

Diplomarbeit

Livelihood transitions in upland Lao PDR in the light of changing policies.

Can traditional rural institutions be maintained?

Verfasserin

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1. Introduction

This thesis emerged from a collaborative scientific project between BOKU¹ and CIAT². Within their research project "Spatial trade-off analyses for site-sensitive development interventions in upland systems of Southeast Asia" there are three interrelated components, which are the GIS analysis³ of the fallow system, the livelihood analysis and market chain analysis and learning alliance. I had the opportunity to join them in Laos PDR and to conduct my diploma thesis on the component of livelihood analysis.

CIAT is a not-for-profit organisation whose objective is to reduce poverty and hunger as well as to maintain natural resources in developing countries. CIAT belongs to one of the 15 centres worldwide that constitute the Consultative Group on International Agricultural Research, also known as CGIAR⁴ (http://flar.org/webciat/).

CIAT has a head office in Vientiane, the capital city of Lao; it enabled and funded my residence in field. The organisation also financed translators for fieldwork. It works and cooperates directly with the Lao government as well as with other international NGOs present in Lao PDR. The BOKU and CIAT research project is part of the project "Oudomxai Community Initiatives Support Project" of IFAD⁵ (Leitner 2007:90).

The following introduction provides a contextual examination of the research interest and objectives. The transition to new livelihoods and the impact on rural households and on the village community is the main focus. The aim is to point out that the development efforts of the Lao government represent a cause for the transition of rural livelihoods. The following part also deals with these effects.

¹ BOKU – University of Natural Resources and Applied Life Sciences, Vienna, http://www.boku.ac.at/

² International Centre for Tropical Agriculture, non profit organisation, http://flar.org/webciat/

³ Geographic Information System

⁴ http://www.cgiar.org/

⁵ http://www.ifad.org/

Upland rural communities in the northern part of Lao PDR are currently confronted with changing agricultural conditions. Due to several government efforts with the objectives to eradicate poverty and provide better livelihood conditions in the rural uplands, the rural households and communities are affected by the transitions of new livelihood strategies.

Social and agriculture changes within the last couple of years and decades, such as growing population, land scarceness and forest degradation, forced the Lao government to create appropriate measures and policies to assure sustainable livelihoods for remote upland environments. Upland agriculture techniques in northern Laos are traditionally based on rotational shifting cultivation, whereby the village is located on a permanent area, and only the cultivation area is shifted a couple of years after the cropping phase (NAFRI/NAFES/NUOL Vol. 1 2005:49). After the cropping phase, the cultivated area requires a long-term fallow period to recover before cultivating again. The main crop of upland shifting cultivators is upland rice but it is common to grow other crops on the same upland plot as well, like cassava⁶, job's tears⁷, galangal⁸, sesame, and so on.

Due to the growth in population the shifting cultivators are forced to shorten the fallow period. Reducing this period to a minimum causes soil erosion and cannot be practised in a sustainable manner any longer. Basically, shifting cultivation is recognised as a sustainable agriculture technique under the condition of maintaining the required fallow period. This manner is currently not guaranteed. Therefore one of the most important government policies on upland agriculture is to stop shifting cultivation. Promoting and supporting the so-called paddy rice, which is lowland wet rice, is one of the declared aims of the Lao government and will act as a substitute for eradicated shifting cultivation for upland environments in the near future.

Also called Manioc, Mandioc, or Yuca (Manihot esculenta), tuberous edible plant of the spurge family (Euphorbiaceae) from the American tropics. It is cultivated throughout the tropical world for its tuberous roots, from which cassava flour, breads, tapioca, a laundry starch, and even an alcoholic beverage are derived. Cassava probably was first cultivated by the Maya in Yucatán. (http://original.britannica.com/eb/article-9020643/cassava)

⁷ Job's tears is a tall, grain-bearing tropical plant commonly used in Asia for food and medicine.

⁸ Galangal plant is commonly used in Southeast Asia and for culinary and medicinal use.

Transforming traditional and approved agriculture techniques, like upland shifting cultivation, requires knowledge on new agriculture technologies. Upland rural communities need support from the government on these topics to build new sustainable livelihoods.

Changing livelihoods affect rural household structures as well as rural village communities. Especially on a rural household level, the gender aspect in decision-making and labour implementation will be affected by livelihood transitions. Rural women and men have responsibilities and duties, and possess power over resources and assets within a household. Exogenous influences that cause livelihood changes, such as government policies on rural communities, bring endogenous changes within rural households and communities.

1.1 Research objectives

This research will focus on upland rural households and village communities of the ethnic minority Khamu, which are affected by a transition of new livelihood strategies. In particular, the focus on so-called intra-household and inter-household institutions, which involve gender differences within households and communal interactions between the rural households and the community, is the subject of the research. Additionally, the identification of policies and laws, which have an impact on development outcomes, are to be identified.

Institutions are well-established, and also structured patterns of behaviour. New livelihood strategies can negatively affect rural institutions on household and community level. As well, changing economic opportunities from development efforts can jeopardize social and cultural traditions. The realization of new livelihood strategies can be viewed as having three stages: a decision process, implementation activities (i.e. labour), and the distribution of benefits. In rural Oudomxay, a northern province in Laos, where fieldwork took place, new livelihood strategies include paddy rice, domesticated NTFPs⁹, job 's tears and galangal.

⁹ NTFPs are non-timber forest products, which are an important source of food security in Laotian rural communities. There is a diversity of Lao forest foods and it includes fruits, vegetables, shoots, mushrooms, fish, small animals, insects, etc.

Considering these facts, the first focus is on the intra-household institution, which concerns the gender aspect. The different livelihood strategies, previous and new, of the farmers' households are to be analysed through all the three stages in order to figure out the differences on the basis of gender. This procedure reveals the traditional division of labour within rural households, as well as the pattern of decision-making and benefits. The second focus is on inter-household institutions, which means communal interaction between households and the village community. The main communal activity is labour exchange, in which most households are involved. The importance and function of this communal activity will be presented within this research. As well, probable changes of labour exchange, due to changes of livelihood strategies, can occur and deliver the farmers with a new situation.

Regarding inter-household institutions, it can be assumed that this represents an important source of income or a guarantee for food sufficiency for rural households. In rural upland Laos, especially in Khamu communities, which are the subject of this research, labour exchange is a traditionally and deep-seated institution. Besides the effects of livelihood transitions on intra-household level, it is justifiable to explore the effects on an interhousehold level.

The objectives of this research are to give answer to the question of changes on rural institutions. The objectives are referred, as you can see above, on the households and the interaction between them and their village community. Giving answers and solution to new challenges triggered through government efforts and policies should be the goal; finding adequate solutions, which provide advantages for all involved people – the rural households and villages, the Lao government as well as different development projects.

Asking for maintenance of traditional rural institutions demands for clarifying the terms. Rural households in upland Lao possess traditionally institutionalised patterns. Within households there are the relation and interaction between genders. Both, male and female members of rural households possess decision-making power as well as power over

resources. They have their duties and responsibilities, which are often separated by gender. E.g. while men decide mostly on livelihood strategies concerning agricultural level, women have more decision-making power on household duties (non-agricultural level).

The inter-household institutions of households and their community is characterised mostly by labour exchange, as mentioned above. Communal interactions and patterns of behaviour are embedded in those inter-household institutions. The interaction in terms of labour exchange has strict patterns and structures.

The question for maintenance in the light of livelihood transitions and changing policies is related to these institutionalised forms of intra- and inter-household interactions. The objectives of this research are to give an answer on this topic.

1.2 Research hypotheses (null hypothesis)

After the clarification of the research objectives and goals, the next step is to formulate research hypotheses, which are build on the research interest. The list of hypotheses were formulated and developed during residence in field. The null hypothesis is a proposition that I will try to disprove within this research thesis.

Hypothesis₁: The introduction of new livelihood strategies maintains household institutions.

- H_{1a}: New livelihood strategies preserve intra-household decision processes.
- H_{1b}: New livelihood strategies maintain the traditional division of household labour activities.
- H_{1a}: New livelihood strategies maintain the distribution of benefits within households.
- H_{1d}: Intra-household institutions are equal across all stages of realising a livelihood strategy (i.e. decision process, labour, benefits).

As you can see the first hypothesis and its subgroups cover the research interest on intrahousehold institutions under consideration of gender aspect.

Hypothesis₂: The introduction of new livelihood strategies has no impact on communal interactions (labour exchange, reciprocity, ...).

- H_{2a} : New livelihood strategies do not influence the interaction of households and village community.
- H_{2b}: New livelihood strategies have no impact on the distribution of household vs. communal labour activities.
- H_{2c} : New livelihood strategies maintain the distribution of private household and communal benefits.

The second group of hypotheses is related to possible impacts on communal interactions. These interactions mean the interaction between rural households and their village community.

Hypothesis,: Livelihood transitions are independent of household wealth.

The third null-hypothesis asks for a relation between an introduction of new livelihood strategies and household wealth. The rural households are officially categorised into wealth groups by IFAD, the International Fund for Agricultural Development (see chapter 5.1). It is assumable that there is a correlation between the wealth category and livelihood strategies.

Hypothesis₄: Livelihood transitions are independent of natural resource endowments and market access.

The fourth null-hypothesis deals with a potential relation of natural resources and access to markets of rural villages and livelihood transitions.

These four main research points will assist in testing these hypotheses, and will be considered in an attempt to disprove them on the basis of the data gathered in fieldwork.

2. Research context and study sites

The Lao People's Democratic Republic is a small Southeast Asian country, which borders China in the north, Vietnam in the east, Cambodia in the south and Thailand and Myanmar (Burma) in the west. The capital city is Vientiane, which is near the Thailand border. The official language is Lao, but French, English and various other ethnic languages are common. Lao PDR covers a total area of 236,800 square kilometres, which consist of 230,800 square kilometres of land area. The administrative division contains 16 provinces, one municipality and one special zone. The province Oudomxay, which this research focuses on, is in the north-western part of Lao.



source: http://upload.wikimedia.org/wikipedia/commons/e/e8/Laos-Karte.png

Most of the landlocked country is mountainous and is characteristically densely forested. Only between 12 and 15 percent of the Laotian citizens live in cities or towns (Ireson 1996: 28). The climate is tropical, with a rainy season from May to November and a dry season from December to April. The lowest point in Lao PDR is 70 m a.s.l. around the Mekong River and elevates to the mountain Phou Bia 2,817 a.s.l. (World Factbook 2006)

The Lao population in 2006 was estimated at 6,368,481 people, and the country exhibits a very high annual population growth rate of 2.39%. Between the 1960s and 1990s the Lao population doubled from an estimated 2,177,000 to 4,202,000 people (Elson 1997:76).

The age structure shows a remarkable proportion: 41.4% of the Lao people are between 0 and 14 years; 55.4% are between the ages 15 and 64. The smallest parts, 3.1% of the population, are those aged 65 and over. The median age is about 18.9 years, and life expectancy is 55.49 years.

Most of the Lao people work in the agriculture sector. This sector generates around 57% of the GDP.¹⁰ An estimated 84% of households is engaged in farming, in which the most common economic system is subsistence farming (Rigg 2003:1).

2.1 Agriculture

Farmland in Lao is national property, but the farmers have the opportunity to trade and even inherit farmland. The cultivated area depends on the size and the labour resources of the Lao families and households.

Farming characteristics show that the lowland area is involved in and dominated by paddy rice cultivation, while the more mountainous areas operate upland rice farming by implementing shifting cultivation. This special form of cultivation is characterised by different stages of land preparation during the year. In the Northern Province Oudomxay, where fieldwork took place, the farming systems are organised mostly as shifting cultivation (Thongmanivong 2004:34 ff).

Shifting cultivation, also known as slash-and-burn cultivation or "hai" (in Lao language) is often said to be responsible for deforestation (Ducourtieux 2004:72).

The gross domestic product is one of the measures of national income and output for a given country's economy.

While most of the upland farmers practise shifting cultivation for rice production, there are several other sources, which are required for food security and livelihood sustainability.

"Upland people depend on forests for subsistence and income generation. Benefits from forests include food, wood, fuel, NTFPs land for crops, shifting cultivation, tree planting and livestock feed and fencing." (NAFRI/NAFES/NUOL Vol. 1 2005:19).

NTFPs, which are non-timber forest products, are very important for food sufficiency in the upland communities as well as a major source of income since commercial trading began. The most important and commonly used NTFPs are:

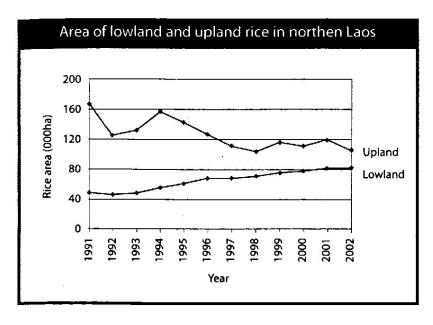
NTFPs	Function	
Paper mulberry (posa)	cash crop - to make fibre products	
Muak bark (puak muak)	cash crop - to produce glue	
Broom grass	cash crop - for making brooms	
Galangal	cash crop - used as a spice	
Cardamom	cash crop - spice and medicine	
Mushrooms	for food subsistence	
Wildlife	for food subsistence	
Bamboo shoots	for food subsistence	
Rattan	for food subsistence	
Forest vegetables	for food subsistence	

(NAFRI/NAFES/NUOL Vol.2 2005:142)

According to a survey conducted in northern Laos in the late 1990s, NTFPs contributed more than 60% towards cash income among rural families (Foppes/Ketphanh 2004:7). The importance of NTFPs for rural communities is to be verified.

Besides the importance of upland rice and NTFPs in the northern part of Lao PDR, the cultivation of lowland wet rice, paddy rice, has increased in the uplands over the last

couple of years. Reasons for this are primarily governmental policies on upland shifting cultivation (see more in chapter 3.1), one of whose main objectives is to eradicate shifting cultivation. The aim of these governmental efforts are to support paddy cultivation in the upland areas to provide rice sufficiency for rural upland communities.



Source: NAFRI, NAFES, NUOL, Vol. 2, 2005, p. 13

As the above table shows, lowland paddy rice in the northern upland is increasing, while upland rice cultivation is decreasing. However, there are still hilly upland villages where lowland is scarce.

Transforming the traditional upland rice cultivation of Lao upland farmers and establishing paddy cultivation technique brings a new challenge for upland communities, where shifting cultivation has been an inherent part of rural livelihoods for centuries. Government efforts are taking on this livelihood transition and government staff provides knowledge and support for upland farmers.

2.2 Khamu ethnicity

The country shows a plurality of ethnic groups. After the Vietnam War in 1975, the newly-formed Lao People's Revolutionary Party kept the general classification of the ethnic groups to three main categories. These are classified by their spatial residence, not by their lingual connection. These groups are the lowland Lao (Lao Loum), the midland/upland Lao (Lao Theung) and the highland Lao (Lao Soung). The Lao Loum represented a numerical majority of about 68%. The upland Lao Theung represents about 22% of the total population (Neudorfer 2007:95).

Based on the ethnic diversity in Lao PDR, a trichotomy seemed to be useful for reducing the complexity. In 1981 the Minister of the Lao People's Revolutionary Party, Kaysone Phomivane¹¹, called for a replacement of the threefold ethnic classification, which was used officially at all levels, even in scientific research.

"If one wants to create new relations of production and new productive forces, there must be new, socialist men" (Pholsena 2006:172).

Kaysone's proposal to replace the former classification was based on ideological principles copied from Stalin's model, which recognizes every member of a multi-ethnic state as equal. However, the effort to replace the threefold ethnic concept was not accomplished, and it is still applied these days (ibid.176).

Besides the classification of Lao people based on their residential patterns, there are five major ethno-linguistic categories. These categories try to define and comprehend the different linguistic pattern of the diverse Lao population, which is characterised by migration from over the centuries.

Thai-Lao (Thai-Kadai)	Mon-Khmer	Hmong-Yao	Tibeto-Burmese	Sino-Ho
(ibid.113)				

¹¹ Kaysone Phomvihane was the founder of the Lao People's Revolutionary Party in 1975 and also became the prime minister of Lao PDR.

Lao's population includes more than 40 ethnic groups, which can be classified into five ethno-linguistic categories. This research relates to the ethnic minority called "Khamu". Khamu people belong to the Mon-Khmer ethno-linguistic group, which constitutes a branch of the Austro-Asiatic language family (Proschan 2004: 342). Most of the Mon-Khmer live in the upland area of Lao PDR, which means that they belong to the Lao Theung of the uplands (Neudorfer 2007:95).

"Khamu" means "person" or "human" in the Khamu language. Formerly, Khamu people were called "Kah" or "Xa" which means "slave" in a pejorative manner in the Tai language. The reason for this is found in history, especially in the history of Luang Prabang city. Before the 13th century the Khamu dominated the historical city Luang Prabang, but after being conquered by Lao ethnic people, Khamu people absconded into remote upland areas or many Khamu became serfs for Lao's aristocracy (Proschan 2004:343).

The Khamu people speak their own language, which they call the "Khamu" language. The majority of the Lao population, the Lao Loum, belong to the linguistic family of Thai-Lao (or Thai-Kadai). The official language is Lao, as mentioned before, and is often referred to as the Lao Loum language.

Khamu and the official Lao language differ, and members of each ethno-linguistic group could not actually communicate with each other because the differences within the languages are too large. However, independently of their ethno-linguistic background, all Lao school-going children learn the Lao language at school (Rehbein 2004:188). Thus most of the Khamu are bilingual, although there is a disadvantage concerning Khamu women. These often didn't have the opportunity to join the educational system in the past and therefore had to learn a second language besides their mother tongue of Khamu. As a study by Richter shows, in the past, many parents did not have the motivation to send their girls to school, as taking care of younger siblings was often seen as the duty of young girls, while their male counterparts were sent to school (Richter 1996:17).

However, besides the fact that many Khamu women only speak Khamu, they are not considered to play a role in representative functions in public affairs or receiving guests (IFAD Report 2002:10).

Traditionally Khamu communities practise shifting cultivation to mainly grow upland rice, though the situation has changed due to government policies, and some Khamu farmers have already started to cultivate lowland paddy rice where lowland is available.

Nowadays Khamu people live mostly in the northern provinces of Lao PDR, especially in Luang Prabang, Oudomxay, Luang Namtha and Houaphan. In Lao PDR the largest number of Khamu people, around 400,000 in the year 1985, live there compared to South-East Asian neighbouring countries (ibid.342).

Concerning kinship and inheritance patterns, there are basic distinctions between Lao Loum and Lao Theung/Soung through matri-linear and patri-linear structures. The Lao Loum often adhere to matri-linear kinship. The Khamu community tends to follow patri-linear kinship and inheritance patterns as well as patri-linear traditions. The youngest sons of Khamu families in particular are favoured to inherit family land (Schenk-Sandbergen/Choulamany-Khamphoui 1995:66), but these inheritance patterns may be superseded by the government land and forest allocation policy (Ireson-Doolittle/Moreno-Black 2004:62).

Consequently, Khamu men are more likely to be the head of the household and the representative within the village community. Female-headed households are not very common in Khamu culture, but if women live alone, due to divorce or loss of spouse, their status as head of the household is recognised and legitimised by the community (Thomson/Baden 1993:4). Nonetheless, Khamu women do not have as much power over economic resources or decision-making within a household compared to their spouses, but this does not mean that women don't have any potential for economic autonomy, and ...

"... self-reliance as crucial economic sectors and activities are monopolised by women due to the acceptance of the gender division of labour." (Schenk-Sandbergen/Choulamany-Khamphoui 1995:17).

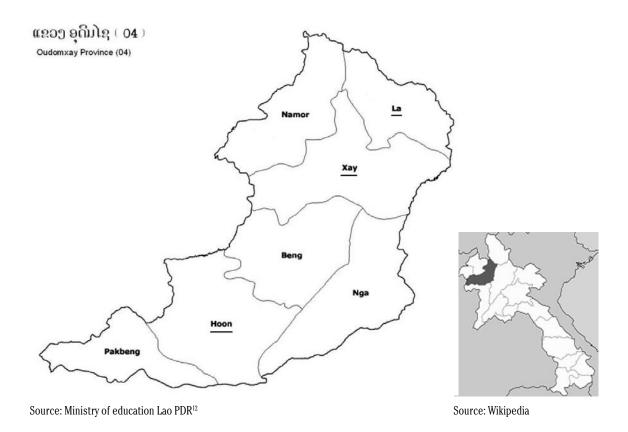
The Khamu household is basically the social and economic unit, where family members live together comprising a nuclear family. The nuclear family sometimes includes other relatives like grandparents, grandchildren, brothers- and sisters-in-law, or siblings. Basically Khamu tend to patri-local patterns, where newly married couples often reside with the husband's family until they can afford their own residence (ibid.64).

