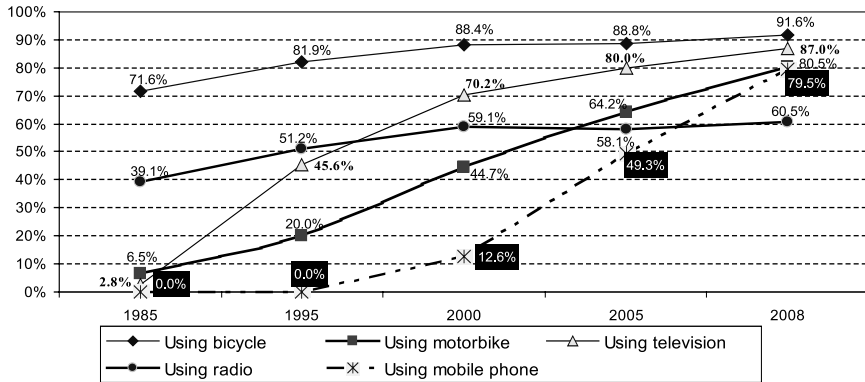


Figure 3. Trend of Local People’s Consumption of Materials.

Source: Survey in February 2008.

a result, local people have become differentiated in their local society based on their different capacities. Under the mechanism of market economy, farmers who own large paddy fields have better opportunity to produce rice products for market, while tenant farmers might face less opportunity to rent the paddy field because landlords now want to produce surplus rice as much as they can to satisfy market demands. Besides these, some households have enough capital invested in agricultural machinery to serve as an agricultural business. For example, they invest to buy tractors and threshing machines, so that they can service other poor farmers who do not have enough capital to purchase those machines. As a result, farmers who have large paddy fields or those who have enough capital to invest in agricultural machines have become richer and richer. Although tenant farmers and other small farmers have also improved their household income through many sources, it seems that the gap between rich farmers and poor farmers has gradually widened.

As socio-economy improves, local people have also increased their consumption of materials. In particular, they favored consumption of industrial products rather than local products. Figure 3 displays the trend of local people’s consumption of materials, including vehicles and telecommunications. Use of bicycles steadily increased from 71.6% of the households in 1985 to 81.9% in 1995, 88.4% in 2000 and 91.6% in 2008. Use of motorbikes rapidly increased from only 6.5% of the households in 1985 to 20% in 1995, 44.7% in 2000, 64.2% in 2005 and 80.5% in 2008. Besides these, some rich households have vans, pickups, ten-wheel trucks and threshing machine trucks. The first use of telecommunications in this village is the radio around 1962. Television is the

second one, which was first used around 1985, and the newest one is the mobile phone, which they first used in or around 2000. As Figure 3 shows, the trend of the villagers using radios has steadily risen from 39.1% of the households in 1985 to 59.1% in 2000; this trend has become stable in 2008. In addition, the trend of using television has quickly increased from only 2.8% of the households in 1985 to 45.6% in 1995 and 70.2% in 2000; it continued to increase to 80% in 2005 and 87% in 2008. Furthermore, the trend of using mobile phones is considered to have speedily increased, particularly since the year 2000 with 12.6% of the households to 49.3% in 2005 and 79.5% in 2008. Many households have more than one mobile phone, while most of the poor households do not have any mobile phone, television, or radio. Nevertheless, some poor households have mobile phones, particularly households whose members work as migrant workers.

Furthermore, as a result of communication with outsiders, local people's attitude toward clothing has changed. Particularly, since the village could communicate with the outside through telecommunications like television, some local people have learned to wear fashionable clothing. Moreover, worrisome information is that traditional knowledge of weaving textile among these local people has been declining and is on the verge of disappearing. In the long past, most of the households had practiced this handicraft; twenty years ago, about 24% of the households in the village still practiced weaving textile, but it gradually declined under the process of development — only 1.4% of them still continue practicing this local knowledge.

A general reason for this decline is that the young generation is not interested in this practice; due to the fact that many of them look at this practice as an out-of-date local knowledge, the practice will decline when the elderly women are too old to practice this handicraft. In the perspectives of economics and sociology, it seems that market economy is one more significant reason that led to this decline in handicraft. Under a market economy, it is not necessary for each household to practice everything in the form of self-sufficient economy; they have to choose more advantageous means of producing as much of their products as they can for not only their own consumption but for sale on the market to earn cash income for the household. In a real situation, they have many choices for earning income such as growing cash crops, working as wage laborer, serving as a retailer, for instance, one benefit of which is the capability to buy as many clothes in various modern styles as they need or wish. Another point is that traditional production is also a risk on the market, particularly the local market; many people favor fashionable industrial clothes, which are sometimes cheaper than handcrafted clothes.

