



Social Development Alliance Association (SODA)

Poverty in Lao PDR

Poverty, Gender and Ethnicity in Agriculture Sector in the Nam Ngum River Basin

Written by
Social Development Alliance Association (SODA)

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SODA Research Team

Abbreviations

| | | |
|-------------|---|--|
| ADB | : | Asian Development Bank |
| ASEAN | : | Association of Southeast Asian Nations |
| CEDAW | : | Convention on Elimination of All forms of Discrimination Against Women |
| CSOs | : | Civil Society Organisations |
| FAO | : | Food and Agriculture Organization of the United Nations |
| FHH | : | Female Headed Household |
| FDI | : | Foreign Direct Investment |
| FG | : | Female Group |
| FGP | : | Female Group Poor |
| FGNP | : | Female Group Non Poor |
| GDP | : | Gross Domestic Product |
| GMS | : | Greater Mekong Sub-region |
| ha | : | Hectare |
| HH | : | Household |
| HDI | : | Human Development Index |
| IFAD | : | International Fund for Agricultural Development |
| IGA | : | Income Generation Activities |
| IMF | : | International Monetary Fund |
| KAP | : | Knowledge, Attitude and Practice |
| Km | : | Kilometre |
| LAK | : | Lao Kip (Lao currency) |
| LCA | : | Lao Census of Agriculture |
| LECS | : | Lao Expenditure and Consumption Survey |
| Lao PDR | : | Lao People's Democratic Republic |
| LECS | : | Lao Expenditure and Consumption Survey |
| LNLS | : | Lao National Literacy Survey |
| LFP | : | Labour Force Participation |
| LSB | : | Lao Statistics Bureau |
| LSIS | : | Lao Social Indicator Survey |
| LWU | : | Lao Women's Union |
| MAF | : | Ministry of Agriculture and Forestry |
| MHH | : | Male Headed Household |
| MG | : | Male Group |
| MGP | : | Male Group Poor |
| MGNP | : | Male Group Non Poor |
| NNRB | : | Nam Ngum River Basin |
| NSEDP | : | National Social Economic Development Plan |
| MG | : | Male Group |
| MDG | : | Millennium Development Goal |
| MPI | : | Ministry of Planning and Investment |
| NGO | : | Non-governmental Organization |
| NSC | : | National Statistics Centre |
| NSEDP | : | National Socio-Economic Development Plan |
| NTFP | : | Non-timber Forest Product |
| UN | : | United Nations |
| UNDP | : | United Nations Development Programme |
| UNESCO | : | United Nations Educational, Scientific and Cultural Organization |
| USD or US\$ | : | United States Dollars |
| UXO | : | Unexploded Ordnance |
| VDF | : | Village Development Fund |

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| SODA | : | Social Development Alliance Association |
| SIDA | : | Swedish International Development Cooperation Agency |
| WB | : | World Bank |
| WFP | : | World Food Programme |
| WG | : | Women Group |
| WHO | : | World Health Organization |
| WTO | : | World Trade Organization |

Exchange rate 1USD = 8000 Lao Kip

Executive Summary

This poverty research report presents a range of sex-disaggregated data in order to analyze the poverty situation at the national level and local differences between male and female headed households. The study was carried out in 6 poor villages in Nam Ngum River Basin of Vientiane Province. Participatory research methods were used in generating the data analyzed for this report. A total of 42 groups - 18 women's groups, 18 men's groups and 6 leader groups - participated in generating the data. The study team interviewed 249 individual villagers in these six rural villages.

Overall poverty rates in the Lao PDR have decreased, dropping from 46.0% in 1993 to 23.2% in 2013. The overall assessment is that Lao PDR is well on track to achieve the targeted national poverty rate. However, it might also be noted that the Gini coefficient, a commonly used measure of income inequality, marginally increased from 35.0% in 2008 to 36.2% in 2013. Another important consideration is that nationally, the majority of the poor reside in rural areas; the rural poor account for 87.6 % of all poor people in the country, despite the fact that rural residents only account for 71.2% of the total population. Poverty remained substantially higher in rural areas, at 28.6% compared to 10.0% in urban areas. It is also important to note that poverty were substantially higher among Non-Lao Tai ethnic groups. The poverty rates were highest among the Mon-Khmer and Hmong-Mien headed households with poverty rates of 42.3% and 39.8% respectively, almost double the national poverty rate of 23.2%. During the past two decades, more households have gained access to electricity, safe drinking water and toilets as well as ownership of more assets. Households invested in housing and durable assets. Net school enrolment increased. However, it was evident from the data that rapid growth and poverty reduction do not automatically benefit the poor. Although four ethnic groups did benefit from the recent economic development, the poor people within these groups gained less benefit compared to the richest households. There were also disparities in the literacy rates of females, especially females from ethnic groups, which continued to lag behind male literacy rates. The poor households expressed a greater concern regarding food insecurity than the non-poor households.

Only a small proportion of all rural households in the Lao PDR were headed by women. Widowhood was the main reason for female headship but about a fifth of all female heads of household became de facto heads due to employment related migration of their spouses. Overall, female heads were older and less literate than male heads. Female headed households were also smaller and subsequently the household labour force was less than male headed households.