In Lao PDR construction of houses vary among different ethnic groups to some extent. Characteristic of Khamu houses is that they are built it on stilts or pilings, where it is possible to use the area under the house for carrying out activities like weaving or breaking the rice husks as well as for firewood storage. The materials used to build houses are basically bamboo and wood or a combination of both. There is a significant difference between the materials used for houses of prosperous and poorer families. While poorer families essentially use bamboo as the main material for house construction, the more prosperous ones often have wooden walls as well as rooves build from metal (Proschan 2004:343).

A typical Khamu village ranges from 15 to 100 household units, which is around 100 to 1000 people per village. The bigger the village, the more prosperous it is, while small Khamu villages tend to be more affected by poverty. A reason for this is that smaller villages possess less farming and agriculture land, which is available to cultivate in a subsistence manner (ibid.343). Governmental development efforts will affect the village structures due to village merging policies and resettlement efforts. Changes in household and village institutions, which is the focus of this thesis, as well as changes on village structures and patterns, will occur in the future.

2.3 Study area

The villages from which the data for this thesis were gathered are all in the Oudomxay province, which is located in the northern region of Lao PDR.



The region is very mountainous and covers a total area of 15,370 square kilometres, of which about 45,000 hectares is agricultural land. Oudomxay province is divided into seven administrative districts. The first is the Xay district, which is the provincial capital, followed by Namo, La, Nga, Beng, Houn and finally Pakbeng district. Only a sixth of the total population of Oudomxay province lives in urban areas.

The population of Oudomxay was estimated at about 236,525 in the year 2000. Most of Oudomxay's population belongs to several ethnic minorities.

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See Ministry of Education Lao PDR http://www.moe.gov.la

Distribution of ethnic groups in Oudomxay:

Khmu (Mon-Khmer group of the Austro-Asiatic family) – 57.7%

Hmong (Hmong-Mien family) – 13.1%

Leu (Tai Kadai family) – 12.2%

Lao (Tai Kadai family) 9.1%

Phoutai (Tai Kadai family) – 2.8%

Kor (Sino-Tibetan family) -2.5%

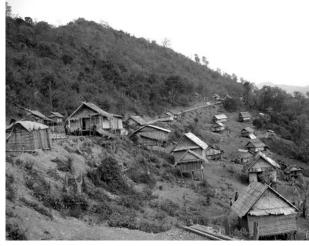
Yang (Tai Kadai family) – 0.7%

Phounoi (Sino-Tibetan family) – 0.7%

(IFAD Report 2002:24)

Oudomxay province is identified as having the second-highest proportion of poor people. Around 60% of Oudomxay's population is classified as poor. Furthermore, the World Food Programme (WFP) declared five districts of Oudomxay (Namo, Nga, Beng, Houn and Pakbeng) as the most vulnerable districts to food security (ibid:25). Houn district is one of the three villages from which data for this research was gathered.

The three villages in which fieldwork took place differ in their natural environment and in agriculture conditions. Nam Heng Neua, in the Xay district, is easy to reach by car and is about one hour's drive from Xay. It has quite a lot of lowland area and is not embedded in a very mountainous environment.







Houay Sang village, which is in the La district, is the smallest village, also not far away from Xay. It takes about an hour to get there by car. When I went to Houay Sang for the first time we had to drive through a river because the bridge, which was built by workers, was not ready to cross yet. Houay Sang is surrounded by hills and there is not much lowland area near the village. However more than half of the villagers have paddy fields because the population is low.

The third village, Phoulat, is in the Houn district. It takes about three hours to get there from Xay by car. The village is very remote and access is not possible during the rainy season. Phoulat is characterised by a mountainous upland area, and lowland paddy area is scarce.

All three villages are not accessible by car during the heavy period of the rainy season because the roads to the villages are not asphalted.

Village profiles

The following table is a profile of the three villages in which fieldwork took place. The information given was provided by the headmen of all three villages during the interviews.

Population	Phoulat, Houn	Houay Sang, La	Nam Heng Neua, Xay
Number of Families	146		144
Number of Households	135	36	96
Total population	886	193	674
Men	430	90	321
Women	456	103	353
Labour total		70	253
Labour Men		35	122
Labour Women		35	131
Infrastructure			
Road access	Yes, around 1998	yes	yes
School	1 - 5 grades	1 - 2 grades	1 – 5 grades
Irrigation system	for paddy (5 ha)	not finished yet	1 (7 families use it)
Water supply/pump/tanks	11 pumps	no supply but 3 water tanks	13 water supplies
Shops	9	5	4
Health centre	no	no	no
Speakers	4	0	0
Electricity	no (some use battery/motor)	no (some use battery/motor)	no (some use battery/motor)
Traders in village	yes	1	4 (have cars)

Wealth Cathegory			
1 rich (category 1 + 2 together)	64	19	44
2 average	25	11	27
3 poor (category 4 + 5 together)	46	6	25
Rice Cultivation			
upland rice	135 households	33 hh (10,37 ha)	79 hh
paddy	17 hh	17 hh (3,82 ha)	54 hh
both	17 hh		
upland area in ha		10,37 ha	55 ha
paddy area in ha		3,82 ha	14,16 ha
Rice Sufficiency			
per 12 month	63 households		34
not enough for 1 - 3 months			21
not enough for 4 - 6 months			14
not enough for 7 - 9 months			7

2.4 History - a short excursus

The history of Lao is complex. Neighbouring countries often posed a threat to the small, landlocked country of Lao. To start with the ancient Lao history and the foundation of the Kingdom Lane Xang by Fa Ngum in the 14th century, it should be mentioned that Lao history began thousands of years ago with migration to South-East Asia from places like China. However, the fist kingdom can be described as marking the beginning of Lao history. The capital of Lane Xang was Luang Phrabang, but in 16th century it was displaced by Viang Chan, which was established as the new kingdom capital. The kingdom endured its status and power for more than 300 years.

In the 18th century the first Laotian kingdom of Lane Xang collapsed. It was divided into three kingdoms: Luang Phrabang, Viang Chan and Champasak (Stuart-Fox 1997:6ff). All three founded kingdoms had to compound tributaries to the kingdom of Siam. The Siam Empire made all important decisions on the Laotian kingdoms, although the Laotian monarchist could decide and reign quite independently. The year 1893 is historically regarded at the beginning of the French colonisation. France was interested in Lao before, but after the invasion of the Chinese Ho, also known as black flags, France offered their protection against the Ho (Simms 2001:157 ff).

French colonisation lasted until the year 1954, although there was a short disruption during World War II. In 1945 Japan occupied Lao, but the country was reoccupied by the French imperialists in 1946. During the short Japanese occupation, the first communist opposition forces and liberation movements were formed. The power of France began to weaken during World War II and the French forces were finally defeated in the year 1954. They lost the battle of Dien Bien Phu against the Vietminh, the Vietnamese national and communist movement for independence, and were finally forced to retire from Indochina territory. Lao became an independent country and became ...

"... united politically under the king of Luang Prabang and a coalition government including communists, neutralists and royalists" (Ireson-Doolittle/Moreno-Black 2004:11).

The next couple of years were characterised by civil war, which was generated by the different demands for power of the several Laotian political fractions. The Phatet Lao, supporters of the Lao People's Revolutionary, started with guerrilla actions and got politically more organized. The royalist forces were still supported by France and later by the USA. The United States of America supported the anti-communist forces financially as well as logistically. As a result, Lao became involved in the Vietnam War, and during 1964 to 1975 Lao became one of the most bombed countries in world history. The consequences were devastating. Productive farmland and villages were destroyed and many people became refugees. During the war, Phatet Lao was subsidised by the Soviet Union, China and North Vietnam. Following the end of the war in 1975 the Lao People's Democratic Republic was founded, and was ruled only by the Lao People's Revolutionary Party, which was established by Kaysone Phomvihane in 1955. Kaysone became the first prime minister of Lao PDR.

In the 1980s, when the power of socialist countries declined, Lao PDR began to establish new economic strategies for development. The market was opened and changed the centrally-planned economy to a more liberal pattern model like the global market economy (Stuart-Fox 1997).

3. Development challenges

Currently, Laos is confronted with rapid changes in the political, economic and social sector. Laos is still a developing country and, based on the results of the 2006 human development report, it ranks 133rd of a total of 177 concerned countries of the world (HDI Report 2006).

"The country is making the transition from command to market, and subsistence to cash. The neo-liberal agenda is broadly accepted" (Bouahom/Douangsavanh/Rigg 2004:607).

As this citation shows, Laos, which is still officially a communist country, began to increasingly deregulate the economic sector and force to make a conversion from subsistence to cash in the 1980s. But the country still suffers from a lack of infrastructure and development. Among 40% of rural dwellers - around 2 million - live below the poverty line, which is partly a result of infrastructurally remote rural areas. The majority of poor people live in upland areas and practice shifting cultivation. Furthermore, about 80% of the rural households in Lao still have no electricity, (Rigg 2003:1ff). However, the rural areas are less affected than the urban areas due to efforts of the Lao government, which opened the market to increase wealth and reduce poverty.

The rural households produce more for their subsistence and are still partly excluded from market entry.

"As well as widening inequalities, people and households are being squeezed by a variety of processes and mechanisms: [...] by the failure of alternative livelihood opportunities to expand sufficiently and rapidly to compensate for the decline in traditional activities." (ibid.3).

Although the Lao government has established several programs to cope with the problems of rural households, it still has to find appropriate and efficient solutions for the challenge of the coming years.

The Lao government is also trying to graduate from its classification as a least developed country within the next 20 years.

"This will require a substantial effort by the government and significant economic growth. Many development problems have been planned and implemented which will have a significant impact on the utilisation of natural resources and the livelihood of the people." (Thongmanivong 2004:15).

3.1 Government policies on upland areas of Lao PDR

The Lao government defined five major policies in the agriculture sector with the aim of providing more development and better livelihoods for the people in upland Lao. To eradicate the poverty of the upland rural people the policies are focused on agriculture and natural resource management. All these policies are linked together and have overlapping concerns.

Shifting cultivation

In the agriculture sector of Lao PDR shifting cultivation practise has been a traditionally applied technique over the centuries. In the year 2000 the government estimated that around 39% of the Lao people depended on shifting cultivation (Thomas 2004:13).

There are several concerns about this specific agriculture technique and the Lao government is concerned with the negative impacts of deforestation, soil erosion, etc. Shifting cultivation is defined as being unsustainable. In fact, shifting cultivation seems not to be sustainable any longer due to population growth and scarceness of land. Essentially, shifting cultivation is sustainable when the rotation and recover cycle of 20 years is observed before the land is slashed and burned again. If the fallow period can not be preserved, deforestation will spread around upland Lao. For this reason the government defines shifting cultivation as not being a sustainable agricultural technique.

The Lao government therefore is aiming at the eradication of shifting cultivation by 2010, which means that it will have to provide alternative crops to replace shifting cultivation. Most of the upland farmers in Lao PDR cultivate and plant rice ("hai") with the shifting cultivation technique. Rice is the most important crop providing food sufficiency. Thus the government policy of eradicating shifting cultivation is linked with supporting paddy rice cultivation. This agriculture technique is also very common in Lao PDR, but it requires lowland area and irrigation systems.

Opium eradication

The seventh Lao party congress resolved to eliminate opium production by 2005. Especially in the upland and highlands of Lao PDR, opium cultivation was a substitute for rice insufficiency of poor farmers. They were able to provide cash income to compensate for the lack of rice. Since the early 1970s opium cultivation in the so-called golden triangle - Burma, northern Thailand and northern Lao - has presented one of the biggest productions of world's illicit opium (Cohen in: Development and change 2000:179).

Systematic efforts of the Lao government are still ongoing to eradicate opium production, and the future will show whether the efforts were successful. Opium eradication is part of the world's war on drugs, and due to the cooperation of Lao government the efforts are recognised in the international community.

Land and forest allocation

The objective of this policy is obviously linked with the strategy of eradicating shifting cultivation. The government has started to allocate land to farmers to support and enable permanent cultivation on a defined land parcel.

The government provides land for crops, tree planting and grazing to rural households with a three-year certificate, but there are also strategies that aim at protecting forests through classification.

The Ministry of Agriculture and Forestry (MAF) created a guideline for land and forest allocation, which involves rural households and provides participatory land-use planning. Some critics believe that this policy generates new poverty and hold that ...

"...land allocation is one of the main causes of new poverty throughout the nation because it is the cause of inadequate arable land being allocated to households." (Alton/Rattanavong 2004:33).

It is in fact justifiable to ask for an equitable allocation of land for all farmers of rural communities. Especially when considering the fact that maybe the poorer farming households are mostly affected by the negative cause of this policy.

Focal site strategy and village relocation and consolidation

The government argues that the relocation of remote rural villages is the most effective strategy to alleviate poverty and increase development and modernization for the country. Moving villages to places with road access will integrate formerly isolated upland farmers into the markets, the healthcare and education system. Postulated positive effects of the policy exist, but a totally new situation affects displaced households, which are being confronted with new environment or agricultural practices. However, the argument of the government for resettlement is:

"If development cannot be brought to the people, bring the people to the development." (Romagny 2004: 117).

Decentralisation

The objective of this policy is providing independency for the Lao provinces and giving them responsibility for socio-economics and agriculture. The Ministry of Agriculture and Forestry (MAF) designated provinces, districts and villages with their own responsibilities. The province is the strategic unit, the districts are the planning and budgeting unit and the rural villages are the implementation unit. The implementation on village level works with the support of staff from district offices. They supply knowledge, and support the implementation within the villages by the villagers.

The most relevant policies for this research are the shifting cultivation policy, the land and forest allocation policy as well as the focal site strategy and village relocation and consolidation. The effects and impacts of these three policies are immediate because the rural households and communities are affected directly by them.

4. Theoretical framework

4.1 Theories of social change

Due to several changes that concern the rural people the theories of social change should function as a base and theoretical structure.

Social change means a structural change of a society within a certain time period and it has to be asked whether and how the institutions of a society are affected by the change.

There are three main categories influencing social change. The first is the physical environment and infrastructure. Environmental conditions influence people's lives and their situation. The second influence is political organisation. The political authority, whether authoritarian, military or democratic, has a huge impact on conditions for social change. The third influence constitutes the cultural factors, including the impact of religious and the communication system of a society. Communication in particular is one of the main influences on social change (Giddens 1999:561 ff).

Furthermore, within the sociological paradigm of social change a distinction is drawn between three functions:

Descriptive function

Assessing the whole situation by describing the chronological sequence and the topological space of change. This also involves a view of the historical aspect of a society.

Explanatory function

This function asks "why" change takes place. It analyses the causes, conditions and the impetus for the specific changing situation. Thus, the dynamic aspect of social change should be cleared in regard to the aim of a detailed reconstruction of the structural aspects within the society.

Evaluative function

After considering the two functions, it is now possible to do an evaluation of social change, taking into account all aspects, such as the consequences, the importance and, finally, to rate the dimensions of social change (Müller/Schmid 1995:12 ff).

The complex paradigm of social change went through different phases. It began with theoretical considerations within the framework of the evolutional theories of differentiation and development by Comte and Spencer to Tocqueville, and Marx's theory of materialism and, finally, the contemporary representative Parsons, who had a systemically theoretical and functional differentiation approach. Parsons' assumption is that the progressive functional differentiation of societies results in social change. Though processes of differentiation within a system do not automatically bring about social change. Parsons argues that social change requires an institutionalisation of social values on all social levels. Also, he supposes that complex societies are involved in continuous conditions of change caused through innovation, changes of social values, lack of resources, etc. If social systems possess the capability of adaptation, then social change results in advancement and progress (Kolland/Gächter 2005;28 ff).

All these different approaches developed over centuries, contributing to the complex theories of social change.

According to Giddens' main categories, which influence and cause social change, the transformation of upland rural livelihoods can be ascribed to the first and second categories. The physical change of the environment and infrastructure determines a change in agriculture techniques in upland Lao, which also causes change in social structure. In northern upland Lao some natural resources have become scarce, and rural households have to find coping strategies to ensure sustainable livelihoods. The government tries to provide such coping strategies, as they support the introduction of new livelihoods for upland rural households.

Causing social change is also determined by the second category, the political organisations. The Lao government's efforts and its development policies leave marks on rural structures. For example, policies, which support the access and involvement in markets for rural households will generate social change over the years. Within this research it is necessary to explore the changes in gender and inter-household communication. The theory of social change delivers a wide and complex basis for it.

On the basis of the paradigm of social change there are several other approaches that try to contribute an analysis of social development and change.

According to Wolfgang Zapf, different stages within a society exist regarding the achievement of development and modernisation. The process of modernisation is categorised in three parts:

- 1) a secular process which began with the industrial revolution and generated the establishment of the western industrialised countries.
- 2) the different processes of the catching-up of economic fragile and weak countries.
- 3) the efforts of western industrialised countries to cope with new challenges with innovative measures (Zapf 1996:63 ff).

The term "modernisation" is defined as a seeking process with unknown objectives. In contrast to this term is the term "transformation", which is a subset of catching-up the modernisation processes. Transformation is not linear but the objectives are well defined. According to Zapf, the transformation objectives are democracy, growth and welfare.

To reach these objectives, disadvantaged countries try to adopt and recreate the basis and patterns of institutions of model societies – the industrialised countries. Furthermore, Zapf describes an intense stacked world society, which can be distinguished between:

- 1) OECD countries¹³, which are dominant
- 2) countries, which are situated in transformation processes
- 3) underdeveloped countries, which struggle for elementary basic needs (ibid.72 ff)

¹³ OECD is the organisation of economic co-operation and development, which is an organisation of industrialised countries whose goal is to improve worldwide trading endeavours.

Zapf's approach does show some weaknesses. He underestimates regression and stagnation. He also doesn't see that the expectations of societies within the transformation processes are too high. He established this approach in the 1960s. Over the next two decades the debates on development intensified and brought new approaches as we will see in the following chapter.

4.2 Theories of development

When exploring a developing country, a short introduction to the theories of development is necessary to comprehend the research and the contextual background. The debate on theories of social change requires a discussion about the main theories of sociology of development or, rather: the two theoretical approaches can not be separated from each other because the sociology of development has its source in the paradigm of social change.

Generally, the sociology of development asks why so-called developing countries exist and what the causes for it are. Within this discussion, three main models have emerged over the years, which attempt to find an adequate answer to this complex question.

Theory of Modernisation

The principle item of this theory is that developing countries have to seek causes for their underdevelopment in their own system. They are responsible for their situation due to endogenous factors, which means that these countries show deficits in technical, economical and social development. The Theory of Modernisation assumes that developing countries will industrialise in the same way as industrialised countries. Modernisation is seen as a process, which developing countries must go through with the aim to adapting to western standards of industrialisation and capitalism. According to Max Weber, an important expert on this specific approach, developing countries will be underdeveloped as long as they are trapped in their tradition (Behrendt 1965:61 ff).

But first of all, the Theory of Modernisation has its genesis in the theoretical analysis of Parsons, called structural functionalism. Society is structured by different subsystems, which are basically harmonizing by sharing uniformed norms and values. Industrialised and developing countries can get involved in conflicts, but these conflicts end up in harmony because they depend on each other.

According to Behrendt, a German sociologist, underdeveloped countries are countries that are technically, economically and socially retarded (ibid.54 ff). Furthermore, the factors for underdevelopment are basically the social structural circumstances as well as the disinterest of a society. Underdevelopment within the Theory of Modernisation is the incompetence of solving problems like the effort of increased wealth and prosperity. And according to this theory, developing countries lack motivation and dynamic impulses for progress.

All in all, this approach seems not to be able to explain the situation of developing countries sufficiently. The initial point that these countries are responsible for themselves due to endogenous factors is insufficient because it does not examine all the causes and reasons. Also, it ignores the history of colonialism and the consequences, especially economic, of the affected countries.

Another point of criticism is the fact that the Theory of Modernisation shows an ideological character. It idealises the concept of modernity as a ubiquitous and desired final stage of societies (Kolland 2004: 89). This ideological view on development is closely connected with ethnocentricity or, more precisely, eurocentricity. All patterns of industrialised western societies are seen as the one-and-only unique concept and standard, which other countries are required to reach as well.

Theory of Dependency

The Theory of Dependency was established in the 1960s in the former colonised South American countries. The theory makes the industrialised and highly developed western countries responsible for the situation of underdeveloped and poor countries. Exogenous factors are the main cause for the situation of underdevelopment. These exogenous factors are the consequences of colonisation and the integration into the global market, and they inhibit the chance for economic development of developing countries (Ziai 2004: 110).

The term "dependency" describes the asymmetric relation between industrialised and developing countries. All economic and social development is dependent on exogenous factors, but the affected countries can not operate and compete with their economic partners in a comparable manner.

When discussing the Theory of Dependency, the terms "centre" and "periphery" must be mentioned. The existence of a centre and a periphery is seen as the main cause for underdevelopment. The powerful situation of the industrialised and rich countries, which are defined as the centre, inhibits the development of developing countries, the periphery. This is possible because the powerful centre possesses all the resources like production, information, etc. Also, it is in the position of political control.