A trend of social change from rural community is displayed by the fact that some small shops that serve local people's new practices appeared in this village while many traditional practices have gradually disappeared. A new game called snooker was brought to serve children in this community in 2004 instead of traditional games. Likewise, the first beauty shop appeared in the village in 2006, which was favored by many women, and now there are four beauty shops while there is only one barbershop in the village. A small CD and VCD shop also serves local people through easier access for them to multi-entertainment at home, which is considered a way of learning modern life from multi-culture, particularly foreign culture.

Discussion of Findings

As a result of analyzing the context of Ban Huaxiang, Xaithany district and Vientiane Capital, the study found two major findings as follows.

First, diversification of livelihood is considered new livelihood strategies under rural development with the mechanism of market economy. Based on the survey, most of Ban Huaxiang villagers are farmers who work in paddy fields, gardens and the forest. Paddy rice production is a key activity usually practiced in the main farming season by agrarian households, and they also raise livestock as an important activity in everyday practices for household subsistence. However, all peasants in this community have developed their own livelihood strategies such as changing from subsistence to market-oriented agriculture, combining local knowledge and agricultural technology, developing access to water sources and capital credit, and changing to non-farm activities for alternative income generation in order to adapt to the changing situation of national socio-economic development.

The findings of this study concur with theory of scholars like Shanin (1990) and Rosen (1975) who do not assume that peasant society as a static social structure but believe it to be dynamic and changeable over time. In the case of Ban Huaxiang, peasants in this community have changed over time in the process of developing their livelihood. To create rice products for the market, modern technology was applied by combining it with local knowledge which has been in practice for a long time. Agricultural tools like tractors are widely applied, and other tools are used depending on the availability of capital investment. In addition, they have tried to gain many ways of accessing water sources, which is a major problem in farming in this village, such as building semi- and mid-weirs and digging great wells. However, these weirs and great

wells could not provide sufficient water for irrigated paddy field production. Furthermore, they have tried to gain access to capital, which is considered as a means for all economic activities in a market economy. The local capital credit called “Savings Unit” was organized in 1998 and has been in business ever since. In addition, to improve household income, most of the farmers have many income sources such as agricultural production and other non-farm activities including wage labor, trade and driving, for instance.

The findings of this case also correspond to the idea of Chambers and Conway (1992) in that livelihood can be conceptualized in many ways including capability, activities, entitlements and assets that consist of both material and social resources required for means of living (Chambers and Conway, 1992, cited in Scoones, 1998: 5). According to this case study, agrarian livelihood is embedded in many systems, particularly political, economic and social systems. When the government promulgated and propagated policies of rural development, the local context changed, and thus, agrarian livelihood has also changed through adapting to the changing political, economic and social situations. Hence, this case means that agrarian livelihood is embedded in many systems, and any change in one factor will lead to change in other factors, too.

Second, rural development improves living conditions, but creates contradictions as well. As a result of rural development under government policy, infrastructure and living conditions of local community have been developed. In the past, this community was isolated with less contact with the outside, no telecommunication, no electricity and inconvenient dirt roads — vehicles could travel only in dry seasons. Nowadays, this community still has a dirt road, but vehicles can travel in all seasons (dry and rainy seasons), which makes it easier to have contact with the outside. Since 1986, electricity is supplied to this village, which is considered a main factor in improving local people’s living condition. There are two schools in the village, including a primary school and a complete secondary school where children of the community are educated. There is also a small village-hospital and two small drugstores which serve the local people in general for basic cases and some emergency cases. In addition, many households live under improved conditions; some of them have large houses and vehicles. Nowadays, these villagers have 87 concrete houses: about 92% of the households have bicycles, 80% have motorbikes, 87% have televisions and 80% have mobile phones. In addition, some rich households have vans, pickups, ten-wheel trucks and threshing machine-trucks. These achievements are noted as a result of development under the market mechanism, which accelerates economic development of agrarian households.