According to this, the cause for underdevelopment is mainly the exploitation of the periphery by the centre (Kolland 2004: 95). The economic production of the periphery is oriented on the requirements of the centre. The existence of centre and periphery is complementary. It is a systematic process that the centre profits from the exploitation of the periphery. Systematic underdevelopment had its origin in the fact that so-called developing countries started producing for industrialised countries and became dependent on the demand of the countries of the centre.

The centre and periphery model was enhanced by Johan Galtung. He referred to the fact that the centre and periphery exist in developed countries as well. Both centres of industrialised and developing countries basically harmonise when it comes to the same interests and demands. In underdeveloped regions there is a disharmony of interests and demands. The periphery of industrialised and developing countries are not connected and do not interact with each other. This facilitates the maintenance of imperialistic structures and exploitation of periphery by the centre (ibid.97).

Post-development approach

The third approach within the sociology of development, which seeks an answer to the underdevelopment of some countries, refuses the term "development" entirely. Refusing the term development does not mean refusing or denying the concept of social change. The point is that the approach discusses the term development as a western construction, which has not been adopted by other countries. It searches for an alternative. The construction of development and the aspect of the adoption of western modernisation are not regarded as desirable in the post-development discourse. Instead of adapting western values and normative standards, it is more effective when developing countries win back their cultural identity and try to be autonomous in a political and economic sense (Ziai 2004:169 ff).

More precisely, the construction of development, which defines all non-industrialised countries as countries in deficit and underdeveloped, is strictly refused by the post-development approach. It emphasises the cultural plurality and their differences as legitimate patterns of a society where western norms and values do not have to be adopted as a dominant cultural manner. Thus the post-development approach does seek alternatives for development (ibid.168).

The post-development approach was established in the 1980s by several representatives such as Esteve, Escobar, Latouche, etc. Most of them had practical experiences in development aid and projects, but they were all disillusioned and disappointed by development efforts and procedures. The post-development approach can be described as a theoretical approach to practical experiences. It is not a theoretical academic concept. Livelihoods of local communities, their attitudes, grass-root movements and norms and values represent the initial focus of the post-development approach. It defines itself as an approach where human beings are the centre of interest. Local culture, knowledge and traditions should be maintained and all other established scientific development discourses should be regarded critically and sceptically.

Furthermore, the approach defines the former development discourses and paradigms as facilitation for influences of industrialised countries to strengthen their market and

economic systems. The economical attempts of a global market destroy the social relations and natural resources. This process will lead to a proceeding destruction of structures of subsistence. Besides this fact, the critics of the post-development approach identifies a global cultural homogenisation as a result of former development projects. According to the representatives of this approach, development projects in the past failed more or less (ibid.183).

4.3 Livelihood Approach

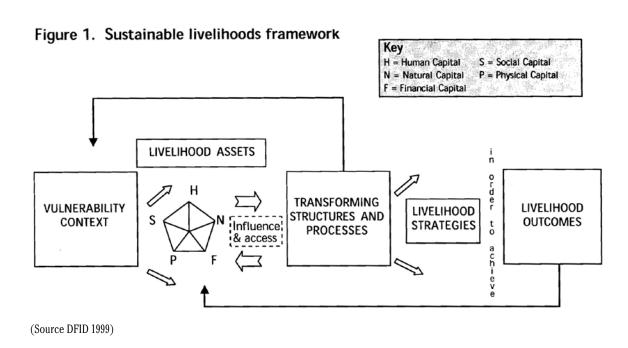
Besides the theories of social change, which deliver a theoretical overview on the research context, the livelihood approach provides a more practical view on it. It is also mentioned because it delivers an introductory overview of the theoretical livelihood concept. In the following, the livelihood approach will be discussed in order to comprehend the research context of rural livelihoods.

Within the development studies there was a more actor-oriented phase after the 1970s and '80s, which focussed on the dependency approach and neo-marxism. The new established approach recognised micro-structures, such as families, households, communities, etc., as an important image of distribution of assets and power. Many of these household studies draw a very pessimistic picture of poor households. In the 1990s a less pessimistic perspective of household studies appeared and draws attention to people's livelihoods and possibilities of maintaining it in a sustainable and survival manner (Haan/Zoomers 2005: 29).

The Department for International Development (DFID), which is based in London, designed a conceptual framework of sustainable livelihoods, founded on research done by the Institute of Development Studies (IDS) of the University of Sussex. According to this, sustainable livelihoods are defined as follows:

"A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base." (Scoones 1996: 5).

At the centre of the livelihood approach are the people themselves, whose aim it is to find possibilities of development in order to reduce poverty. Poverty includes multiple dimensions that affect people's livelihoods in a certain way. By implementing the livelihood framework the situation of the rural people should be improved. The framework considers poor people in a context of vulnerability, which is influenced by shocks, trends and seasonality. These factors are denoted by a relationship to multiple sorts of capitals.



Concerning the research context it implies that the government efforts and policies as well as natural resources cause transforming structures and processes, which influence livelihood strategies and the transition to new livelihood strategies. On the basis of the framework these different assets influence the structures and processes, but governmental efforts also have an impact on people's access to assets. Thus, access to assets cannot be regarded independently of governmental endeavours. For instance, when the governmental policy is implemented to resettle remote villages and cluster them to bigger and easily accessible villages, the assets of rural families and households can change and cause a transformation of structures and processes which finally end up in new livelihood strategies.

Furthermore, the livelihood approach determines some core principles, which have to be implemented when using this approach. Firstly it has to be people-centred, then holistic;

dynamic; it should build on strengths; should be able to link the macro and micro level and, finally, it should be sustainable.

The principle of the people-centred approach means analysing people's livelihood by involving them in the process with the intention of supporting them in defining their own future goals.

Holistic in this context indicates that the approach is non-sectoral, recognises multiple influences on people and tries to reconstruct how they are related to each other. The acknowledgment of the multiple livelihood strategies as well as the multiple outcomes contributes to the principle of holism.

The livelihood approach is denoted as dynamic because it works with dynamic structures, as the livelihood of people represents, which is not static and always affected by several changes. As a result, the approach has to be dynamic to meet the requirements of the research context.

To build on strengths is another important principle of the approach. Thus people will be encouraged and enabled to achieve their goals. Particularly the fact that the approach builds on strengths rather than needs emphasises a special and sensitive contribution.

Furthermore, observing the macro and micro level is a valuable concern because there are still concepts that fail in the attempt to relate these two levels, and just focus on one level.

Sustainability means the fact that people are resilient to shocks and trends and do not depend on external support. A sustainable livelihood will leave safe and valuable structures for the concerned people and their next generations (DFID 1999: chapter 1.4).

4.3.1 Assets

According to the framework (Figure 1) the vulnerability context involves the impact of the environment of people's livelihood. This context has an influence on the livelihood assets. The DFID characterised five different types of assets, which are defined as capitals (ibid.chapter 2.3.1 ff).

All these different types of assets are related to each other and, of course, influence each other; access to an asset can generate several benefits.

"If someone has secure access to land (natural capital) they may also be well-endowed with financial capital, as they are able to use the land not only for direct productive activities but also as collateral for loans." (ibid.chapter 2.3).

Human capital includes skills, knowledge, ability to work and good health. An important requirement in reducing poverty is a healthy physical condition as well as access to education. Hence human capital is a very fundamental livelihood asset, which contributes to the livelihood outcome of transformation. Government efforts in Lao PDR may facilitate access to human capital or increase the existing human capital of rural households and communities. The education of rural children will increase when resettling remote villages that do not have any access to an education system. Also, the health status of rural people may improve through governmental efforts and policies because the merged villages are located at roads or near roads, which gives rural people better access to a healthcare system.

The term social capital describes a participation of people in networks, memberships of more formalised groups and informal safety nets, like reciprocity or exchanges. If people possess a high grade of social capital they will be able to extend their access to other institutions.

In rural upland areas of northern Laos social capital is extremely valuable. Rural households interact, for example, in labour-exchanging groups to cultivate their agricultural area. Informal safety nets, which enable participation in reciprocity systems, may offer solutions or coping strategies when resources or food are scarce.

Natural capital includes, on the one hand, assets like land, forests, marine or wild resources. On the other, it contains so-called intangible public goods like air quality or biodiversity. Even the shocks and trends in the vulnerability context are related to the natural capital. Thus natural processes or catastrophes can cause the destruction of the natural capital

of the rural people. In the research context it should be considered that the allocation of paddy lowland area is an important natural capital in the northern uplands. Due to the natural conditions in the uplands there is not enough lowland area to provide for all rural households and families. Thus the ownership of paddy lowland area can strengthen rural households and constitute very important capital, however not everyone can benefit, and the government may not provide it to every household.

The expression physical capital is used for the extensive term of infrastructure. It includes affordable transport on roads or rails, buildings and even the access to information, so-called telecommunication, is added to the term of physical capital.

Physical capital was already mentioned in the part about human capital because the different assets or capitals can not be regarded independently of each other; the different forms of assets are mutually conditional. Road access enables an inclusion in the health-care system for rural households, although this inclusion also requires financial capital. Access to information has an effect on the level of education, but education also affects the qualitative acquaintance with information systems. The Lao government is in a position to offer and strengthen the physical capital of rural households by providing and facilitating access to physical capital of remote rural people.

Financial capital also comprises an important resource, besides the other forms of capital, which makes it possible for people to achieve their livelihood objectives. Not only the asset of cash, bank deposits or valuable objects but also resources of inflow money, like financial support from the state, can be assigned to this last capital type.

Concerning the sustainable livelihood framework, the aim is to transform the livelihood assets into livelihood outcomes by determining the structures and processes which influence such a transformation. For example, the government policy can create new access to assets through improving the infrastructure. Generally the access to assets is a profound contribution to livelihood outcomes (e.g. reduction of poverty).

Structures can be defined as "hardware" which sets a frame and contributes to the legitimacy of governance appointments, (e.g. legislative, executive), and the term of processes constitutes the software.

"They [the processes] determine the way in which structures – and individuals – operate and interact." (ibid.chapter 2.4.2).

This means that the transforming structures and processes of the livelihood framework are caused by external influences from institutions, policies and laws, organisations, etc. Here it should be pointed out that livelihood assets can contribute to establishing access to several areas, and have an influence on structures and processes and vice versa.

An introduction of new livelihood strategies, which is the focus of this research, may change the access to assets of rural households. For example, when the government introduces and supports new livelihood strategies in the upland rural areas, it may affect the financial capital of rural households, when becoming involved in the market chain through cultivating new cash crops. Changes to the capital of rural farmers may also appear in a different way considering the gender aspect. For example, when an introduction of a new livelihood strategy results in more power over decision-making or access to several resources for men or women.

4.3.2 Livelihood strategies

With the determination and implementation of livelihood strategies people seek opportunities to achieve their livelihood goals. The livelihood approach tries to support and reinforce positive potential and attempts to ease negative influences. People's assets influence the decision or choice of strategies, the so-called access to assets. Access to assets offers up different possibilities for defining appropriate strategies. More precisely, it demands diverse strategies, and these are connected to people's preferred livelihood outcomes.

Scoones identified three clusters of livelihood strategies, which cover the livelihood possibilities of rural people. These are agriculture intensification/extensification, liveli-

hood diversification and migration. Livelihood strategies can be divided into three levels: the individual, the household and the village level (Scoones 1998:9 ff).

For this research the agricultural diversification is very interesting to take a look at. The introduction of new livelihood strategies in upland Laos may bring an agricultural diversification through the introduction and support of new crops as a substitute for shifting upland rice cultivation. However agriculture intensification and extensification may also play a role in future agriculture procedures in the upland. The introduction of paddy lowland rice cultivation in particular may require intensification, at least until this new agriculture technique of rice cultivation is proven in upland areas.

4.3.3 Livelihood Outcomes

The so-called outcomes can be achieved by the applied livelihood strategies and are split into five categories: More income, increased well-being, reduced vulnerability, improved food security and, last but not least, more sustainable use of the natural resource base. It should not be assumed that these concerned people only try to achieve the maximum income.

"Rather, we should recognise and seek to understand the richness of potential livelihood goals." (DFID 1999: chapter 2.6).

According to the livelihood outcomes it should be noted that an outcome such as increased well-being is difficult to demonstrate compared to increased income, for example. It demands an extensive and further view of the situation of the people.

Reducing poverty, which is the main objective of the Lao government, can be viewed as the major livelihood outcome. Reducing poverty does not mean only increasing income, as it is mentioned above. The access and assets and different forms of capitals may result in increased well-being and reduced vulnerability of upland rural communities.

4.4 Household decision-making from a gender perspective

There are several scientific approaches on household decision-making power considering gender relations. All of them try to deliver and provide an explanation about family behaviour and relations between family members. Before demonstrating these different approaches and models it is important to point out that it is about the behaviour and interaction of family members and their preferences, whether they are selfish or altruistic. And before demonstrating the different household and family models, the term gender will be briefly explained.

Gender is strictly constructed within human interaction and ...

"... is an ever-present socio-economic variable which affects roles, responsibilities, constraints and opportunities of people in a society." (Gebert 1995:3).

Besides other variables such as age, ethnicity, class, etc., gender can also be the basis for generating social differences. The gender approach tries to illustrate the different tasks and roles of men and women and tries to put it into a perspective that facilitates a reconstruction of differences.

The following provides a disquisition and progression of the different models of family interaction over the last couple of decades.

Samuelson and Becker provided theoretical models of family behaviour and preferences in the 1950s and 1970s, which were widely accepted and provided an initial point of reference for further and contemporary discussions on this topic.

Common preference models

Samuelson established the consensus model ...

"... to exhibit the conditions under which family behaviour can be rationalized as the outcome of maximizing a single utility function." (Lundberg/Pollak in: Journal of Economic Perspectives 1996:142).

The source of the consensus model is the perception of the single utility function of each family member. But in the case of the consensus between each family member, the family works as one single unit and leaves their individual differences behind.

Becker introduced a similar approach, which he called the altruist model. He argued that family consists of one altruistic parent and selfish, but rational children. The presence of an altruistic parent, who is concerned about the well-being of all family members, suffices to transform the selfish behaviour of other family members into consequently unselfish behaviour (ibid.143). Therefore, family income and goods are distributed well amongst each of the members. Everyone profits and benefits from the family welfare.

Criticism of these models was made about the assumption that only one decision-maker in the family system appraises and calculates the best opportunity for all.

These two models seem to be obsolete, though they are still accepted as a theoretical framework. Based on these two models there are other approaches that try to provide adequate explanations to recent questions and concerns.

Cooperative bargaining models

Due to the fact that common preference models do not recognise the multiple preferences of household members, the cooperative bargaining models were introduced by economists in the 1980s. Their model was based on the game theory, and marriage was defined as a cooperative game in which spouses have their differences and conflicts. To solve these differences they cooperate through bargaining strategies.

By considering the gender aspect in decision-making and within households Lundberg and Pollak introduced the separate sphere model. This approach includes the fact that husband and wife have gender-specific activities in their roles as household members. Both models, the cooperative bargaining model and the separate spheres model, consider that husband and wife bargain over their individual decision-making on gender-based activities.

The separate spheres model in particular is an adequate approach within family and household systems, with a strict division of labour and specialisation based on gender (Martz 1996:44).

Transaction approach

As with the cooperative bargaining model, the transaction approach argues that the decision-making power of household members or spouses depends on the allocation of power over income, health, earning, etc. Though the focus is on potential income more than the actual income.

"Pollak's (2005) work suggested that bargaining power in decision-making was determined by the spouse's productivity in household production…" (ibid.45).

So-called productivity in household production includes work on the farm in an agricultural household, which is relevant for this study. The more productive a spouse of a farmer's household is, the more decision-making power he or she will have over resources, family needs, livelihood strategies and so on.

Not clear in this approach is the question of whether gender-related intra-household duties, especially those done by female members, are relevant to productivity. Household duties do not generate income and are not recognised as gainful employment.

This study aims to determine whether and in which domain men and women of rural households tend to have more decision-making power. Some studies on farmers' households have shown that men tend to have more decision-making power in farm production, while women have decision-making power in the household (ibid.47).

Unitary vs. collective models

When referring common preference models to the unitary model, the cooperative bargaining models and transaction approach can be referred to collective models. The unitary model assumes that a household acts as a single unit of common preferences and

pools its income. Focusing on the individual differences of household preferences, the collective models offer a more comprehensive view on intra-household allocation.

"All collective models have two common features: first, they allow different decision-makers to have different preferences, and, second, they do not require a unique household welfare index to be interpreted as a utility function, thereby allowing the index to be dependent on prices and incomes as well as 'tastes'." (Quisumbing/Maluccio 1999:8).

Emphasizing the different preferences among household members also includes a differentiated view on the economic situation within a household unit. The collective models assume that due to the different preferences, gender specific economies in a household also exist, so-called "autonomous sub-economies" (Quisumbing 2003:6). The appearance of autonomous sub-economies results in the decision-making of individual household members who try to maximise their individual utility instead of the utility of the household unit (ibid.6ff).

Considering the fact that Lao upland rural communities recently made the transformation from subsistence to cash, the exploration of an occurrence of autonomous sub-economies is also reasonable to implement.

When reviewing literature on Lao PDR it can be assumed that decision-making on livelihood strategies and the allocation of resources are differentiated by gender as well as duties and jobs.

"In both village and town, most jobs are gender-linked" (Ireson-Doolittle/Moreno-Black 2004:14).

According to this, there must be a difference between household members and their decision-making power and the control over resources and benefits. Furthermore, it seems that the unitary model is not adequate and sufficient to describe upland rural intrahousehold patterns. Pooling resources within a household, as the unitary model argues, would make a discussion about gender related power over household resources irrelevant.

Family and household

While discussing the different types of household decision-making models above, it is necessary to demonstrate the differences between the two terms "family" and "household" in the following.

Generally, family and household complexity is explained in two models. The assumption is that extended family structures are common in pre-industrial agricultural societies ...

"... whereas the nuclear family household is most common in 'simple' (e.g. hunter-gatherer, slash and burn) or modern societies" (De Vos 1995:32).

As well, there is the idea that in urban and industrial societies the large, complex traditional family structure is going to lose some of its functions.

Referring to "new home economics" a household builds a place of basic commodities production. The family is a certain community of individuals that can profit from the joint production within the same household (0tt 1992:19). Like the collective models, the "new home economics" argues that it can not be supposed that all members of a family are in total agreement on relevant decisions. Based on the transaction approach a family can also be defined as an organisation of exchange. This exchange may reduce the transaction costs. There is a distinction between three types of family transactions, which can create a surplus in comparison to a single-person household. This surplus is often generated by the cooperation of family members.

"As a production company, the family members can make use of comparative advantages by specializing in market work and work at home in conjunction with intrafamily trade. The family enables the exchange of home-produced goods (e.g. cooking, shopping) for which usually no external exchange market exists." (Ott 1992:20).

"As a consumer cooperative, the family permits the joint use of indivisible goods (e.g. dwelling, car) and provides declining costs by economies of scale." (ibid.20).

"As an insurance coalition, the family produces security through an exchange of mutual promises for aid. This includes material security for risks such as illness or unemployment as well as for old age." (ibid.20).

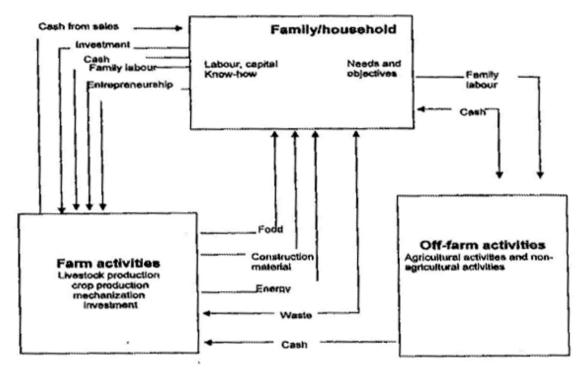
Although the third type, "insurance coalition", relates to a social function, the essential reason for the joint household-keeping of family members lies in its economic advantages. When regarding the traditional debate on family and household terms, it is the nuclear family that is meant. Especially in industrialised societies the concept of the nuclear family is the representative setting for decision-making and resource allocation (ibid.22).

Farm households

In the 1980s Ruthenberg introduced a definition of farming systems, which were described as a unit ...

"... with several activities that are closely related to each other by the common use of farm's labour, land, capital, by risk distribution and by the joint use of the farmer's management capacity." (Marinda 2006:60).

A farming system features internal factors which concern resource endowments. These endowments are family labour, the capital which is generated by household members, and know-how. Ruthenberg illustrates the interrelationship within a farm family unit (ibid.61).



Source: Marinda 2006

The Ruthenberg's illustration shows the complexity of farming systems when operating internally within the farming system. The boundaries of the farming systems and the input and output generated within this system become apparent in this illustration.

When regarding input such as family labour within a farm household, it is not clear who controls or makes decision on production activities. Both, men and women provide labour input but the power over decision-making may not be well balanced. Ruthenberg also emphasizes that control and access over resources, which is determined on a household level, and the distribution of resources between men and women, may have an impact on farm activities and productions as well as on off-farm and household activities (ibid.61).

Wattenbach and Friedrich have another definition. They characterise a farming system as a natural resource management unit, which is applied by a farm household and includes all the economic activities, both on-farm and off-farm activities, of all the family members (ibid.61).

Needless to say, this definition as a natural resource management, which includes all family members, also raises the question of gender aspects about allocation of resources, labour input and decision-making power.

5. Methodology

In the following part, there is a description of the various methods, which were applied for data collection. Each stage of the methodological progress will be discussed and demonstrated to comprehend the choice of methodology within this research.

5.1 Framework and Design

Rural institutions differ according to livelihood strategy. Patterns of behaviour typically occur with the realization stages of a livelihood strategy, beginning with the decision process, its implementation, and ending with the distribution of benefits. Such patterns of behaviour have household and community dimensions. Table 1 is a stylized representation of how traditional and new livelihood strategies involve household members (gender) and also members outside the household (community) within labour exchange.

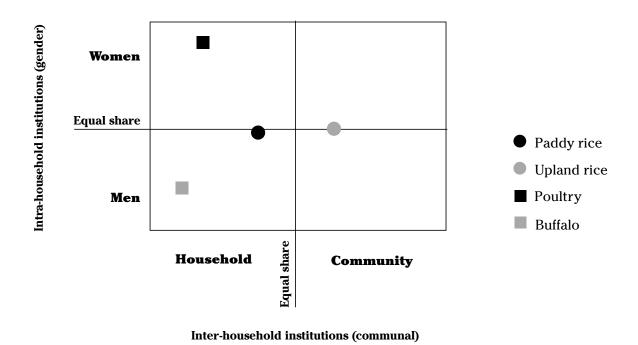


Table 1. Conceptual framework: Inter- and intra-household institutions of livelihood strategies (decision process, implementation, and benefit distribution)

To explore the intra- and inter-household institutions, tools of the participatory rural appraisal (PRA) were applied during the interview sessions.

With the exception of the first ten interviews, each other interview with rural household members was divided into two parts: the semi-structured interview part and the PRA session with flipchart.

The semi-structured interview was divided into four main parts:

1) Family context

Moving to a village? Why did they move? What kind of agricultural activities did they do in the old village? Children? Education? How many people live in the household? Division of labour and domestic responsibilities?

2) Agricultural activities

Main activities for food and income? Communal of the household activities? Selling products? Any future plans concerning livelihood strategies? Will it still require labour exchange?

3) Communal activities

Involvement in labour exchange by gender? Meaning of labour exchange? Changes of labour exchange in the last couple of years?

4) Changes

Changes and problems affecting family? Changes on village community? Changes on an agricultural level and natural resources? Trading activities? Effect of the village merging policy?

The PRA flipchart session, which constituted the second part of the interview session, was also divided into two parts: exploring the intra-household institutions of each livelihood strategy concerning gender differences and then the inter-household institutions focused on communal interactions.

For every livelihood strategy of a rural household, which the interview participant mentioned in the interview before, he or she had to show on a seven-rank scale the decision-making, the labour implementation procedures and the distribution of benefits by gender and communal level. The appendix contains a list of implementation procedures for each livelihood strategy.

The implementation procedures of upland rice farming and corn cultivation are the same, which is cultivated in the same way as upland rice and is often placed in the same plot with upland rice and some other crops, like job's tears, cassava, sesame, galangal, and bananas. It depends on the farmer and the availability of plots. Some farmers cultivate upland rice in their own plot and some farmers grow upland rice together with other crops.

The way in which paddy rice is farmed is totally different to upland rice and other crops. This is done on a lowland area and is not burned. Paddy rice is cultivated in an independent plot with no other crops.

The labour procedures on livestock vary from small livestock, such as chicken, ducks, goats and pigs and larger animals like cows and buffalo. The small animals have to be fed, while the big animals do not need to be fed by the farmer: they graze on the grassland or fields. Another livelihood strategy is the collection of NTFPs. While the domesticated NTFPs require the same implementation procedures as upland rice, the collection of NTFPs only needs to be distinguished in the collection and selling procedures.

In order to explore the decision-making power, the different implementation procedures and the benefits of each livelihood strategy I created a seven-rank scale.

The illustration below concerns the intra-household institutions by gender aspects.



Using the line as an indicator, interview participants had to show which person in their household is responsible for decision-making, labour implementation and how the benefits are distributed by gender. The ranking scale is classified into:

entirely female | mostly female | a little more female than male | equal | a little more male than female | mostly male | entirely male

The inter-household institutions, which are the communal interactions between the household and the village community, were explored using the same method. On the seven-rank scale interview participants had to show whether decision power is located on a household level or communal level. The labour implementation procedures were explored by considering villagers outside a household and whether they are involved in labour exchange. The aim of this session was to figure out which labour procedures require labour forces outside rural households, and represent an interaction between households and the village community.



The ranking scale is classified in the same way as the scale for intra-household institutions except for the terms. Female and male were replaced by the terms household and village community:

entirely household labour/activity | mostly household labour | a little more household labour than communal labour | equal | a little more communal labour than household labour | mostly communal labour | entirely communal labour

Wealth ranking of rural households

The interviewed farmers are categorised by wealth ranking, which IFAD¹⁴ defined for rural households:

Category 1

- 1) Surplus rice, selling and lending to others
- 2) Sell cash crops (corn, sesame, job's tears), NTFPs and cattle of around 500,000 700,000 LAk/year¹⁵
- 3) Have more than eight heads of cattle, small animals (pigs, goats) more than ten heads, poultry more than 30
- 4) Own assets (a tractor, TV, rice mill, and small hydroelectricity)
- 5) Own a lot of agricultural land
- 6) Children attend school, only a few household members are ill and can afford medical treatment and have enough clothes
- 7) Have a permanent house

Category 2

- 1) Surplus rice
- 2) Sell cash crops, NNTP's and cattle, generating around 300,000-500,000 LAk/year
- 3) Have cattle 5-8 heads, small animals (pigs, goats) 5-10 heads, 20-30 poultry
- 4) Have no assets (TV and small hydroelectricity)
- 5) Own enough agricultural land
- 6) Children attend school, only a few household members are ill and can afford medical treatment and have enough clothes
- 7) Half-permanent house

¹⁴ The International Fund for Agricultural Development (IFAD) developed the wealth categories in 2004, the definition is unpublished so far and was provided to me during fieldwork from CIAT (International Centre for Tropical Agriculture) staff

¹⁵ LAk is the official Laotian currency called Lao Kip. Exchange rate: 10,000 Kip equals 0.75 Euro

Category 3

- 1) Rice sufficiency during whole year
- 2) Sell cash crops, NTFPs, cattle, generating of around 200,000-300,000 LAk/year
- 3) Own 2-5 cattle, 2-5 small animals (goats, pigs), 10-20 poultry
- 4) Have no assets (TV and small hydroelectricity)
- 5) Own medium sized agriculture land
- 6) Children attend school, only a few household members ill and can afford medical treatment and own some clothes
- 7) Half-permanent house

Category 4

- 1) Rice insufficiency for 1-3 months/year
- 2) Sell cash crops and NTFPs cattle, generating around 50,000-100,000 LAk/year
- 3) Own nought to one head of cattle, small animals 0-1 (goats, pigs), poultry 5-10
- 4) Have no assets (tractor,TV,rice mill and small hydroelectricity) and sometimes wage labour for income
- 5) Not enough agriculture land for sustainable livelihood
- 6) Children cannot attend school. Few household members are ill. The family can not afford medical treatment and don not have enough clothes
- 7) Temporary house

Category 5

- 1) Rice insufficiency for more than six months a year
- 2) No income from cash crops, NTFPs or cattle
- 3) Have no livestock
- 4) Have no assets and sometimes wage labour for income
- 5) No or only a little agricultural land
- 6) Children cannot attend school. There are a few household members ill. The family cannot afford medical treatment and do not have enough clothes
- 7) Temporary house

For this research the five categories were divided into three categories to reduce the complexity and make data collection easier. The first two categories represent the category "rich", the third category represents "average" and the last two categories represent "poor" within this research.

After telling him how many household members of each category I wanted to interview, the headman of each village selected the households under consideration of the three wealth categories. I wanted to avoid a majority of a certain wealth category and tried to create well-balanced patterns of the three wealth categories for the data collection.

5.2 Sampling and data collection

Rural households represent the qualified sample units for data collection with the purpose to find out household and livelihood transitions. Thus, the selection process is a non-probability or purposive sampling, which is not based on random sampling but corresponds to formulated criteria.

The first step was to do a sample among the participants of rural households considered by gender and wealth-ranking to avoid an under-representation of one of these groups. As I mentioned before, the headmen of all three villages decided which of the farmers should be interviewed. In field 51 semi-structured interviews and 41 PRA flipchart sessions, were made Fifteen of the 51 interviewed members of a rural household were from the category "rich". Seventeen farmers were "average" and 19 out of 51 were classified as "poor". Only one member per rural household was interviewed.

Nam Heng Neua Xay District		Houay Sang La District		Phoulat Houn District		
Wealth code	female	male	female	male	female	male
Rich	4	3	2	1	1	4
Average	5	4	4	0	2	2
Poor	4	5	4	2	2	2

In addition seven key informants were interviewed to get contextual information about this research topic. These key informants were the three headmen of the relevant villages, the headman of the DAFO¹⁶ in the Houn district, the deputy of administration of PAFO¹⁷ in Xay, the headman of PAFES¹⁸ in Xay and a staff member of NAFRI¹⁹. Due to the temporary residence in the researched field area the method of non-participative observation also delivered, besides the interviews, valuable information for understanding and reconstructing the explored community on a household level as well as on an individual level. A participative observation was not possible due to the language barrier.

I would like to point out that the 51 interviews and 41 PRA sessions that delivered the data and were analysed cannot represent the Lao upland population or the Khamu culture. I have chosen an inductive approach and try to describe and explain the experiences and environment of the Khamu villages.

To comprehend and justify the choice of the implemented method techniques, one can see in the table below, to what extent the method enables an exploration of the research interest classified into four groups:

Methods/research objective	Key informants and experts n = 7	Semi-structured interviews n = 51	PRA flipchart n = 41	Non-participatory observation
Contextual information	X	X		X
Intra-household (decisions, activities, benefits)	X	X	X	X
Inter-household (decisions, activities, benefits)	X	X	X	X
Policy implications	X	X		

¹⁶ District Agriculture and Forestry Office

¹⁷ Provincial Agriculture and Forestry Office

¹⁸ Provincial Agriculture and Forestry Extension Service

¹⁹ National Agriculture and Forestry Research Institute of Lao PDR

The interviews took place in each of the three villages. We stayed in these villages for several days; the first step was always a meeting with the headman of the village. I explained to the headman how many farmers I would like to interview and from which wealth category. Then the headman went to the farmers' houses and asked them to take part in the interview.

Potential weaknesses of the implemented method may appear due to the fact that the headmen of the Khamu villages decided who I could interview. Because of this I sometimes had the impression that some farmers just participated in the interview session because the headman, who has an influential status within rural communities, told them to come. Some farmers did not seem to take part in the interview session voluntarily, which probably has an influence on the responses.

Another weakness within this research is the problem of translation. CIAT provided two English translators for me. Because most Khamu women cannot speak Lao Loum a second translator who spoke Khamu was required. Whenever we went to villages, a second translator, who is employed at PAFO in Xay, came with us to translate the statements of the interviewed Khamu women into Lao Loum. It may be possible that this brought a loss of valuable data due to the complicated double translation.

These weaknesses were unavoidable because we had to respect the position of the headman of each village; as well, there was no other adequate solution for the language problem regarding the languages Lao Loum and Khamu.

5.2.1 Semi-structured interviews

This empirical social research method of collecting data is characterised by a guideline of important questions, which have to be cleared in the process of the interview. As the term "semi-structured" already suggests, it is not a pure open technique that generates data from only one input. The interviewer uses a guideline with reformulated questions as an orientation, but tries to avoid a rigid disquisition. The interviewer has to improvise and to be open for new input as well as be careful not to disturb the narration of the respondent.

The semi-structured interview is reasonable to apply to the first contact in field because it acts as an ice-breaking approach due to the active role of the interviewer (Atteslander 2000:140 ff).

Essentially the sample of qualitative interviews is chosen intentionally and not randomly, which demands presumptions and hypothesis before entering the field (Diekmann 2006: p. 451). To analyse the rural household level and for encounters with experts and key informants the semi-structured interview helps to get an overview of the situation of rural households, which are the core elements of this research.

5.2.2 PRA

The participatory rural appraisal requires the active role of the group in question. The scientific team acts as a facilitator in detecting the strengths and needs of rural people without imposing concepts and strategies for probable solutions. The results of the exploration have to be presented and delivered to the rural people.

The PRA tools involve diverse instruments (Schönhuth/Kievelitz 1993:9):

Observation	Focus group sessions	Interpretation of secondary data
Create a schema/ diagram	Photos	Rankings
Check requirements of innovations	Semi-structured interviews	Check validity of results

As the schema above shows, the PRA includes a variety of tools to make a triangulation during the explorative phase possible.

To explore the livelihood changes of rural people the implementation of PRA tools is an approved methodology in this research context. The livelihood approach involves the subjective perception and position of the rural people. This research contributes to the people's perceptions of livelihood and households to understand local conditions. For this reason the implementation of the participatory rural appraisal (PRA) is an appropriate method.

For exploring the research interest it would have been too extensive to apply all the tools of PRA. For that reason I focused and applied the tool "ranking" (the seven-rank scale), the semi-structure interview technique as well as the non-participative observation during residence in the villages.

5.2.3 Key informants and expert interviews

The expert interview is characterised by following a guideline of pre-formulated questions. Mostly expert interviews are executed with other data collection instruments within scientific research, however an expert interview is established as a self-contained method tool of empirical social science. When conducting an expert interview, the interviewee is not the focus of the research interest. It is the institution or organisation in which this person is involved. Thus, the interview expert may deliver valuable contextual information on the research topic. The objectives of expert interviews are to find similarities on an institutionalised level beyond individual level (Meuser/Nagel 1991:442 ff).

5.3 Data analysis

The analysis of the qualitative data of the interviews and the PRA tools demand a special approach. For an appropriate analysis of the semi-structured interview, qualitative content analysis was applied. The content analysis is a systematic text analysis, which is not only looking for manifest contents but also for latent contents. The generated text is classified and reduced into categories, which are built simultaneous within the interpretation phase (Mayring 1996).

Thus I worked with the qualitative data software MAXqda. This databank allows generating codes and facilitates the organisation of extensive qualitative data.

The expert interviews were analysed by filtering similar contents of the key experts. Compared to the other qualitative interview analysis the content of an expert interview is not segmented into sequences or units by the relevance of individual statements.

Thematically and contextual units are to analyse and not individual latent contents like in other interview analysis (Meuser/Nagel 1991:453 ff).

The PRA sessions data was managed and analysed with the statistic software SPSS. It is a very clearly arranged and quick tool used for analysing a comprehensive amount of quantitative data. With the SPSS it is easy to illustrate the results with the support of tables.

6. Results and discussion

6.1 Traditional livelihood strategies and transition

Producing upland rice in terms of rotational shifting cultivation is still done by 40 of the 51 interviewed farmers' households. Three farmers have already stopped upland rice cultivation this year and eight of the 51 said that they do not grow upland rice at all.

As already mentioned, upland rice cultivation can be described as a traditional livelihood strategy of the rural upland population in Lao. According to the data, which was collected in the three Khamu villages, upland rice cultivation is still an important livelihood strategy for these communities.

The government's objective to transform upland rice cultivation to paddy lowland cultivation has also left its marks, and the results show that 23 of the 51 interviewed farmers households already cultivate paddy rice. Thirteen farmers told me that they have already been allocated paddy areas by the government but it is not yet ready for planting rice. The reason for this is mostly the absence of the irrigation systems necessary to plant paddy rice.

Sixteen of the farmer's households, which constitute one third of the interviewed farmers, said that they have not yet been provided with any paddy lowland area, and still do not know whether they will receive any in the future.

It seems that the transition from shifting upland to permanent paddy rice cultivation is in progress and has been executed to a large degree already. However, one third of the farmer's households are still not sure how to ensure food sufficiency, when considering that the government's goal to stop upland shifting cultivation within the next two years will be applied.

Another important livelihood strategy for rural people in the northern upland of Lao PDR is raising small livestock, such as poultry, pigs and goats. Almost every rural household, independent of the wealth category allocated to the household, raises chickens. Some farmers have pigs and goats as well. However, chickens are the most commonly raised animals in the rural households in Oudomxay province. Approximately 83% of the farmers I interviewed told me that they raise small livestock, mostly chicken.

Basically these animals are not for sale. The rural families raise them for themselves, and the animals contribute to food sufficiency. Eggs from the chicken or ducks can be used for food; the farmers can also use the meat.

Besides the function as a contribution to food sufficiency, chickens have another function in the life of Khamu people. There are several animistic and spiritual ceremonies in which chickens are sacrificed.

Raising large animals has not been very common in upland Lao. These animals do not provide support for farmers in the upland fields because they cannot be used on hilly areas. Due to livelihood transition in the upland area, cows and buffalo are primarily used as support for lowland paddy cultivation. Buffalo are used for agriculture production to prepare the paddy fields and break the soil before sowing and planting. For farmers with large livestock it is an important facilitation for their cultivation. Besides facilitation, buffalo can also be used as a deposit, which ensures income should there be a lack of any family needs. Buffalo, for example, may be sold when money for medical treatment is lacking.

However, about 20% of the farmers raise large livestock, such as cows and/or buffalo. Besides the fact that these animals are not often raised in the upland area, as I mentioned before, another explanation for this is the fact that these animals are very expensive. Mostly rich farmers can afford to buy buffalo. And some rich farmers use tractors imported from Thailand or China as a substitute for the animals.

Gathering NTFPs is definitely a traditional livelihood strategy in upland Lao. The rural families gather these products from surrounding forests to ensure food sufficiency and, since participating in the market chain, they have already started to ensure income by selling it to traders. Almost 80% of the interviewed households said that they gather NTFPs from the forests. The families not gathering NTFPs answered that they do not do this because there is no need for it. This is related to the wealth category of rural households. Rich rural households possess resources and cash to buy products from the forest when required. Other farmers who do not collect it in the forests have already started to plant domesticated NTFPs in their own gardens or cultivation plots. When the domesticated NTFP crop is successful these families will not need to collect it from the forests.

When mentioning a transition to new livelihoods in the northern upland Lao, it has to be pointed out that the transition from upland to lowland paddy rice is the main focus of government development efforts. This transition is defined as facilitation because upland farmers describe upland rice cultivation as very hard work, which does not guarantee good rice quality.

"Upland rice farming is difficult to prepare and work. And it requires more labour exchange and you get tired on the upland field very quickly. To slash and burn is very hard work as well." (Interview 2X X18).

"Yes, paddy rice farming is easy...it does not require as much work as upland rice farming. And the rice quality is better than the upland rice." (Interview L3).

The paddy rice cultivation in the lowland areas of the villages is identified as a better way of rice cultivation by the farmers. In addition to the fact that lowland cultivation is not such hard work in general, there are some other reasons. The upland rice crop is often compromised by wild rats and other vermin. Using buffalo is also possible in a more or less lowland area. So farmers who have paddy area and are able to afford buffalo can use them as support and facilitation for rice cultivation.

The transition from upland rice to paddy rice cultivation also brings a change of labour procedures in the aspect of gender.

The labour procedures on upland rice farming can be distinguished by gender. While burning the upland field is more an activity done by men or male members of a household, weeding can be presumed to be a "female" activity. Seventy-eight per cent said that cleaning the upland field is equally shared by women and men. The rest, around 22%, is identified as a "female" duty. By exploring every labour procedure of upland and paddy rice farming differences in aspects of gender aspect can be observed. Typical "female" labour procedures on paddy cultivation can not be identified and seem to be absent.

But paddy rice cultivation maintains so-called typical "male" labour activities. As with burning the upland field, which is done almost exclusively by men, labour carried out on paddy rice is also mostly done by men. This includes, for example, watering the paddy field, which 41.2% of farmers described as an activity done by "entirely male" members of the household or community. Also remarkable in this context is that the first labour procedures, like digging irrigation systems and boundaries as well as breaking soil again, are mostly described as activities done by male members of the household.

Based on the fact that farmers often said that so-called "hard" work is for men and paddy rice cultivation is seen as facilitation compared to upland rice farming, these variations on the gender aspect seem to be a contradiction.