This finding partly agrees with Popkin's opinion that the market is a useful economic system for peasants. There are often better opportunities for peasants in the market than under feudalism, and markets can reduce the bargaining power of the lords (Popkin, 1979). The results of this study agree with Popkin's idea in that the market's demand encourages peasants to produce as much of their products as they can for the market as a way of increasing household income. In contrast, the results of this study do not agree with Popkin's thought in that the market mechanism creates benefits for landlords at the expense of poorer peasants. In the past, rich and poor agrarians often applied reciprocal cooperation and moral economic system in agricultural practices. Nowadays, rich agrarian households invest in machinery to earn profits from poorer agrarian households. The tenants have to pay an agreed amount of cash or products to the landlords based on borrowed paddy field area, often not based on the harvest of each year as in the past. This event occurs because the market mechanism encourages the rich to acquire as much surplus as they can.

On the other hand, rural development has also created unintended consequences, which can be a threat to sustainable agrarian livelihood. In the face of changes in national and local socio-economy, local people have adjusted themselves as much as they can based on their capacities for sustaining their livelihood. As a result, some diverse practices led them to unsustainable livelihood in some cases such as the case of out-migration of labor from the local area, particularly migration to work in Thailand, decreased use of traditional local knowledge, declined moral economy, increased consumption of materials and increased spatiality between local people, for instance. Therefore, the findings of this study coincide with Popkin's opinion that market crops may offer greater expected income than subsistence crops, but market and cash crops are assumed to increase the probability of a drop below the danger point (Popkin, 1979: 9). Likewise, findings also concur with Scott's opinion that under the process of market integration, many negative effects occur in peasant society (Scott, 2000). The results of analyzing this case study reveal that many negative effects have occurred in the community under process of development with market-oriented mechanism. As much as the villagers have created new choices, they have often faced new challenges. For instance, peasants who have cultivated new cash crops have faced new risks of unfamiliarity with new crops, resulting in low harvest; some peasants have faced landlessness; some peasants who have tried to gain access to the labor market in Thailand have often faced illegal risks.

Furthermore, the results of this study are similar to the opinions of De Koninck (1992), Parnwell (1996), Scott (2000) and Vandergeest (2003) in that development under the market mechanism often leads to differentiation

between groups of people in society. As De Koninck (1992) states, differentiation in classes occurred in the process of socio-economic development under the market mechanism in peasant communities. Also, Parnwell notes, “uneven development is the manifestation in space (between places, sectors, and people) of the problem of unequal access to natural, social, political, and economic resources” (Parnwell, 1996: 2). Similarly, Scott pointed out that as a result of being involved in market relations, production and reproduction of wealth and poverty are becoming more diverse as well as socially and spatially fragmented. Moreover, Vandergeest (2003) reveals that development in all its forms is inherently a spatial activity and all development projects involve reorganizing the meaning and control of space.

The results of this study show that under the mechanism of market economy, peasants who have large paddy lands have a better opportunity to produce rice for the market, while tenant peasants might have less opportunity to rent the paddy land because the landlords want to produce as much surplus products as they can to fulfill market demands. Besides these, some households that have enough capital invested in agricultural machinery like tractors and threshing machines rent them out to poor farmers as an agricultural business. As a result, peasants who have large paddy fields or who have enough capital to invest in agricultural machines and other off-farm activities like establishing shops and retail shops have become richer and richer. Although tenant farmers and other small farmers also have gradually improved their household income through many sources, it seems that the gap between the rich peasants and the poor peasants has gradually widened. Moreover, as much as household economy has been improved, peasants favor increase in consumption of things, particularly modern things like vehicles and telecommunication equipment, which can manifest the difference between groups of people in the community. At the same time, they have gradually abandoned their traditional local knowledge for agricultural and handicraft practices. Particularly, traditional tools have been replaced by modern tools, and they have almost discontinued their traditional knowledge of textile weaving and turned to fashionable clothes instead.

Moreover, the findings of this study coincide with the opinion of Scott in that commercialization of agrarian economy is steadily stripping away most of the traditional forms of social insurance (Scott, 1976: 10). Also, it is similar to the opinion of Randall and Charlesworth (2000) that “moral economy” being the powerful emerging official doctrine of “political economy” that takes on its meaning in “dialectic tension” with market economy. The results of this study reveal that customary moral economy has gradually declined while the market

mechanism has increased its influence over the community, or that it exists in the form of complex moral economy. Moral economy still exists in a group of close or distant relatives but not among general neighbors as in the past. Yet, the trend of moral economy is declining and its form is transforming.