But although paddy rice cultivation contains more labour implementation procedures, which are dominated by men, it does not mean that paddy rice farming is more "hard" work. When farmers describe upland rice farming as "hard" work, we should think that they have to work the whole day in upland and hilly areas, while paddy rice is cultivated in lowland areas.

That paddy rice cultivation involves more male labour within a household, as the data shows, can also be explained by another circumstance. Paddy rice cultivation in the hilly

upland area in northern Lao is a new livelihood strategy, which is supposed to replace the traditional upland shifting cultivation. This livelihood strategy requires that farmers acquire new knowledge on how to cultivate this new form of rice. When the Lao government educates and trains farmers in the village, most often the head of the family will get in contact with the government staff. The head of the families are mostly men. Khamu women are often disadvantaged by the lack of education for women and the lack of knowledge of Lao Loum, which is essential to get in contact with people outside a village or another ethnic group. Although a change is occurring, and the rate of young women participating in the education system is equally balanced compared to the rate of young men in school system, the representatives of rural households are still mostly male. (See more on intrahousehold institutions under gender consideration in chapter 6.3.2.)

6.2 New cash crops in upland Lao

There are several plants that are important to the contribution of income for the rural families in upland Lao. Alongside the NTFPs, which the farmers find in the forests, there are job's tears and galangal fruit, which many farmers have started to domesticate over the last couple of years.

n = 96	District: Xay, La, Houn		
Livelihood strategies	Past	Future goals	
Upland rice farming	75 households	7 hh	
Livestock small	42 hh	22 hh	
Paddy rice farming	36 hh	43 hh	
Corn	32 hh	19 hh	
Job's tears	27 hh	32 hh	
Livestock big	17 hh	4 hh	
Fruit garden	13 hh	8 hh	
Domesticated Posa/Puak muak	10 hh	12 hh	
Fish pond	8 hh	13 hh	

Cassava	7 hh	10 hh
Sesame	7 hh	11 hh
Shop	6 hh	3 hh
Home garden	6 hh	9 hh
Trading	6 hh	4 hh
Galangal	5 hh	27 hh
Sweet potato	2 hh	0 hh
Agar wood	0 hh	2 hh

(data from DAFO facilitators) 20

This table shows what kind of livelihood strategies the rural households had in the past. The future goals represent objectives, which farmers assume to reach in the near future. Twenty-seven out of 96 farmers cultivate job's tears and only five farmers said that they planted galangal. Twelve farmers who have already planted job's tears said that they want to extend job's tears cultivation in the future. And 20 farmers from 96 who have not planted job's tears in the past said that they want to start planting job's tears in the near future.

This means that about 47 of 96 farmers will be involved in job's tears cultivation in the near future. It seems that harvesting job's tears will become an important livelihood strategy for the rural people in the upland Lao in future. The reasons for starting new cash crops cultivation are to be involved into the market, which means the farmers have possibilities to earn some money in addition.

As I mentioned, only five farmers plant galangal. Twenty-three farmers told DAFO staff in PRA sessions that they want to start growing galangal in the near future. And four out of the five farmers who have already planted galangal want to extend the cultivation area for it. The data of the facilitators of the DAFO in Oudomxay shows that ten out of 96 farmers cultivate domesticated NTFPs, such as posa or puak muak. Three of them defined the extension of this cultivation area as a future goal. In addition, nine farmers who have not

The data of the facilitators of the PAFO in Xay was collected during the participation of a workshop given by Michael Hauser and Douglas White in Xay in February 2007.

planted domesticated NTFPs yet said that they will start planting it in the near future. This means that about 20 out of 96 rural families will plant domesticated NTFPs in future.

If farmers start to cultivate NTFPs by themselves they will not need to collect it in the forests anymore. This would be an advantage for the farmers because NTFPs are getting scarce in the forests of the upland Lao. Mrs. Loy, a 37-year-old farmer, said:

"In the past, the village was small with not many people. Back then there were many NTFPs in the forests and people did not know anything about selling products. They used it only for family consumption. But now more people want to collect NTFPs and they know how to sell. So, now, it is hard to find NTFPs in the forests." (Interview 2X X9).

Many farmers told me that the natural resources, concerning NTFPs in the forests, have greatly changed. The growing population due to the village merging policy is one of the main reasons for the reduction of NTFPs in the forests. The farmers know that NTFPs are good to sell to traders because the demand is big. Domesticated NTFPs are a solution for this problem and the farmers will not need to depend on the decreasing NTFP sources in the forests. However, domestication of NTFPs requires specific agricultural knowledge. The government staff of DAFO has started with support and education as well providing seeds for domesticated cultivation. Extension of the DAFO support would be necessary in order to include more villagers.

6.3 Intra-household institutions

The following chapter tries to give answers on the first hypothesis and its subgroups, which focusing on maintenance of household institutions.

6.3.1 The decision-making process

The decision-making process within farmer's households when considering the aspect of gender is something else that affects rural households. Decision-making can be related

to the basis of gender and has an impact on the distribution of capital, power and labour of the members of rural households. Basically the decision-making process within farmer's households in upland Lao can be described as dominated by male. Men make decisions on traditional and new livelihood strategies like upland rice or paddy rice farming. However, there is a difference between traditional upland rice farming and paddy rice farming concerning the decision-making process.

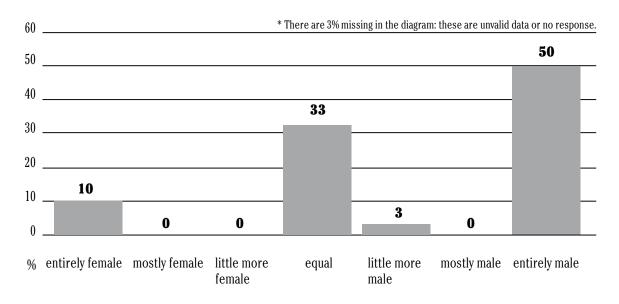
Upland rice farming

Fifty-three per cent of the interviewed farmers declared that decision-making on upland rice farming is "a little more" or a rather "entirely male" process. Only 10% of the farmers said that the decision-making process is "entirely female". In this context it has to be noted that two households were female-headed households. That the decision-making process is made by women can be referred to by the absence of their husbands.

Decision-making on upland rice cultivation

n=30

Who makes decision in your household?

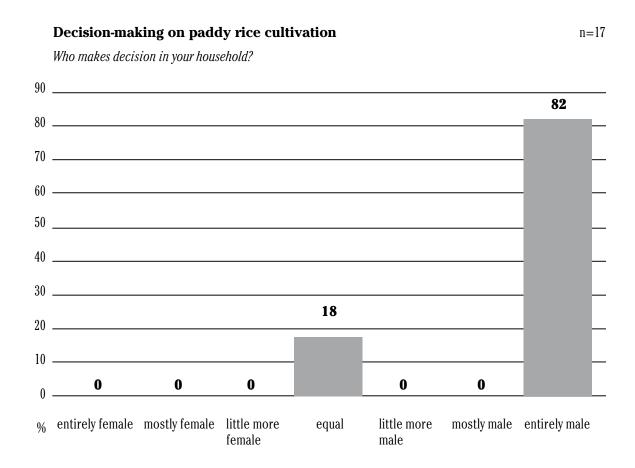


The three percent, which does not show up in the table, are farmers who answered that upland rice farming is a traditional livelihood strategy of Khamu people. That means it is a cultural heritage, which you can not make a decision about. It is taken for granted that

farmers cultivate upland rice as their parents have done in the past. According to this, it was not always possible to attribute the decision-making power to gender in the case of the interviewed farmers.

Paddy rice farming

The decision-making process regarding paddy rice farming, which is a new livelihood strategy in upland Lao, differs from the that of upland rice farming. Decision-making in this regard is a process made by 82% of males. Eighteen per cent of the farmers said that the decision-making process regarding paddy rice farming is equally balanced in gender. It is remarkable that women are not included in the decision-making process of this new livelihood strategy, which is claimed and supported by the Lao government. The exclusion



of women on paddy rice cultivation may generate massive consequences on female power of resources within a household because rice cultivation is still the strategy most important in ensuring sustainable or at least good livelihoods for rural households.

Collection of NTFPs

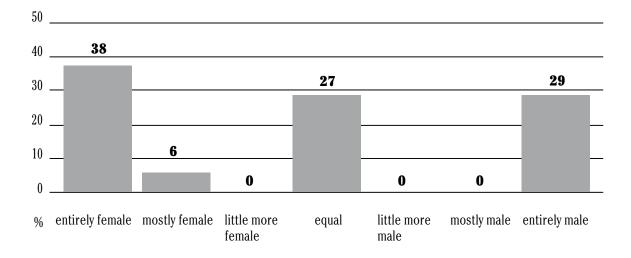
As already mentioned, gathering NTFPs largely contributes to rural household food and household resources. The NTFP collection delivers food and materials, like wood or bamboo from the forests. The collection used to be for subsistence and individual consumption. Nowadays NTFP collection provides a better livelihood for the rural farmers. Almost every rural household is involved in the collection because farmers sell these products from the forests. The NTFPs are identified as a cash crop, which have an important local value for the transition of subsistence to commercial farming.

The collection of NTFPs is an exception in the constitution of rural households when it comes to aspects of gender. The decision-making process on the collection of NTFPs is mostly dominated by females. The major fraction of 38% determines that decision-making is entirely female in this context. Furthermore, 27% of the interviewed farmers said that the decision-making process is equally balanced on the basis of gender. However, 29% still answered that even the decision about the NTFPs collection remains an entirely male issue.

Decision-making on NTFPS collection

n = 34

Who makes decision in your household?



Thus, gathering NTFPs is a strategy which provides decision power and power over these resources for women within rural households. Referring to the natural resources, which are characterised by decreasing NTFPs, the female participation or the domination of the decision-making process regarding NTFPs seems not be maintainable in the future. When the transition of gathering NTFPs to the domestication of NTFPs is implemented, the decision power of rural women is even more at risk, as can be seen in the following.

Domesticated NTFPs

Only four interview participants of the three villages in Oudomxay province reported that they have already started to cultivate posa and puak muak in their gardens. Three of them said that the decision about this livelihood is entirely made by male members of the household, which means the husband or father.

If decision-making about the domestication of NTFPs is made by the husband or male members of a family, one of the only issues dominated by the female, the power over NTFPs decision-making, would not be a female issue any longer. As the data shows women hardly have any power over the decision-making process concerning livelihood strategies, except for NTFP collection, where more than one third of the farmers said that the decision-making process is entirely female. Therefore the domestication of NTFPs may jeopardize the women's decision-making power in future.

Livestock

The decision-making process and bargaining on raising small livestock, like poultry, pigs and goats, is mostly well balanced gender-wise. Around 50% of the interviewed rural farmers said that they make equal decisions about livestock. Almost 33% said that decision-making in this issue is dominated by males, while the rest, about 17%, identify decision-making on small livestock as being more or less dominated by women. The decision-making power of females on raising small livestock may result in the fact that women are often responsible for feeding and taking care of small animals, which gives them more decision power (see "Implementation Procedures").

Totally different to the power on decision-making on small livestock, the power in decision-making on big livestock, like buffalo and cows, is dominated by males. Seventy-five per cent of farmers who have buffalo and cows said that the decision-making process is determined "entirely by the male". The other part, 25% of rural households, said that the decision-making process is equal gender-wise and they bargain with the spouse on this certain livelihood strategy.

6.3.2 Implementation procedures

In this part of the study the different livelihood strategies, like upland rice or paddy rice, were divided into their implemented labour procedures considering the aspect of gender. As described in chapter 6.1 the livelihood strategies are therefore distinguished between different labour procedures under the consideration of gender aspects.

Upland cultivation procedures are similar to those of corn cultivation, which is cultivated the same way. Additionally it is often farmed in the same plot together with upland rice and some other crops, like job's tears, cassava, sesame, galangal or banana. It depends on the farmer and the availability of plots. Some farmers cultivate upland rice in their own plots and some farmers grow upland rice together with other crops.

The implementation procedures of paddy rice farming are totally different to upland rice and other crops. It is on a lowland area and will not be burned down. Paddy rice is cultivated in an independent plot with no other crops.

The labour procedures involving livestock vary in small livestock, like chicken, ducks, goats and pigs and big animals, like cows and buffalo. The small animals have to be fed, while the big animals do not need to be fed by the farmer as they can graze on the grassland or field.

While domesticated NTFPs require the same implementation procedures as upland rice, the collection of NTFPs needs only to be distinguished into the collection and selling procedures.

Upland rice farming

The different labour procedures regarding upland rice farming show some significant results concerning gender differences on implementation.

The first defined implementation of upland rice cultivation is to slash the upland area. Most of the farmers, 75.9%, said that this activity is executed equally by women and men.

In contrast to slashing an area, the next labour procedure, burning the upland area, delivers more significant results in the differences concerning gender aspects.

Almost half of the interviewed farmers said that burning the upland field involves women and men equally. Still one third of the farmers describe this certain duty as an entirely male activity. For only around three per cent of the farmers it is an entirely female duty.

The reasons for this are complex. First, it is a quite dangerous job and can have catastrophic and destructive implications for the whole village. In the Khamu culture hard work and dangerous work is done by men. Another explanation for gender differences on burning the upland field can be found in the time it is done. Farmers said that burning mostly occurs at sunset and at night. It is not that windy during the night and unintentional fire sources can be identified more easily. If a farmer has children, they must ensure that someone takes care of them during the night. And as you will see in chapter 6.3.4 about traditional division of labour within rural households, childcare is mostly a female responsibility.

The next labour procedure regarding upland rice cultivation is to clean the area after burning. The largest part, 78.6%, of this duty is shared equally between women and men. The rest, 21.4% is a responsibility distributed between "entirely female" to "a little more female". However, there are no farmers who described cleaning the area as a typically male activity.

Planting the upland area is equally balanced between women and men. Eighty-six-point-seven per cent said that the husband and wife share this activity and work together.

Weeding can be described as a typical female activity on the upland field. Sixty per cent of the interviewed farmers described the responsibility of this certain activity as "entirely female" and "mostly female". Consequently, weeding is a traditionally female duty within the rural households and families.

Although Khamu culture attributes hard work to men, weeding is also hard work as well as time consuming, especially on hilly areas. But in general hard work is defined as carrying heavy things as the following excerpt of an interview shows:

"Even if we exchange labour for building houses the female villagers are involved. They can prepare food or carry some things, which are not too heavy." (Interview 2X X6).

"Because it is hard work ... men will do it. But if the work is not that hard women can do it as well." (Interview L3).

According to this statement, weeding is not defined as hard work and this may contribute to the fact that weeding is a female duty in Khamu culture.

Gender differences in the labour procedure of harvesting the upland rice crop are rarely present. Eighty-six-point-seven per cent of the interviewed farmers said that they share it equally between the female and male members of the household. The rest, 13.3%, tends to be the responsibility of female members of the household, which harvest the rice crop.

Women and men share carrying the upland rice from the field to the rice storages, which are mostly outside the villages, equally by 80%. Furthermore 16.7% said that carrying the rice crop is an "entirely female" and a "mostly female" activity.

The last step in the labour procedure of upland rice farming is to sell the crop. However 73.3% of farmers who grow upland rice usually do not sell it. Upland rice is basically for their own consumption. Around 17% said that women and men sell it equally. It depends on who has time to sell.

Paddy rice farming

Sixty-two-point-five per cent of the farmers who cultivate paddy rice said that digging the irrigation system for the paddy field is shared equally by both genders. A total of 31.3% is a "little more male" to "entirely male" activity. This means around one third of the paddy rice farmers assess digging the irrigation system as being a more or less male activity.

Digging the boundaries for the paddy rice field is clearly defined amongst the genders. Forty-three-point-eight percent of farmers answered that this paddy cultivation procedure is shared equally by the genders. The biggest part, 50.1%, is male. Activity-wise, this 50.1% is distributed over "little more male", "mostly male" and "entirely male". One farmer said that digging boundaries is entirely the duty of the female members of the household or family. This farmer is a 37-year-old man who often has problems with his stomach and who explained that due to sickness he can not support his wife by working on the field.

In the next labour procedure, digging the soil, most of the farmers (76.8%) said that women and men share this work equally. It was said that 17.7% of this labour procedure is distributed as a "little more male" to "entirely male" activity. Only one farmer (5.9%) said that it is a totally female duty.

Watering the paddy area is shared equally by 41.2% of the farmers. The same percentage of 41.2% answered that watering the paddy field is an "entirely male" activity. This circumstance can be ascribed to the fact that watering, as well as preparing the paddy field (digging irrigation and boundaries) is presumed to be hard work, which is basically described as work for men. Although paddy cultivation is presumed to be less hard work in general, there are several implementation procedures, which are defined as hard work in the same way as it is on upland cultivation steps.

Breaking the soil again after watering seems to be shared equally by female and male farmers (52.9%). Around 23.5% of the farmers answered that re-breaking the soil is done by entirely male members of the rural household, and 17.6% said that it is a "mostly male" activity.

Almost 90% of the farmers said that sowing the rice is equally shared by female and male farmers. Only one farmer said that it is entirely the duty of women, and one farmer said that it is totally a male duty.

Concerning planting the rice straw, 16 out of 17 interviewed farmers who plant paddy rice said that this labour procedure is equally balanced between genders.

It is the same with harvesting the rice crop. Of the farmers, 94.1% said that the labour is equally shared between women and men. Both help to harvest the crop on the paddy field.

The majority said that carrying the rice crop to the rice storages around the village is a duty equally shared by both sexes (88.2%). One farmer said that carrying the rice crop is an "entirely female" activity within his household. This is the same farmer who said that his wife digs the boundaries for the paddy field because he is often sick and cannot support his wife all the time.

It is not very common to sell paddy rice in the three villages. So it is not very remarkable that 94.1% answered that they do not sell the paddy rice. Only one farmer said that they sell rice and it is "a little more male" responsibility.

Raising livestock small

Raising small animals, like chicken, ducks, pigs or goats requires some pre-arrangement. The farmers have to build fences or small houses. This is basically described as a duty done by men. Twenty-four of 34 farmers who raise small livestock said that this duty is "entirely" done by the husbands or male members of the interviewed members of rural households and families. None of the interviewed farmers identified this labour procedure as a duty for female members.

Compared to building fences, feeding the small livestock is mostly a duty done by wives and female members of a family. However, 47.1% of the farmers said this labour procedure is shared equally among the genders.

Many female farmers said that they feed the livestock very early in the mornings while their husbands are still sleeping.

"I wake up around 4 am, cook the rice, carry the water, feed the animals, cook food and then I go to the paddy field or garden plot." (Interview X4).

Twenty of 34 farmers said that slaughtering small animals is entirely a men's activity. Ten farmers said it is "mostly" and a "little more" the duty of men than women. And four farmers said that slaughtering the small animals is shared equally by the genders.

Although cooking and preparing food in Khamu culture is mostly the duty of the female members of a family, as can be seen in the traditional division of labour within rural households section, cooking and slaughtering small animals build an exception. Cooking small livestock is done equally by the men and women, as reported by 35.3% of the farmers. And even 23.5% of the farmers said that cooking the small animals is "little more" a male activity. Seventeen-point-six per cent identified cooking small livestock as a duty done entirely by women.

But small livestock, like chicken, is not always used for family consumption. Many farmers also sell some small livestock. While selling is a male activity in the Khamu culture in general, the farmers said that in this case, men and women share selling chicken and other small animals equally by 42.4%, and 33.3% said that selling small livestock is entirely a male activity.

Raising livestock big

Raising larger animals, like buffalo and cows, also requires building fences or houses, although these animals spend a lot of time in the fields.

Building fences for buffalo or cows is mostly done by men, the same for building fences for small animals. Seven out of the eight farmers who have big animals said that it is "mostly" or "entirely" a male activity. Feeding these animals is not necessary because they graze on the fields and grassland.

Basically buffalo and cows are not raised for consumption. Only three out of the eight farmers slaughter buffalo and cows. In this case it is described as a "mostly" or "entirely" male duty to slaughter large animals.

One of the three farmers who slaughter buffalo and cows said cooking it is an "entirely female" duty, while two of them said it is an "entirely male" activity.

As mentioned above, cooking in general is the responsibility and duty of female. In contrast the preparation of cows and buffalo to eat tends to be mainly done by the male members of rural households.

Furthermore, four farmers out of the eight who raise large animals said that selling is shared equally between women and men. It depends on who has time to sell. And the other four farmers described selling large livestock as an "entirely male" duty.

6.3.3 Distribution of benefits

As the data has shown so far, Lao women are restrained in decision-making processes regarding livelihood strategies, except for the collection of NTFPs. The decision-making power regarding the distribution of benefits or money is also unequal between genders.

Benefits of upland rice farming and paddy rice farming are basically distributed within the whole family. The Lao farmers usually do not sell the rice, so rice is cultivated for family consumption and food sufficiency. All family members benefit from the livelihood strategy of growing rice. In the case of some livelihood strategies, which were cultivated to sell, there is a gender inequality in the decision-making power over benefits as you can see in the handling of small livestock.

Although 25 out of 27 farmers said that women are responsible for keeping the money made by selling small animals, the decision-making on spending the money is not done only by women. Most of the farmers said that the decisions made on spending the money

is equally distributed between the genders. The farmers said that women usually save the money, while men basically spend it, but not without discussion with their wives. Mr. Liun, a 33-year-old farmer, said:

"My wife keeps the money, but I spend it, but only if my wife allows me to spend it on something." (Interview H2).

Another farmer, Mr. Dah Phone from Houay Sang, said:

"My wife keeps the money and we spend it when someone is sick, then we spend money.. everyone in the family can benefit from it." (Interview L3).

The fact that women manage the money earned from selling products gives them some power over resources. The decision-making power is mostly reserved for male farmers and the only livelihood strategy in which women have some decision-making power is the collection of NTFPs. While this power may not be maintained due to the transition of new livelihoods such as domesticated NTFPs, the female decision-making power over the benefits and the distribution of it does not seem to be jeopardized.

6.3.4 Traditional division of labour within rural households

While the different implementation procedures of every livelihood strategy considered the gender specific division of labour, this chapter will focus on the traditional division of labour within household tasks. Khamu women tend to do most of household chores and reproductive tasks within the household and family. They usually get up earlier than their husbands. Mrs. Suk, from Nam Heng Neua village said:

"Basically I get up around 4 o´clock and prepare the rice, which means I break the rice first and cook it afterwards. My husband usually gets up around 5 or 6 o´clock" (Interview 2X X18).

As mentioned, sticky rice constitutes the main diet in Laos. Hence Khamu women prepare the sticky rice dish every morning. Most of the villagers do not own rice mills, which means they have to manually break the husk from the rice with a mallet. This procedure is time

consuming. Furthermore, the farmers said that cooking is basically a task carried out by women. However, when a rural family receives guests, it is common that Khamu men do the cooking. While some farmers said that cooking and taking care of children is shared equally by both genders, other household tasks, such as washing clothes or cleaning the house is clearly identified as duties done by female family members.

It seems that an introduction of new livelihood strategies maintains the existing patterns of the gender-specific division of household labour. When considering the fact that the execution of new agriculture technologies and the domestication of NTFPs as well as the decision-making involved are dominated by men, women will remain responsible for reproductive tasks. The possibilities for strengthening the role in public affairs do not seem to be given for Khamu women through transformation of livelihood strategies.

Consequently, governmental efforts on changing the livelihood strategies of rural communities affects rural households and communities but it does not easily affect and change the rigid gender division of labour. It even seems that it may intensify the rigid pattern of the gender-specific division of household labour.

6.4 Inter-household institutions

For the purpose of exploring the inter-household institutions, which means communal interaction between the rural households and the village community, the focus is on labour exchange for the main livelihood strategies of the farmers. The same approach as for exploring intra-household institutions was implemented. The farmers were asked about each implementation procedure of every livelihood strategy concerning the proportion of household and the village community assignment of labour. It will be made clear what implementation procedures are communal or household activities. This chapter refers to the second hypothesis and its subgroups and tries to give adequate answers.

6.4.1 The decision-making process

There is no difference in the decision-making process regarding intra-household institutions. Once more it can be pointed out that men in Khamu culture basically have more decision-making power than women. If a male farmer is making a decision to start a certain livelihood strategy, he will also make the decision about the labour exchange of the family.

Only one woman said that she manages labour exchange, looks for other labour and can make decisions about it because she spends the most time exchanging labour compared to her husband, who spends more time in the forests cutting trees and collecting wood.

6.4.2 Implementation procedures

Upland rice farming

The first implementation procedure in upland rice cultivation is slashing the upland area before burning it. Fifty-six-point-seven per cent of the farmers said that this labour procedure involves "mostly communal labour". Exactly 30% said that is "little more communal labour" than labour of each household. Therefore slashing an upland rice field can be described as a duty that involves mostly communal labour outside of the certain household.

Completely different is the involvement of other labour in the village community concerning burning the upland area. Fifty-six-point-seven per cent said that this step involves "entirely household labour forces" and still 16.7% describe it as a "mostly household labour" activity. And 13.3% of the farmers said burning the upland field involves "a little more household labour" than labour outside the household or family.

Sixty per cent of the farmers answered that clearing the upland field after burning involves "mostly and a little more communal labour" than only labour within a household. Still 23.3% related this implementation procedure to household labour, while 10% of the farmers said that clearing the upland field involves household and communal labour equally.

Planting the upland rice is basically a communal activity. Eighty-six-point-six per cent of the farmers said that planting the rice involves "mostly (73.3%) and a little more (13.3%) communal labour" force.

As well as planting being a more or less communal activity, weeding involves also more labour from village community. Forty-three-point-three per cent answered that weeding requires "a little more communal labour" force and 30% said that it involves a "mostly communal labour" force to weed the upland field during the year. Around 16.7% said that weeding involves a "little more household labour" than communal labour force.

Harvesting the upland rice in the Khamu culture also involves more labour from the village community and is not only done by household and family members. Fifty per cent said that harvesting involves "a little more communal labour" and 26.7% said that "mostly communal labour" is applied for this implementation step.

The last implementation step on upland rice farming is also an activity that mostly involves labour from the village community. Forty-three-point-three per cent of farmers said that carrying involves "mostly communal labour" force, and 33.3% said it requires "a little more communal labour" force than the household labour force. Only 6.7% said that carrying the rice to the rice storages or village involves household and communal labours equally.

With the exception of burning down the upland area, all the other labour procedures on upland rice cultivation is more a communal activity and is not done by only household and family members. The whole village community participates in upland rice cultivation for each plot of a family and household.

Paddy rice farming

The different implementation procedures of paddy rice farming are basically labour procedures which also involve labour from the village community, as the following results will show.

The first step is to dig an irrigation system for the paddy rice field in the lowland area of a rural village. Seven farmers of the 15 who cultivate paddy rice said that digging the irrigation system is "mostly a communal activity", which is a percentage of 46.7.

Twenty-six-point-seven per cent describe this duty, which involves a "little more communal labour" force than only household members.

Three out of 15 farmers (20%) said that digging an irrigation system was a duty that involves "entirely household labour" force. These farmers built the irrigation system without the support or help of other farmers of the village community.

The second implementation procedure, digging the boundaries of the paddy rice field, is in most instances a duty that involves labour from the village community. Eleven out of 16 farmers described it as being "a little more communal labour" and "mostly communal labour". Two farmers said that digging boundaries was done only by members of their own households.

Most of the farmers (35.3%) said that digging soil is "mostly communal labour". Twenty-three-point-three per cent said that digging soil on the paddy field is shared equally by household members and others from village community. Seventeen-point-six per cent of the farmers answered that it involves a "little more communal labour" force to dig the soil. Two out of 17 farmers (11.8%) said that it requires "entirely household labour" and no labour support from outside the household

The next implementation procedure is watering the paddy rice field. This particular step differs from the others concerning the relation of household and community labour. Ten out of 17 farmers, which is about 59%, said that they water the field using "entirely household labour". Eleven-point-eight per cent said that watering is "mostly household labour" and 17.6% said that it is a "little more household labour" than communal labour. Only one out of 17 paddy rice farmers said that they share watering the field equally with household

and communal labours, which means that the labour force is quite balanced between a farmer's household and other labours of the village. And one farmer said that watering his paddy field involves "a little more communal labour" force.

After watering the paddy field the soil has to be re-broken before sowing and planting. This duty is also described as "entirely household labour" by 29.4% of the paddy rice farmers. Eleven-point-eight per cent said that it is "mostly household labour" and only one out of 17 (5.9%) said that it is a "little more household labour" than communal. Seventeen-point-six per cent of the farmers said that re-breaking the soil is shared by household and community members equally and still six out of 17 farmers described it as being "a little more communal labour" (three farmers) and "mostly communal labour" (also three farmers).

Sowing the paddy rice is another exception to watering the field. The largest amount of farmers, 47.1%, said that sowing is "entirely household labour" and does not require support from other villagers. Twenty-three-point-five per cent described it as "little more communal labour", while 17.6% think that it is balanced equally between household and village community members.

The next implementation step "planting" the paddy rice is remarkable because, compared to sowing, it is mostly a communal activity. Forty-one-point-two per cent said it was a "little more communal labour", and 35.3% said it involves a "mostly communal labour" force. Two out of 17 farmers, 11.8%, said that they shared the duty of planting equally amongst the village community and household members. Only one paddy rice farmer described planting the paddy rice as an "entirely household labour".

The reason that planting paddy rice is mostly a communal activity compared to sowing may lie in the fact that planting rice on an upland field is mostly a communal activity as well. This means that within the village community there are labour exchange groups which do a lot of planting together. This is maybe a reason why planting paddy rice maintains communal activity because planting is a proven and traditional communal activity.

Harvesting paddy rice is mostly defined as "a little more communal labour", which 52.9% of the farmers said. And 17.6% said that harvesting paddy rice is "mostly communal labour", in which most village members are involved. The same percentage said that harvesting is done entirely by household members. And two out of 17 farmers said that it is a "little more household labour" than communal.

The last implementation labour procedure in paddy cultivation is carrying the paddy rice to the storage or village. Eight out of 17 paddy farmers said that this duty involves "a little more communal labour" than household members (47.1%). Seventeen-point-six per cent of farmers said that it is "mostly communal labour". Two out of 17 farmers said that carrying the harvested paddy rice is only done by the household members without the support of other villagers. Also, two out of 17 described it as "mostly household labour", while two farmers said carrying the paddy rice is shared equally by household and village community members.

6.4.3 Livelihood transitions and the impact on inter-household institutions

The results showed that traditional upland rice cultivation in the upland regions of Oudomxay province involves and requires labour forces outside the household. All labour procedures, except for burning the upland area, are duties that are shared and supported by the village community. The specific household that needs support for their upland field interacts with the village community and will get support.

The question still open is whether the transition from upland to paddy rice cultivation can maintain the inter-household institution and interaction between households and village community. As the data shows it can be assumed that the interaction between these two institutions will be maintained in future.

Although paddy rice cultivation is described as facilitation and less work compared to upland rice cultivation, the participation of the village community will be mostly maintained.

Except for the implementation procedures of watering, re-breaking the soil and sowing the paddy area, the different steps mostly tend to the involvement and support of labours outside a certain household. Thus new livelihood strategies or the transition to a new one, like paddy rice cultivation in the northern upland region, will not change the interaction on household and village community level.

Livestock

Livestock represents another important livelihood strategy for the future of the rural people in Oudomxay province. However, livestock in upland Lao is a livelihood strategy that does not require village community support. The farmers' households and families take care of the animals by themselves. It is not common in Khamu culture to form labour exchange groups for raising animals. The labour input on it is too low to demand support from other villagers.

Job's tears and galangal fruit

The new cash crops in upland Lao, which will be cultivated by more and more farmers in the near future, are characterised by similar implementation procedures as upland rice cultivation. This is the reason many farmers have intercropping plots, where they cultivate different crops, like upland rice, corn, job's tears or galangal together.

When job's tears and galangal fruit cultivation increases in Oudomxay province in future it can be assumed that the inter-household institution and the interaction of rural households and village community will also increase. At least these specific new types of crops also require labour exchange, which means, with the transition to job's tears and galangal fruit cultivation, interaction between households and villagers will stay.

6.4.4 Distribution of benefits

The profits and benefits of the collaboration and labour exchange between each rural household and village community members are basically distributed in favour of the households and family members. Although members outside a household support and offer a labour force for agricultural activities to a certain household, the harvested

products and money earned from selling it is distributed among household members. It is a common rule in Khamu culture that rural households and families have their own individual agricultural area from which they can profit. However, the labour input requires interaction between different village members.

Nevertheless, members outside a rural household or family context can benefit from the harvested crops of other farmers. The exchange of essentials goods and foods is still an important factor in the case of food insufficiency. This exchange is a reminder of the principles of reciprocity.

Sticky rice is the main product of Khamu people ensuring nutrition and food sufficiency. It is part of almost every meal. It is common to eat sticky rice three times a day combined with other products, like vegetables or collected products from the forest (mushrooms, bamboo shoots, rats,...).

In the case of rice insufficiency, which many farmers are affected by, it is common to borrow rice and give back the same amount when the family harvests rice in the next harvest season. Also, it is the norm to borrow and exchange the same kind of products, rice for rice, vegetable for vegetables, etc. Mrs. Bin, a 27-year-old woman from Nam Heng Neua said:

"...we do not have enough rice for five months per year. In times of insufficiency we borrow rice from relatives in the village and then we give back the same amount of rice, if we have enough." (Interview 2X X17).

The exchange of rice and other food is essential for many farmers, mostly for the poorer ones because they often suffer from rice insufficiency during the year. Besides food insufficiency, poor farmers often also lack money, which means that they are not able to buy rice if needed. The exchange system within the village community, then, is necessary and essential for many rural households. Thus all villagers may profit indirectly from the benefits of each rural household when considering the rice harvest and the rice surplus of some households, which they can offer to other villagers.

6.5 Labour exchange

In this chapter the interaction between rural households and the village community will be described in order to comprehend and understand inter-household institutions. Labour exchange is a deep-seated phenomenon and system in Khamu culture, which is essential to farmers. This chapter does also refer to the second hypothesis as the chapter before did also.

6.5.1 Constitution and principles

Basically the purpose of forming labour exchange groups can be described as facilitation for rural households. Some households within a village are merged together as a labour exchange group and help each other on the cultivation area of each household.

The size of the exchanging groups depends on the villages. In Houay Sang village, for example, there are 36 households and ...

"... we divided labour exchanging groups into four. In each group there are around nine people. All these groups exchange labour and will just pull together if there is something to do, like weeding." (Interview L1 exp).

In the bigger village Nam Heng Neua there are about ten labour exchange groups that help together on the rice fields or other gardens. If someone is building a new house usually larger labour exchange groups are formed because it is important for the particular family that their house will be built as quickly as possible.

Usually the defined labour exchange groups do not change members, as Mr. Liun, a farmer from Phoulat, explains:

"Do you always exchange labour with the same people?"

"... yes, we exchange mostly with the same members. For example with my cousins, but also with non-related members of the village. When we are finished working on an upland field, a friend of mine says: 'Ok, tomorrow we work for you!' Then I will organise

the food and everything. And this happens until, for example, all five involved labourers are finished with their field." (Interview H2).

But there are also rural households which do not join such labour-exchanging groups. These mostly have enough money to hire labour, which brings some vantages. If they hire labour, they have to dispose of money, while if they were to join a labour exchange group they would also have to invest their labour force and time to the farmers who helped them on their field. When farmers help a certain farmer on his or her field, then they have to "clear the debts", which means offering labour and support as well.

6.5.2 The impact and function of labour exchange

As mentioned above, the main function of forming labour exchange groups in the upland villages in northern Lao PDR is basically facilitation of the hard work in the hilly upland rice fields and gardens. A farmer's rice field can be slashed within one or two days, when working with others in a group. When working on their own, a rural family that may only have two labourers, for example, more time would be expended in finishing it. The farmers said it is less exhausting, faster and they are able to cultivate a bigger area than they would on their own. The function of diversion or deflection when working with other people was also mentioned by the interviewed farmers.

Social function

Labour exchange also has an important social function in empowering the village community. The farmers are able to share their knowledge and experiences on specific types of cultivation as well as on other topics like family life, problems, etc.

After the day on the rice field the labour exchange group members meet up in the house of the farmer whose field they were working on. This farmer is responsible for providing food and drinks in the evening as well as preparing the food for the working day. The meeting in the evening also offers an exchange of different topics and contributes to a better village community.

Almost every farmer said that they drink the traditional Lao rice wine in the evening, called Lao Hai, which they produce themselves. It can be described as a ritual after a labour exchange day in which the members join and drink this certain kind of alcohol. Some female farmers mentioned that they do not join the meetings in the evening because they take care of the children. Mr. Keun, a 36-year-old farmer said:

"Mostly the men meet and drink together. My wife often goes home and cooks or takes care of the children. Sometimes we go together ..." (Interview 2X X14).

Due to the village merging policy of the Lao government, many rural families have moved to the three villages within the last couple of years. That means that many farmers were confronted with living in a new village community in which they sometimes did not know anyone. The labour exchange is an important factor for including new villagers in the existing village community. I asked Mrs. Nam, a 25-year-old woman from Nam Heng Neua:

"Was it difficult to get in contact with the villagers, when you moved here?"

"First, it was difficult to have contacts with the others. But after a few months we exchanged labour and so we got in contact with others. It was good for the social life in the village." (Interview 2X X20).

The inclusion into a new village is probably not that difficult because they all have the same cultural and ethnic background, which is the case in all three villages Khamu. This means they all speak the same language, Khamu, and even share traditions on an agricultural level, which depends a little on other ethnic minorities, like Akha or Hmong. Thus farmers who move to a new village are familiar with and share the traditions, but apart from this, a social inclusion is not taken for granted. Therefore labour exchange possesses the function of including new members in a social system and is very important for the farmers.

Access to food

As mentioned before, labour exchange is voluntary and not all villagers and households join such groups. While joining a labour exchange group, the food is guaranteed on a working day out in the fields because the farmer needing help has to prepare the food for the others. Some farmers said that in case of food insufficiency they offer their labour within a labour exchange group to ensure food and nutrition in times when they lack rice or other products. Mr. Nga, a 26-year-old farmer from Nam Heng Neua said:

"If we have a lack of rice, we sometimes borrow rice from relatives or we exchange labour because then we can eat for free. When we exchange we all eat on the field." (Interview 2X X5).

This excerpt clearly shows how important labour exchange is for poorer farmers who are not able to buy rice in the case of insufficiency. The access to food, which ensures at least a minimum of good nutrition through labour exchange, cannot be displaced in future.

Coping strategies when family labour is lacking

Besides the fact that farmers identify labour exchange as a common strategy in rice cultivation, there are cases and reasons for why rural families depend on labour exchange.

The most often-mentioned reason for joining labour exchange groups, besides facilitation, is that some rural families do not have enough labour in the family for cultivating their agricultural area by themselves. Some families have small children too young to support their parents in the agricultural area. And even if the grandparents are still alive, it is mostly impossible for them to work on the agricultural area because it is too hard work for old people. Some farmers living together with their parents and children said that their parents are mostly responsible for the household and taking care of grandchildren, while the farmer's husband and wife go to the upland field.

Another reason for the lack of labour forces within a rural family is the increasing number of children who now have access to the education system in the merged villages. While some farmers' children could not go to school in the former village because the next school was too far away, the situation has now changed. In all three villages there are schools to which almost every family sends their children providing they are old enough.

Due to the participation of rural children in the education system some rural families are now affected by lack of family labour. In the past, children were able to support their parents in the agricultural area if they were old enough. Nowadays the rural children spend more time in school than in the past.

All these facts make labour exchange important and necessary for many rural families. Without the support of other villagers, they may suffer from food insufficiency because they are not able to cultivate enough area to grow enough or even a surplus of rice. Many farmers still suffering from rice insufficiency during the year, but without labour exchange the numbers would be probably higher. But labour exchange is not only essential for families lacking labour, but also for farmers who have lost their spouses. Especially in cases of female-headed households where the spouse has died the participation and support of labour exchange is essential and indispensable, as the next interview excerpt of Mrs. Noan, a woman from Phoulat shows:

"I have three girls, ... they are 13, 12 and nine years old. The two oldest girls go to school. The oldest daughter is in the second grade at primary school and the 12-year-old is in first grade. The youngest will go in the future, maybe next year or in two years. My husband died of tuberculosis nine years ago. [...] when we go to the field my daughters help me. But the youngest daughter is too young to do hard work.[...] people from the village help me on the upland field ... there are ten people who exchange labour. So we are all the same group and help each other. [...] another big problem for me and my family is the lack of male labour." (Interview 2H H3).

Thus participation in a labour exchange group is necessary for some rural households for ensuring food sufficiency at least for a couple of month per year.

6.6 Livelihood transitions and household wealth

Before investigating the relationship between livelihood strategies and household wealth-ranking it should once again be mentioned that the former traditional livelihood strategy of northern upland households was upland rice shifting cultivation. This strategy was independent of the rural household's wealth-ranking. It is linked with the ethnic Khamu culture to cultivate upland rice in a rotation system followed by fallow periods.

Referring to the third hypothesis, this chapter clears the question of a relation of livelihood transitions and rural household wealth.

Upland rice farming

The data refers to the workshop of the DAFO staff, which was held in February 2007 by Michael Hauser and Douglas White in Oudomxay. The facilitators collected data using the PRA tool, which I have analysed considering wealth-ranking.