It was found by analyzing the transformation of agrarian livelihood strategies in this case study that some peasants are faced with unsustainable livelihoods as a result of rural development through the concept of increased population mobility, green revolution and changing agrarian practices, environmental changes and their impact on farmers, increasing non-farming jobs and diversified incomes, and integration of local economy into the market system. The findings of this study coincide with the opinions of some scholars who study sustainable livelihood like Chambers, Conway and Scoones. As Chambers and Conway (1992) insist, livelihood is sustainable when it can cope with and recover from stresses and hardships and maintain or enhance its capabilities and assets, while not undermining its natural resource base. Likewise, Scoones (1998) points out that in different contexts, sustainable livelihoods are achieved through accessing a range of livelihood resources (natural, economic, human and social capital) which are combined in pursuit of different livelihood strategies (agricultural intensification or extensification, livelihood diversification and migration). Based on Chambers, Conway and Scoones, rural development in this case study has led some peasants to face some problems that risk their sustainable livelihood. Some peasants could not sustain their livelihood through agricultural work and have transformed into wage laborers in local areas; some became migrant laborers working in Vientiane city and some migrate to work in Thailand legally and illegally. The instance of illegal migration to Thailand manifests that the peasants could not recover from stress and hardships because they have risked themselves to survive. Nevertheless, most of the off-farm works they have performed are unskilled wage labor, through which high income cannot be earned. These laborers are seen not only as unskilled laborers, but are considered as a group of peasants who are unable to get access to human capital for livelihood resources.

In addition, some peasants have faced the problem of lack of agricultural land, so some of them have to work as tenant farmers or change into wage laborers. At the same time, the trend of outsider interference for land ownership in the form of investing in reforestation like rubber tree gardens or agar wood gardens has been on the increase. These situations are indicators of an increased trend of local people's risk due to lack of land. Nonetheless, this situation also reveals the declining access local people have of natural resource, which is considered to be part of natural capital of livelihood resources. Furthermore,

many farmers still lack capital to invest in agricultural machinery like a tractor, so they have to pay for hiring machines from the rich farmers. Some poor peasants became debtors of the rich because of an investment in an agricultural practice which resulted in no harvest due to a natural disaster like flood or an investment in other failed off-farm activities. These situations show that some peasants could not access economic or financial capital. Although the village administrators have tried to solve this problem by establishing a savings unit in the village, the problems of lack of capital and debts are still challenges for poor peasants.

Moreover, most of the peasants have abandoned their traditional local knowledge of agricultural practices, particularly in favoring the use of modern agricultural tools instead of traditional tools. Also, while they have abandoned some traditional handicraft practices like textile weaving, consumption of materials has increased, particularly fashionable clothes, which leads to changes in their traditional livelihood. When they have changed traditional livelihood by market system, it leads to declining moral economy. These social and cultural situations reveal the declination of social resources, which is a social capital for livelihood sources.

Briefly, Ban Huaxieng has improved in terms of basic infrastructure and living conditions as a result of rural development under market mechanism. On the other hand, development under market mechanism has also created unintended consequences, which are risky for some agrarian households' sustainable livelihood in certain cases such as migration of labor out of the local area, particularly migration to work in Thailand, decreased use of traditional local knowledge, declining moral economy, increased consumption of materials and increased spatiality between local people. Therefore, the results of this study concur with the hypotheses of this research: to sustain their livelihood, local people have adopted diverse and complex strategies of earning income. In addition, social and cultural practices have changed under economic development in the period of market-oriented mechanism; in particular, traditional moral economy has been declining and changing to a new form of economic cooperation.

According to the findings of this study, different groups of people could cope with situations of natural, economic and social changes on different levels based on their capacities. Hence, solving problems for local people on different levels should depend on the characteristics of each group and on local conditions. Therefore, government policy-makers and government decision-makers should pay attention to this in making decisions about rural development plans and implementation of those policies.

In order to reduce the number of labor migration from rural to urban areas and to Thailand, Laotian government — particularly policy makers and development planners — has to consider rural development as the focal plan and increase the budget on rural development in all sectors, including infrastructure facilities, easy access for the local people to the market, healthcare services and educational service including common and vocational schools. In addition, Laotian government should expand factories to rural areas to provide off-farm employment to rural people, which would prevent rural-urban migration. Nonetheless, to solve the problem of unskilled laborers for off-farm work in rural areas, the government should create more vocational training centers in local areas, particularly in the districts far from the city to help improve the skills of workers, which is considered to be a way of helping unskilled rural laborers earn more income.

Moreover, technical staff from Provincial and District Agriculture and Forestry Offices should pay more attention to solving problems of farmers in agricultural practices such as providing instructions or training on how to solve problems with agricultural practices, particularly new cash crops that are introduced for growing, lack of water for irrigated plantation, for instance.