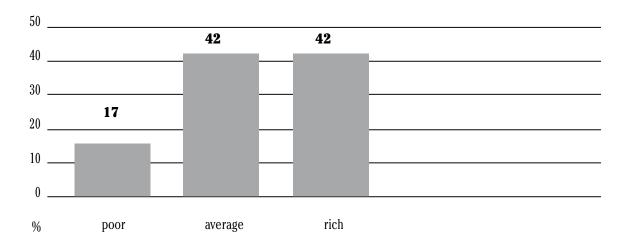
As the data collected by DAFO staff shows, upland shifting cultivation is still quite equally distributed by wealth ranking of the upland farmers. Thirty out of 75 households that still cultivate upland rice are allocated to the wealth category "poor". Twenty-three households are rich households and 22 of the households that cultivate upland rice are average.

Paddy rice farming

While looking at the result of paddy rice farming it can be seen that differences between the wealth-ranking of rural households and the implementation of paddy rice cultivation exist. Thirty-six out of 96 asked households said that they have already started to cultivate

Wealth category of paddy rice field owners

n = 36



lowland paddy rice. Fifteen of them are rich households and also 15 are average households. However, for the poor households it seems not to be self-evident to be provided with a paddy rice field. Only six households out of 36 said that they own a paddy rice field. During the qualitative interviews many poor farmers said that they would like to start cultivating lowland paddy rice, but unfortunately they do not possess any lowland area and were not sure whether the government would provide lowland area for them in future. Mrs. Thep, a poor woman from Phoulat village, said:

"... I do not have a paddy area. I probably won't ever get a paddy area. In the village there is not enough paddy area for all villagers in Phoulat." (Interview 2H H1).

Another poor farmer from Phoulat village, Mr. Lang, said:

"At the moment we do not have a paddy rice area. We hope that the government will give us some area in future. We would like to do paddy rice farming in the future." (Interview 2H H8).

Phoulat village, which is in the Houn district, is in a particularly remote and mountainous area. It differs from Nam Heng Neua and Houay Sang village in its extreme hilly environment. This means the government cannot provide enough lowland paddy field for everyone, which affects particularly poor households. A reason for this is that rich farmers are more often involved in the representative duties within a village community. These duties, such as job as a headman or member of the security staff, require and ensure contact to government staff. These connections between government staff and some certain farmers seem to be an advantage when government staff provides and divides lowland area.

Livestock

Compared to paddy rice farming, raising small animals, like poultry, pigs or goats, is well balanced among the three wealth categories. Raising small livestock is not related to the wealth-ranking of a rural household. For all rural households small livestock is an important livelihood strategy and is supported by the government.

From the eight households that told DAFO facilitators that they raise big animals, like cows and buffalo, only one household is categorised as a poor household. The rest are wealthy farmers, who can afford these expensive animals.

Collection of NTFPs

The decision about gathering NTFPs in the forest is independent of wealth ranking. It is a common tradition for Khamu people to collect products from the forest to ensure well-balanced nutrition and, nowadays, also to sell it. Almost every farmer said that they still collect or at least did it in the past. If they have stopped gathering NTFPs from the forest the reason for it is that they have started to cultivate domesticated NTFPs, such as posa (paper mulberry bark) and puak muak.

When comparing the wealth-ranking and the domesticated posa and puak muak it shows that these two variables do not correlate. Ten households said that they have already started planting posa and/or puak muak. Four of them are categorised as wealthy; three households are average, and a further three households are categorised as poor. Thus the extension program of the government affects all households independent of wealth-ranking, and the rate of domesticated posa and puak muak will increase in future.

As the table in chapter 6.2 shows another crop, the galangal fruit, will increase in future. Twenty-seven farmers said that they want to start cultivating galangal fruit. Four of these said that they wanted to extend it, which means that they have already planted galangal. The transition to cultivating galangal fruit of 23 farmers seems to be independent of wealth ranking in a rural household. Nine out of 23 farmers wanting to start planting galangal are categorised as poor farmers. Eight farmers are wealthy, and the rest, six farmers, are average households. So it seems that there is no correlation between the decision about planting galangal and wealth ranking. Galangal fruit is a new livelihood strategy for the upland rural households, which is only planted for selling, cash crops provide income for farmers. Most of the upland farmers, independent of wealth category want to profit from it in future.

6.7 Natural resources and livelihood transitions

In this chapter we have to answer the question whether livelihood transitions are independent of natural resource endowments and market access, It refers to the last hypothesis. The motivation and cause for the most incisive livelihood transition, from upland to paddy rice farming, are also changes in natural resources. The natural environment in the northern upland region in Lao PDR is suffering from the excessive "slash and burn" shifting cultivation, which results in deforestation, and forces the government to change the agriculture policies. The transitions are dependent on natural resources. The growing population due to relocation and merged villages also leaves marks on natural resources in the village's surrounding area. As already mentioned, gathering NTFPs is an essential strategy for upland farmers to ensure food sufficiency as well as contributing to an increased income made from selling these products. Though the more people move to a village, the more people gather products from the forests. The result is that NTFPs are hard to find.

"Five or ten years ago it was easy to find NTFPs or fire wood in the forest and you didn't have to walk long distances. You could find these things very close to the village, like ten minutes away. But now so many people have moved to Nam Heng Neua. They all want to collect NTFPs. So you have to go far away to find it. And there's only a small amount to find." (Interview 2XX2).

Thus the growing population changes the natural resources and demands for new coping strategies. Some farmers have already started to plant domesticated posa and puak muak, with the support of government policies, like Mrs. Ying, a 28-year-old farmer:

"Now people have started to plant NTFPs, like posa or puak muak, in their own gardens. A DAFO project supports these plants and educates us on it. They help us to do more activities and they show us how to find seeds in the forests and plant them in our own gardens." (Interview 2X X2).

If farmers start to cultivate domesticated NTFPs it may give the forest a chance to recover and provide products in future.

The impact of market access and livelihood transitions is also an interesting phenomenon.

The three relevant villages are now all involved in the market chain facilitated by road access. Many farmers say that before they were living in remote villages where there was no road access and no traders who came to the village. The fact that the road access makes it possible for big traders from outside the village access smaller one has brought about a change in the livelihood strategies of the farmers. They have started to plant cash crops and to get involved in trading activities. Market access has facilitated a change from subsistence to cash crop agriculture. Not exclusively, but it has started to become an important strategy for rural households. The following chapter handles the question of market access once again.

6.8 Government efforts and policies

In this part the question to answer is: What impact do government policies on agriculture have on household and village community level? The following deals with a general question on the relation of government efforts and their impact on rural households and communities. In addition this chapter deals with the second part of the fourth hypothesis, which examines the connection of livelihood transitions and market access.

Government policies affect the agriculture sector, withouth any doubt. The Lao government has several other policies, which are to bring more development for the country; the main goal is to rise up from the classification of a least-developed country by 2020. To reach this goal, changes and policies in the agriculture sector are necessary because this sector considerably contributes to the gross domestic product (GDP), and most of the Lao people are involved in the agriculture sector.

Stabilise shifting cultivation

The policy of stabilising shifting cultivation primarily affects the upland population of Lao PDR. An estimate in 2000 indicates that 39 per cent of the Lao population is still involved in shifting cultivation. To ensure their livelihoods they have to continue the so-

called "slash and burn" cultivation. Due to the upland and hilly environment there is no other option because lowland paddy rice fields are scarce (Thomas 2004:13).

This policy creates a new situation for the rural upland people who have been practicing shifting cultivation traditionally for centuries. Many upland farmers have already stopped practicing shifting cultivation for rice production and have started to grow lowland paddy rice. However, this is only possible when lowland in the village or in the surrounding area is available. In Nam Heng Neua a lot of lowland area for the cultivation of paddy rice exists because the village is not located in a hilly environment. Phoulat village in particular is located in a very hilly and mountainous area and still quite remote, although they have already a road access. This is why the shifting cultivation policy is not successful everywhere: because the natural environment does not allow the transition to lowland paddy rice. Mrs. Ying from Phoulat village said:

"We don't have a paddy area, so it will be a problem in the next few years because the government wants to stop upland rice farming. But we cannot stop it if we don't have any paddy area." (Interview 2H H7).

Many farmers said that they actually wanted to grow paddy rice, but do not yet have the proper area. Farmers who have already started paddy rice farming describe it as being less exhausting and delivering a better quality of rice compared to the upland rice harvest. These reasons motivate other villagers to start paddy rice farming. So there is a kind of a conflict when farmers want to do paddy rice farming, which is commonly described as easier to cultivate than upland rice, but are unable to without having adequate land. Mr. Soy from Nam Heng Neua said:

"... yes, I don't have land area for paddy cultivation and that means a lack of rice sometimes." (Interview 2X).

Lowland paddy rice is considered to be of higher rice quality and much safer for a sufficient rice harvest. Farmers tend to see paddy rice farming as an advantage and hope to change from upland to paddy rice farming, but the mountainous natural environment in upland northern Lao does not provide enough lowland area for all farmers to benefit from the transition. The headman of the DAFO in the Houn district said:

"... no, there is not enough land in the upland area for every farmer to start a paddy [...] As a substitute we provide education and technology for other activities like livestock or home and fruit gardens. In the lowlands of Lao there is enough land for paddy cultivation." (Interview DAFO H).

Land and forest allocation

"Consistent with the desire to stop shifting cultivation and opium production, government visions for the uplands see 'settled' communities practising permanent agriculture on defined land parcels ..." (Thomas 2004:14).

It is clear that the different policies belong together and are mutually dependent because land and forest allocation is linked with the policy of stabilising shifting cultivation. The aim of this policy is "permanent agriculture", which is the opposite of shifting cultivation. In each village the DAFO classified village forest land and allocated land to households with a three year land use certificate (Thomas 2004:14).

The policy of land and forest allocation aims to offer farmers the opportunity to cultivate on a permanent field, which should reduce the shifting cultivation tradition. This approach also contributes to the reduction of the deforestation in the northern upland Lao PDR. Due to a population increase, which is the result of village relocation policy on one hand, there is not enough land and forest to allocate to every farmer. I asked Mr. Khoumüang, the headman of Nam Heng Neua:

"What will happen in the future? Can DAFO provide more paddy area to the farmers?"

"The future goal of the village is to reduce shifting cultivation and to stop it soon. This year there were already five households who stopped harvesting upland rice, but in future they will stop upland rice totally and cultivate paddy field areas."

"Do you think that there will be enough land area for paddy cultivation for all farmers?"

"It might be a problem because if someone has an area for a paddy field (lowland) he can continue, but if a farmer doesn't have an area he has to change to farming upland rice into other crops. [...] The owners from the paddy fields are the farmers but the upland and other areas are still the property of the government. In this village the DAFO just set the boundaries of the forest...but they kept some areas that have not yet been divided amongst households." (Interview XI).

As can be seen, the land and forest allocation policy is very complex and difficult to implement. Although the policy has defined main objectives, there is no guarantee that they can be realised in such a way that everybody will benefit.

Village relocation and consolidation

Most of the farmers in the three villages that have been explored are affected by village merging. The main reason for merging remote villages with a village near road access is basically to provide access to infrastructure and markets, which is essential for developing a country. For example if people live near a road it is possible to go to a hospital should serious health problems arise, which was not guaranteed in remote villages. A result of this policy is a better infrastructure and more development for upland farmers:

"I moved from Nam Ba village three years ago because the government told us to move to another village. I agreed to the policy and wanted to move because of the good infrastructure, like water supply and solar electricity. I was interested in it because I have never seen this kind of electricity before." (Interview 2X X4).

Mrs. Yang, a 39-year-old farmer from Nam Heng Neua said:

"... but the infrastructure, like water supply, school, road access, closer distance to the hospital, the availability of medicine, etc. changed. It is better in Nam Heng Neua." (Interview 2X X11).

The village relocation policy has positive but also negative aspects. For most of the farmers, who have been told to leave their former remote villages life has changed and they have been able to benefit from the improved infrastructure or diversification concerning cultivation crops. Many farmers defined themselves as poor farmers in their

former villages, while now they are better off. Mr. Long, a 37-year-old farmer from Nam Heng Neua, said:

"In the old village we only did upland rice farming. There was no area to make a garden or something else. It was very mountainous and not good to cultivate anything else." (Interview 2X X16).

Most of the farmers profit from diversification in the new villages, which is promoted and supported by the Lao government. With a situation similar to Mr. Long's described above, many farmers were affected by it in their former remote villages. The possibility of diverse cultivation was very limited and the knowledge of cultivating new crops, like job's tears, galangal, etc. was very small.

The relocation and merging policy does not only contribute to improved agriculture diversification but also to such things as being included in the health care system. Although one of the three villages has no health care centre, farmers have much easier access to hospitals in comparison to the situation in their remote former villages. On this topic Mrs. Yii from Houay Sang village said:

"... if you are sick people get together or send you to hospital. You take care or give some money. All the villagers help and donate money, like 1,000 or 5,000 kip, if someone needs to go to hospital and does not have enough. So the village community is very strong and helpful." (Interview 2L L4).

The inclusion of the Lao people in the health care system, independent of their wealth and prosperity, could be an important contribution to reaching the Lao government's objective of positive development by 2020.

Also, inclusion in the education system, which is guaranteed in all three villages, is an important factor for the Lao government in reaching its objectives. Every farmer with children sends or will send them to school in the village. Even the situation of female children has improved because they are now able to join the education system as well as the male children.

I asked Mr. Khoumüang, the headman of Nam Heng Neua:

"What is the situation about education of girls and boys now?"

"Nowadays there are more girls in school than boys."

"What is the reason for that?"

"Because the population includes more women. Families nowadays don't care whether it's a girl or a boy that they send to school... when they graduate from village school they have to go to a high school in the next village. There are also more women in high school." (Interview XI).

As the headman told me, women nowadays also have access to the education system. In the past girls often were never sent to school because they had to support their parents in all kinds of household activities, as the following interview excerpt of a 19-year-old son of a poor farmer's household demonstrates:

"... we moved because of the policies of the government and we thought it was good here because there's a school and a road.. Our first daughter never went to school, she is 21. I am nineteen and I have a brother who is also nineteen. He's in the 4th year of secondary school at the moment. My 17-year-old sister only went to primary school for two years, then she stopped because our grandmother was sick and there was no one to help in the household because our oldest sister had already got married and lived with her husband. So there was not enough labour within the household. My 15-year-old brother is in 5th year primary school and now he's stopped. My seven-year-old brother is still at primary school and my five-year-old sister is too young to study at the moment." (Interview 2H H8).

A negative aspect of relocation and one of the problems attached is the loss of the Khamu's cultural tradition. Although road access brings more development for rural people and access to health care it is accompanied with changes in cultural heritage. For example the traditional animistic ceremonies practiced in the case of illness are jeopardized and will probably disappear in future. Khamu farmers told me that it is a Khamu ritual to sacrifice animals and donate them to the forests when somebody in village is suffer-

ing from a serious disease. Through the development efforts of the Lao government farmers were told to stop this sacrifice and go to hospital when they are ill. From a western civilisation point of view, trusting in western scientific medicine instead of practicing superstitious and animistic methods seems to be the only rational recommendation. Nevertheless I would like to mention that it is unlikely that development efforts will help to maintain Khamu cultural traditions, and this can be seen as a deprivation of cultural identity.

Impact on trading activities

Policies like relocation of villages near roads cause other changes. One of the most significant changes due to road access is the involvement in the market chain and trading activities. All three villages in Oudomxay province are located on roads that make it possible to benefit and be a part of the market chain. Trading activities are able to increase because traders regularly come to the villages to buy cash crops from the farmers.

The fact that inclusion within the education system is nowadays well balanced among gender may also bring about changes in trading activities.

Khamu children learn the official Lao language, Lao Loum. While Khamu women were mostly not able to speak Lao Loum in the past because they were excluded from the education system, men mostly acted as representatives when outsiders came to the village. The result of this is that many Khamu women are still not able to speak Lao Loum well enough to have a representative role in the community, for example being a head of a village. For that reason it is mostly the responsibility and duty of Khamu men to get in contact with traders from outside a village who can not often speak Khamu language.

But the fact that nowadays girls learn Lao Loum in school as well may change the strict responsibilities fragmented by gender. If Khamu women are able to speak Lao Loum they will also be able to increase trading activities or start trading activities and get in contact with big traders from outside a village.

Another important change triggered through government policies is the impact on the production of handicrafts. Khamu men and women often produce handicrafts, like clothes, baskets, knives, etc. While weaving is typically done by Khamu women, making baskets and other tools for farming is done by men. However the weaving activities of Khamu women in particular are decreasing because it is now easy to buy clothes in the merged villages. Mr. Ohn from Phoulat said:

"My wife does not weave anymore. If we need clothes we buy them in Houn or in the village. Three years ago we bought it in Houn, but now we can buy clothes in the village." (Interview 2H H9).

According to this, government policies and efforts can change rural activities and do not maintain the traditional livelihood strategy, like the production of weaving products. To weave clothes requires cotton. Rural households can either cultivate cotton or buy it. However, both require inputs or investments. Through easy access to cheap clothes in the village, now it seems to be more profitable for some families to buy than produce.

Impact on village community

The impact of the main government policies on the social component and the village community are varied. The purpose of merging villages is primarily for more development and an inclusion in different infrastructural improvements for the rural households in the uplands. Relocating a farmer's household from a small and remote village to a bigger one with road access brings new situations and challenges for them. Firstly, a rural family that moves to another village has to get in contact with the new people in the village. All three villages are 100% Khamu villages, which is an advantage because there are no language differences.

Some farmers said that in their former village no labour exchange existed. They joined labour exchange groups in the new village for the first time, which is also defined as an advantage for getting in contact with other unknown villagers.

I asked Mrs. Suk, a 22-year-old farmer from Nam Heng Neua:

"How was the situation when you moved to the new village?"

"... it was not difficult for us because all households from Nam Pa moved here as well. My mother's sister was here before I moved here. And it was not difficult because all the people in Nam Heng Neua are Khamu. It is the same culture, which I know well." (Interview 2X X18).

Most of the farmers describe their new lives in bigger villages as positive because the village community is better and offers more advantages. However, there are still some negative aspects of living in a bigger village community, which is related to the increasing trading activities.

"When Nam Heng Neua was a small village with a smaller amount of villagers than it has now, people shared food with each other. But now, if someone has banana, they want to sell it and say, if you want you can get it, just give me 1000 kip²¹ for it. They always want to trade; it is like trading all the time." (Interview 2X X2).

It seems that a heightened knowledge of trading has an impact on the principles of reciprocity, which was an important system in rural subsistence communities before. The transition from subsistence to cash does not only concern the relation between a rural household and traders. The relationship within the village community also seems to be affected by this new phenomenon.

7. Conclusion

As the results show new livelihoods in upland Lao PDR. are mostly refered to the cultivation of cash crops, like job's tears, galangal, the domestication of NTFPs and paddy rice. This introduction of livelihood strategies seems to jeopardize existent intra-household institutions. Regarding the decision-making process within a rural household new livelihood strategies exist that cannot preserve decision-making power on the basis of gender. Especially gathering NTFPs, which is an essential strategy and rural women have decision-making power on it, is decreasing and will be more and more displaced by the domestication of NTFPs. As the data shows, the decision-making on the domestication of NTFPs is in favour of rural men. In decreasing the decision-making power of rural women, the distribution of benefits and its allocation may also become unbalanced between men and women. An introduction of new livelihoods supported by the government does not bring advantages for all members of a rural household. The unbalanced power over decision-making and resources should be considered by responsible members of the government. Adequate solutions and alternatives for these unfair effects should be developed in future.

The transition from upland to paddy lowland rice maintains so-called "male" implementation procedures, while labour procedures, which are only or mostly done by women, are decreasing. It seems that the introduction of new livelihoods in upland Laos excludes rural women more than rural men - not only concerning the decision-making process but also the implementation procedures. It does not mean that rural women do not accomplish that much labour input anymore. They are also involved in labour procedures but, for example the new paddy rice cultivation does not feature clearly defined labour procedures for women. It will probably emerge over the years when paddy rice cultivation is fully established in upland Laos.

Also the fact that not enough lowland area for paddy rice cultivation in upland Laos is available, brings disadvantages and disprofit for some rural households. As the results show, a lot of farmers, especially the poorer ones, often do not possess lowland area. Do not

have or own alternative cultivation area for upland shifting area builds a trap for linger in poverty. It seems that poorer households do not profit in the same way that the more prosperous households do. The scarce lowland area is allocated advantageous for wealthy households.

The adoption of new livelihood strategies seems to intensify the strict traditional division of labour within a rural household. The fact that rural women are less involved in the knowledge and techniques that new livelihood strategies require contributes to the maintenance of women's responsibility for reproductive household tasks. Although mostly women gained from access to educational system in the past, there is no signal that the traditional division of labour within rural households will change in the near future.

The distribution of the benefits of new livelihood strategies tends to be less affected. Essentially all members of a rural household benefit from agriculture crops. The increasing trade activity in rural households makes it possible to earn money. The men and women of a household generally bargain on the distribution of it. As already mentioned, women save and take care of the money, while men tend to spend it, but not without bargaining and negotiating with their spouses. Thus rural women also possess power in the negotiation process concerning benefits for rural families.

Interaction between the rural household and village community does not decrease, although some new livelihoods exclude requirements for communal interaction, like trading activities, domestication of NTFPs crops, etc. However, new cash crops, like job's tears or galangal, does require labour exchange, and, if more rural household cultivate it, more labour exchange is needed.

The separation of private household and communal benefits may become enforced. The more cash crop cultivation means the more income for rural households, which is basically not distributed amongst other village members. Through paddy cultivation, benefits will be distributed equally and shared with others of the village community

when food is scarce. The principle reciprocity of rice crops will be maintained within rural village communities when changing rice cultivation from upland to paddy.

There is definitely a connection between the new livelihood strategy of paddy rice and household wealth. The rural households cultivating paddy rice so far are mostly from the categories "rich" and "average". It seems that it is not a coincidence that poor rural household are mostly excluded from these new livelihood strategies. The government provides lowland area for farmers and the ones better off have the advantages of being chosen. An explanation for this fact is that the wealthier households have more influence and are more likely to occupy representative functions within rural villages, such as the duty as headman.

Moreover, livelihood transitions are not independent from natural resources and market access. The changing natural environment in upland Laos constitutes the government efforts and development strategies. Soil erosion, deforestation and so on have forced the government to create coping strategies for upland rural communities, which can be achieved with a transition from tradition to new livelihood strategies.

New livelihood strategies are also adapted to access the market, which is obvious when considering the governmental support of cash crops. Without doubt, the access to markets brings a lot of advantages for rural households and communities. However, it is important not to neglect and overlook possible negative consequences for rural communities. Especially cultural traditions of Khamu people seems to be jeopardized.

In summary I would like to point out that changing livelihoods incur the modification of rural institutions. The main objective of government efforts and policies to eradicate poverty in the Lao uplands is notable, without a doubt. However, it seems that the policies affecting upland communities do not consider the effects and changes on rural institutions. The rural villages can profit a great deal from the development efforts of the Lao government and there are profitable improvements for rural households in upland Laos.

Though the role of rural women seems to be partly neglected as well as the impact on inter-household communication.

Everyone should profit from development efforts, but as a transition to new livelihoods shows, it is not advantageous for everyone, especially not for rural women and poorer households. The policies have an effect on traditional livelihood strategies as well as on the institutionalised patterns of rural households and communities, but it has to be pointed out that the inter-household institutions are less affected by government policies than the intra-household institutions.

However, this should be noted by the Lao government and it should try to react and provide alternative solutions, which favour all farmers, independently of gender or wealth.

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9. Appendix

Checklist for semi-structured interviews

Intra- and Inter- Household Institutions (gender/communal)					
Interview code					
Participant					
District					
Village					
Wealth code (1 – 3)					
Date					
Time					

Household and Family context (as a short introduction)

When did you move to this village? Why? Activities in the old village? How many children, how old? Do they go to school? Who lives in the household? Traditional division of labour (cooking, care of children...?)...Changes on division of labour?

Activities on household level

- What are the main activities that your household do food sufficiency and income?
- Cultivation, NTFP, Livestock,...
- Which of these activities are communal activities?
- Which products do you sell? To whom? Why?
- Do you have any plans for the future to change livelihood strategies? Why?
- Does future activity require labour exchange?
- Who will work for it, what will change in labour?

Village Community

- Who is more involved in labour exchange (male/female) and why?
- What does it mean for you (more work, facilitation,...) Why?
- Labour exchange in the past? Labour exchange in the future decrease? For example, when people start activities, which don't need a lot of labour.

Changes/Problems in the household and village

What has changed in your village in the last couple of years?

- 1) changes in social life
- 2) changes in the agriculture sector
- 3) changes in infrastructure
- 4) changes in trading activities

Do you know natural resources in your village which are scarce?

- 1) forest
- 2) NTFPs
- 3) Water (stream, supply,...)
- 4) Wildlife
- 5) Soil

Government policy of merging villages? What changed?

(Negative aspects, like village too big, too much population, not enough land, ...?)

Main problems in the $\,$ family? Lack of rice, lack of labour, sickness, house, \ldots ?

Checklist for expert interviews with headmen

Village profile

How many people live in village (male, female)?

How many households are in the village (wealth category)?

Ethnic group?

Infrastructure (school, water supply,...)?

Where is the next village? How far to go?

Where is the next market for selling products? Traders?

Who built the houses? Labour exchange in village?

Traditional activities of households?

What do they cultivate traditionally to ensure their food security or income?

Decision on a household level? Men, women, both?

Who works and what kind of labour (field area, household, child care,...)

Distribution of income and benefits within households?

What are the traditional activities of the village community (exchange labour)?

What does the village community share?

Do they cultivate land together?

Who makes decisions about communal activities?

Share benefits?

Land area

Who is the owner of the cultivated land area (Village property, government, farmer)?

What rights do farmers have? Can they inherit land for their children?

Changes

What changes of strategies will happen in the future (go for paddy,...)?

What about government policies and their impact?

Problems

What are the main problems of the village and households?

Are there problems due to government policies and laws?

What about natural resources in and around the village area?

Checklist for expert interviews with DAFO staff

Can you tell me something about the activities of DAFO?

What governmental programs and strategies do you implement in rural villages? (Village extension, mergers, dividing land,...)

What is the goal of the agriculture strategies of the Lao government?

Is there enough land for paddy rice farming for farmers who want to stop shifting cultivation?

What are the main problems in rural villages?

What impact will the government strategies and programs have on farmers? What do you think will change in the near future for the rural villages?

Checklist for PRA flipchart session

 $Labour\ implementation\ procedures\ for\ the\ main\ livelihood\ strategies\ in\ the\ uplands\ of\ Laos$

Livelihood Activities	Code Participant		Livelihood Activities	Code Participant		
Liverinood Activities	female - male household - community		Livelinood Activities	f - m	hh - comm	
upland rice			paddy rice			
decision-making			decision-making			
slash			dig irrigation system			
burn			dig boundaries			
clear			dig soil			
plant			watering			
weed			break soil again			
harvest			sow			
carry			plant			
sell			harvest			
distribution of benefits			carry			
			sell			
			distribution of benefits			
Livestock small (poultry)			Livestock big (pig,buff.,cow)			
decision-making			decision-making			
build fences/houses			build fences/houses			
feed			feed			
slaughter			slaughter			
cook			cook			
sell			sell			
distribution of benefits			distribution of benefits			
Corn			Galangal fruit			
			i			
decision-making slash			decision-making slash			
burn			(burn)			
clean			clean			
plant			dig soil			
weed			plant			
harvest			weed			
carry			harvest			
sell			carry			
distribution of benefits			sell			
			distribution of benefits			
Job's tears			Domesticated Posa			
decision-making			decision-making			
prepare			slash			
plant			burn			
weed			clean			
harvest			plant			
carry			weed/take care			
sell			harvest cut, clean bark)			
distribution of benefits			sell			
			distribution of benefits			

Collect NTFPs		Fruit trees	
decision-making		decision-making	
Collect		slash	
sell		(burn)	
distribution of benefits		clean	
		plant	
		weed	
		sell	
		distribution of benefits	
Cardamom		fish pond	
decision-making		decision-making	
prepare, dig hole		build pond/fences/	
plant		build water supply	
weed		feed	
harvest, drying		fishing/prepare	
sell		sell	
distribution of benefits		distribution of benefits	
Cassava		Sesame	
decision-making		decision-making	
slash		slash	
burn		(burn)	
clear		clear	
plant		plant	
weed		weed	
harvest		harvest	
sell		sell	
distribution of benefits		distribution of benefits	
Others			
decision-making			
prepare			
slash			
burn			
clear			
plant			
weed/care/watering			
harvest			
carry			
sell			
distribution of benefits			

List of interview participants

Code	Date	Village	Name	Sex	Wealth code	Age	Function
Н1 ехр	03/05/07	Phoulat		male			Headman/farmer
L1 exp	03/12/07	Houay Sang	Mr. Douang Kham	male	3		Headman/farmer
X1 exp	03/16/07	Nam Heng Neua		male			Headman/farmer
DAFO H	04/04/08	Muang Houn		male			Head of DAFO Houn
DAFO X	04/27/07	Muang Xai	Mr. Muanthong	male			Deputy of administration DAFO Xai
PAFO X	04/22/07	Muang Xai	Mr. Somsa- mouth	male			Head of Extension Service Xai (PAFES)
NAFRI	04/04/07	Phoulat	Mr. Khampou	male			Staff of NAFRI
H1	03/05/07	Phoulat		female	1		farmer
H2	03/06/07	Phoulat	Mr. Liun	male	1	33	farmer
НЗ	03/06/07	Phoulat	Mrs. Gnou	female	2	47	farmer
L1	03/12/07	Houay Sang	Mrs. Ka	female	2		farmer
L2	03/13/07	Houay Sang	Mrs. Phone	female	3		farmer
L3	03/13/07	Houay Sang	Mr. Dah	male	3		farmer
X1	03/16/07	Nam Heng Neua	Mr. Long	male	3		farmer
X2	03/17/07	Nam Heng Neua	Mr. Soy	male	2		farmer
Х3	03/17/07	Nam Heng Neua	Mrs. Tom	female	1		farmer
X4	03/17/07	Nam Heng Neua	Mrs. Men	female	3		farmer
X5	03/17/07	Nam Heng Neua	Mrs. Ching	female	2		farmer
2H H1	04/02/07	Phoulat	Mrs. Thep	female	3		farmer
2H H2	04/02/07	Phoulat	Mr. Yoa	male	1		farmer's oldest son
2Н Н3	04/02/07	Phoulat	Mrs. Noan	female	3		farmer
2H H4	04/02/07	Phoulat	Mr. Khamnis	male	2		farmer
2H H5	04/03/07	Phoulat	Mr. Kling	male	1		farmer
2H H6	04/03/07	Phoulat	Mr. Siphon	male	1		farmer
2H H7	04/03/07	Phoulat	Mrs. Ying	female	2		farmer
2H H8	04/03/07	Phoulat	Mr. Lang	male	3	19	farmer's son
2H H9	04/04/07	Phoulat	Mr. Ohn	male	2		farmer
2H H10	04/04/07	Phoulat	Mr That	male	3	20	farmer's son

		,	,				
2L L1	04/07/07	Houay Sang	Mr. Thon	male	1		farmer
2L L2	04/07/07	Houay Sang	Mrs. Choi	female	3		farmer
2L L3	04/07/07	Houay Sang	Mrs. Viang	female	2		farmer
2L L4	04/07/07	Houay Sang	Mrs. Yii	female	2		farmer
2L L5	04/07/07	Houay Sang	Mrs. Mii	female	1		farmer
2L L6	04/08/07	Houay Sang	Mrs. Aunj	female	2		farmer
2L L7	04/08/07	Houay Sang	Mr. Äh	male	3		farmer
2L L8	04/08/07	Houay Sang	Mrs. Müng	female	1		farmer
2L L9	04/08/07	Houay Sang	Mrs. Nang	female	3	35	farmer
2L L10	04/08/07	Houay Sang	Mrs. Bok	female	3	30	farmer
2X X1	04/20/07	Nam Heng Neua	Mrs. Koy	female	2	35	farmer
2X X2	04/20/07	Nam Heng Neua	Mrs. Ying	female	2	28	farmer
2X X3	04/20/07	Nam Heng Neua	Mrs. Goh	female	2		farmer
2X X4	04/20/07	Nam Heng Neua	Mrs. Sang	female	2	28	farmer
2X X5	04/21/07	Nam Heng Neua	Mr. Nga	female	3	26	farmer
2X X6	04/21/07	Nam Heng Neua	Mr. Quit	male	3	55	farmer
2X X7	04/21/07	Nam Heng Neua	Mr. Khamdi	male	3	37	farmer
2X X8	04/21/07	Nam Heng Neua	Mr. Xiang	male	3	28	farmer
2X X9	04/22/07	Nam Heng Neua	Mrs. Loy	female	1	37	farmer
2X X10	04/22/07	Nam Heng Neua	Mrs. Soy	female	1	32	farmer
2X X11	04/22/07	Nam Heng Neua	Mrs. Yang	female	1	39	farmer
2X X12	04/22/07	Nam Heng Neua	Mr. Khamplau	male	1	36	farmer
2X X13	04/23/07	Nam Heng Neua	Mr. Khamsay	male	1	54	farmer
2X X14	04/23/07	Nam Heng Neua	Mr. Keun	male	2	36	farmer
2X X15	04/23/07	Nam Heng Neua	Mr. Din	male	2	50	farmer
2X X16	04/23/07	Nam Heng Neua	Mr. Nong	male	2	37	farmer
2X X17	04/24/07	Nam Heng Neua	Mrs. Bin	female	3	27	farmer
2X X18	04/24/07	Nam Heng Neua	Mrs. Suk	female	3	22	farmer
2X X19	04/24/07	Nam Heng Neua	Mr. Chium	male	1	59	farmer
2X X20	04/20/07	Nam Heng Neua	Mrs. Nam	female	3	25	farmer

Interview example

oun District, Phoulat	Time	Code
.04.2007 rs. Thep, WC 3 poor	08:00	2H H1
Q: Can you tell me when you moved to Phoulat, and what was the it?	e reason fo	r
A: I moved from the village Phou Yut 4 years ago. It's three hours vidue to the village merging policies. There were two options for moved choose between Phoulat and Phoulao village. But I preferr	y family.W	e
because my agriculture area is closer to this village.		
Q: Can you tell me something about your family and your housel A:There are three people in the household, me and my two child band died around 14 years ago. The girls are 15 and 14 years old. the 14-year-old girl, goes to primary school. The 15-year-old girl we	lren.My hu One of the ent to scho	m,
as well, but stopped because of sickness. She won't go to school a I am responsible for all the household activities and duties. For w	•	ies
on the agricultural field me and my 15-year-old daughter work ar	_	
ther.The 14-year-old can't help us most of the time because she s school.	till attends	
Q:What are your main agricultural activities?		
A: I do upland rice farming. And I make alcohol to ensure incom Lao Hai, the traditional Lao rice wine, and sell it to other villagers around 10 to 15 jugs of Lao Hai per month.		<u>,</u>
Then I have 10 chickens and one pig. And I collect posa, puak muak and broom grass in the forests. I so a trader in the village. He sells it to big traders from town who co regularly.		n,
regularly.		
Q: Do you exchange labour? A:Yes, I exchange labour for upland rice. But I help others on the	re naddy	
area, for example. I exchange for several activities like slashing, cl ting, weeding, harvesting and carrying – but not for burning.		ın-
Q: Are there basically more men involved in labour exchange? A: No, everyone comes to exchange labour and support other vill	lagers	
female and male	145013	
Q: Do you like labour exchange?	1	,
A:Yes, it's quick to do and I enjoy working with others and it's m we forget to be tired and afterwards we drink alcohol and talking		1,
time.	9	
Q: Do you think that labour exchange will decrease in future?		
A: I don't know but I will exchange for job's tears in addition. So r will be more labour exchange in the future.	maybe thei	e
Q:What kind of future activities would you like to start?		
A:This year I am going to start cultivating a job's tears garden.		
Q: Why do you want to grow Job's and not for example maize?		

Because I am experienced, I did cultivate Job's in the past.

harvest earlier than the rice. 48 Q:Who makes the decisions about these agricultural activities? 49 A: Someone in the village told some villagers about job's tears cultivation. I 50 make the decisions within my household and try to copy and imitate what 51 others in the village do. 52 53 Q:What about the income and money? Are your daughters allowed to spend 54 55 money for themselves? A: I keep and manage the money and make decisions on spending money for 56 my daughters. 57 58 Q:What has changed in the last couple of years in this village on agricultural 59 sector? 60 A: Now some people already have paddy areas and some have gardens...ve-61 getable gardens. In the past I only did upland rice farming, no cash crop like I 62 63 cultivate now. Q:What has changed in the social life in your village? 64 A: In the past if someone had some fish or food, they shared it with neighbours 65 or others. Now people don't share it for free, they want to sell it. 66 67 Q:What kind of changes on infrastructure brought your relocation to Phoulat? A: In Phoulat there is a school, water supply, we have clean water and there is a 68 road access. So the aspect of infrastructure is better than in the past. It is easy 69 to sell products and crops. 70 Q: Changes on natural resources in the surrounding area? 71 72 A: The forest is decreasing. NTFPs are also decreasing. In the past there were many NTFPs in the forests and it was easy to find them. 72 The population of wildlife and agriculture area is also decreasing. And the soil 74 quality is also bad because of the short fallow periods. 75 76 Q: Do you want to cultivate paddy rice in future? 77 A: I don't have any paddy area. I probably won't ever get any paddy area. In the 78 village there is not enough paddy area for all villagers in Phoulat. 79 80 O: What has changed for your family since you moved? 81 A: Basically in Phoulat it's better than in the old village. I can sell what I produ-82 ce and cultivate. 83 Q: Do you sometimes have a lack of rice during the year? 84 A: Some years we do not have enough rice for around three month per year. 85 But then there are better years, when we have enough rice for the whole year. 86 It depends... 87 Q: How do you get rice during the insufficiency? 88 A: Sometimes I borrow rice or buy rice from relatives or I share animals 89 and NTFPs to get rice. Nobody in my family sells labour for money, we only 90 91 exchange labour.

Q: And do you require other labour for planting Job's tear?

A:Yes, and I'll grow it together in the same plot as the upland rice, but I can

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Abstract

This study tries to demonstrate the impact of livelihood transitions and government efforts on rural institutions in northern Lao PDR. Essentially intra- and inter-household institutions of the ethnic minority in Lao PDR, the Khamu, build the focus of the research. The research objectives are, on the one hand, to determine the likely effects of livelihood strategies and practices of households and communities and, on the other hand, to identify the impacts of development policies that foster equitable outcomes.

In Lao PDR shifting cultivation is still a dominant land use practice. With increasing population pressures, resulting shorter fallow periods render the traditional land use system unsustainable. Policy to merged villages provides health and education services but cause localised pressured on natural resources. Thus alternative practices need to be developed and supported to enable the growing population to achieve sustainable livelihoods.

New opportunities, many of which arise from development efforts, may alter longstanding social and cultural traditions. Promoted governmental livelihood activities include paddy rice, livestock, job's tears, galangal and domestication of non-timber forest products (NTFPs).

This research examines the effect of realising such new livelihood strategies on (1) the roles of men and women within households and (2) traditional interactions between households and their communities. To filter these effects this study is built on an exploration of every implementation procedure for each livelihood strategy of rural households.

Abstract (deutsch)

In der vorliegenden Diplomarbeit "Livelihood transitions in upland Lao PDR under the light of changing policies. Can traditional rural institutions be maintained?" werden die Auswirkungen und Veränderungen des Lebensunterhaltes und der Existenzsicherungsstrategien von bäuerlichen Institutionen im Norden von Laos, aufgrund von Regierungsinterventionen, dargestellt. Die Feldforschung fand vom Februar bis Mai 2007 in der Provinz Oudomxay im nördlichen Laos statt. Die Untersuchung beschränkt sich auf die "Khamu", einer ethnischen Minderheit in Laos.

In Laos dominiert immer noch Brandrodung als landwirtschaftliche Flächennutzung. Doch durch das zunehmende Bevölkerungswachstum wird diese traditionelle landwirtschaftliche Technik gefährdet. Die Nachhaltigkeit ist nicht mehr gesichert, da der Zeitraum, in dem das Land brachliegen sollte, um sich von Nutzung zu erholen, nicht mehr eingehalten werden kann.

Verordnungen der Regierung, wie beispielsweise das Zusammenlegen von abgelegenen Dörfern, bringt zwar einige Vorteile und Zugang zum Gesundheits- und Bildungswesen für die ländliche Bevölkerung. Doch die natürlichen Ressourcen in den zusammengelegten Dörfern werden zunehmen knapp. Dieser Umstand erfordert alternative Strategien, um eine nachhaltige Existenzsicherung der bäuerlichen Bevölkerung im Hochland von Laos zu sichern.

Solche neuen entwicklungspolitischen Strategien der laotischen Regierung bringen Veränderungen in sozialen und kulturellen Traditionen der bäuerlichen Bevölkerung mit sich. Mit der folgenden Forschung sollen Effekte einer Neueinführung von landwirtschaftlichen Strategien auf haushaltsinterne, geschlechtsspezifische Unterschiede zum einen, und traditionelle Interaktionen zwischen bäuerlichen Haushalten und der Dorfgemeinschaft zum anderen, durchleuchtet werden. Dafür wird für jede landwirtschaftliche Strategie jeder notwendige Arbeitschritt auf haushaltsinterner und -externer Ebene untersucht. Teilstrukturierte Interviews, sowie der Einsatz von PRA (participatory rural appraisal) Techniken, wurden zur Datensammlung im Feld eingesetzt.

Curriculum Vitae

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