Nevertheless, local administrators and schools should recognize these problems as important issues and think of effective ways for training and making younger generation respect, admire and value their local knowledge and traditional culture, and preserve practices in everyday life to achieve development along with conservation of sustainable valuable culture to overcome problems of declination of local knowledge and traditional culture in the process of rural development.

References

- Asian Development Bank (ADB). 1996. "ADB Project in Lao PDR to Boost Rice Production and Reduce Deforestation." *News and Events, News Release No. 138/96*. 21 November. <http://www.adb.org/Documents/News> (Accessed May 21, 2008).
- _____. 1999. "Proposed Loan to the Lao People's Democratic Republic for the Shifting Cultivation Stabilization Pilot Project." *Report and Recommendation of the President to the Board of Directors*. <http://www.adb.org/Project/report> (Accessed October 3, 2005).
- Chambers, R., and G. Conway. 1992. "Sustainable Rural Livelihoods: Practical Concepts for the 21st Century." *IDS Discussion Paper 296*, Brighton: IDS.
- De Koninck, Rodolphe. 1992. *Malay Peasants Coping with the World Breaking the*

- Community Circle?* Singapore: Stamford Press.
- Ministry of Agriculture and Forestry. 1999. *The Government's Strategic Vision for the Agricultural Sector, Vientiane, Lao PDR*. Vientiane: Ministry of Agriculture and Forestry.
- National Statistical Center. 2000. *Basic Statistics about Socio-Economic Development in the Lao PDR*. Vientiane: State Planning Committee.
- Parnwell, Micheal J. G., ed. 1996. *Uneven Development in Thailand*. London: Avebury.
- Phomvihanh, Kayson. 1986. *Political Report of Party Center Administrative Committee on the Fourth LPR Party Congress in 1986*. Vientiane: Lao PDR Publisher.
- _____. 1988. *Absolute Renovation in Order to Achieve New Victory in Conducting Two Strategic Duties*. Vientiane: State Publisher.
- Phothisanh, Sounate, and Nouxay Phoummachanh. 2000. *History of Laos: Ancient Time to Present*. Vientiane: State Publisher.
- Popkin, Samuel L. 1979. *The Rational Peasant: The Political Economy of Rural Society in Vietnam*. Berkeley: University of California Press.
- Randall, Adrian, and Andrew Charlesworth., eds. 2000. *Moral Economy and Popular Protest: Crowds, Conflict and Authority*. London: Macmillan
- Rosen, George. 1975. *Peasant Society in a Changing Economy: Comparative Development in Southeast Asia and India*. Urbana: University of Illinois Press.
- Scoones, I. 1998. "Sustainable Rural Livelihoods: A Framework for Analysis." *IDS Working Paper 72*. <http://www.ids.ac.uk/ids/bookshop/wp/Wp72.pdf> (Accessed March 31, 2008).
- Scott, James C. 1976. *The Moral Economy of the Peasant: Rebellion and Subsistence in Southeast Asia*. New Haven: Yale University Press.
- Scott, S. 2000. "Changing Rules of the Game: Local Responses to Decollectivisation in Thai Nguyen, Vietnam." *Asia Pacific Viewpoint* 41(1): pp.69-84.
- Shanin, Teodor. 1990. *Defining Peasants: Essays Concerning Rural Societies, Exploratory Economies, and Learning from Them in the Contemporary World*. Oxford, UK: Basil Blackwell.
- Vandergeest, Peter. 2003. "Land to Some Tillers: Development Induces Displacement in Laos." *International Social Science* 175: pp.47-56.
- Vilaysom, Somephone. 2007. *The Factors of Migrating from Rural Areas to the Capital City of Lao Women. Case Study: Xaythany and Xayseththa Districts, Vientiane, Lao PDR*. Seoul: KFAS.
- World Food Program. 2008. *Where We Work — Laos*. <http://www.wfp.org/country> (Accessed April 1, 2008).
- Yamanae, Taro. 1973. *Statistics: An Introductory Analysis*. London: John Weather Hill, Inc.

DEXANOURATH SENEDUANGDETH is Professor at Faculty of Social Sciences, National University of Laos. He taught History and Geography at Pedagogical University of Vientiane, Laos. His recent publication is *Community-based Participation in Watershed Management and the Utilization of Natural Resource at Nam Xong River, Vangvieng and Hinheup Districts, Vientiane Province, Lao PDR*.

Address: Faculty of Social Sciences, National University of Laos, P.O. Box 7322, Dongdok, Vientiane, Lao PDR [*Email:* dexanourath@yahoo.com]