The gender inequality between male and female headed households in the agricultural sector was evident the agricultural land they used, in both the size of the land plots and the number of plots. At the national level, the average size of agricultural land operated by female-headed farm households was only slightly smaller than the land operated by male-headed farm households. Female-headed farm households operated, on average, 700 square meters less agricultural land than male-headed households, a difference of 3.5 percent. For irrigated lands, female-headed farm households operated, on average, 400 square meters less than male-headed farm households, a difference of 5 percent. Consequently, female headed households have less diversified cropping patterns than male headed households. A very important source of gender inequality in the agricultural sector is livelihood diversification and income. National level data shows that female headed households were less able to engage in livestock production as a source of livelihood as compared to male headed households. Female headed households received lower prices when selling livestock, regardless of the type of livestock. Also, substantially fewer female headed households were able to market grains as compared to male headed households. Further, female headed households were less engaged in fishery and forestry as income sources. Another relevant and important finding was that female headed households had less access to loans, especially formal loans to invest in businesses.

Overall poverty rates in Vientiane province decreased dropping from 27.8% in 1998 to 12% in 2013. Approximately 99 percent of the households had their own land, and agriculture was the important livelihood; about 94.4 percent of the villagers were involved in rotational rice shifting cultivation. About 88% of the villages have implemented land and forestry land projects. Agriculture extension workers had visited about 79.2 % of the villages.

During the field survey, the various aspects of well-being and ill-being were defined by female and male groups. The common aspects cited by both sexes were economic wealth, sufficient land for agricultural activities, owning a good house, employment, food security, good health and owning some animals. However, there were some differing views between female and male groups. Women more often identified issues concerned with the welfare of the family, while men more often mentioned factors that would ensure high economical production and productivity.

Access to land, food insecurity (rice shortage), employment, health and education were regarded as top priorities. Land was considered by many villagers as the most important resource for agriculturally based rural livelihoods. In the social sector, the cost of health care services was thought to be a major impediment to accessing such services; another impediment was the distance to the services. Education and health problems were common in all village sites. Women's groups were more vocal on health issues. Other problems included the absence of markets, bad roads, domestic violence, low female participation in development work and increased social problems.

Different groups in the target villages had experienced and prioritized problems differently. Non-poor groups were more interested in business and social welfare. Poor groups were more interested in daily economic survival or daily income activities. Health care was selected as a key issue by groups of women, but less important by groups of men. The women's discussions of health and schooling issues were more comprehensive than the men's discussions of these issues.

Concerning gender roles, women do most of the household work. These tasks included cooking, washing dishes and clothes, fetching water, looking after small children and the sick, cultivating crops and cleaning the surroundings of the households. Furthermore, women had heavy and unpaid household duties that took them away from more productive activities. The men were indicated as the primary decision makers at both household and community levels.

Several recommendations were made from the survey results. Development actors should focus on improvement of agricultural land and provide more agricultural extension services. Agricultural land access, agricultural extension, more job creation, income generation activities, vocational education and training should be the highest priorities in the target villages. Similarly, strategies that increase poor people's access to productive resources such as credit as well as employment schemes must be made gender aware. The effects of all such policies must be monitored from a gender perspective as well as from a poverty perspective. Village participatory planning with gender and ethnic sensitivity approaches should be developed. The female headed households and the poor should be the main target groups of village development planning.

Summary sheet

| | LECS 4 in 2007-08 | LECS 5 in 2012-13 |
|--|-------------------|-------------------|
| 1) Agricultural Households | | |
| • Sex household head (%) | | |
| Male headed households | 95 | 94.8 |
| Female headed households | 5 | 5.2 |
| • Average household size | | |
| Male headed households | 5.9 | 5.4 |
| Female headed households | 4.8 | 4.2 |
| • Average household labour force (active members) | | |
| Male headed households | 4.4 | 4.3 |
| Female headed households | 3.8 | 3.5 |
| 2) Literacy rate | | |
| • Household members age 6+ | | |
| Male members | 73 | 75 |
| Female members | 57 | 60 |
| 3) Agricultural land | | |
| • Land access (%) | | |
| Male headed households: | 96 | 94.5 |
| Female headed households: | 88 | 90.3 |
| • Land area (ha) | | |
| Male headed households: | 1.9 | 1.7 |
| Female headed households: | 1.6 | 1.6 |
| 4) Technologies | | |
| • Average irrigated land area (ha) | | |
| Male headed households: | 1.2 | 0.75* |
| Female headed households: | 1.3 | 0.71* |
| 5) Credit | | |
| • Access to credit for production/business purposes | | |
| Male headed households: | 15 | 16 |
| Female headed households: | 10 | 11 |
| • Credit used for agricultural purposes | | |
| Male headed households: | 36 | - |
| Female headed households: | 28 | - |
| 6) Crop production (Percentage of area planted) | | |
| • Rice | | |
| Male headed households: | 77 | 72.3* |
| Female headed households: | 89 | 76.8* |
| • Industrial crop | | |
| Male headed households: | 8 | 5.4* |
| Female headed households: | 4 | 5.1* |

| | | |
|---|-----|------|
| 7) Livestock production | | |
| • Engaged in cattle production (%) | | |
| Male headed households: | 52 | 38* |
| Female headed households: | 47 | 36* |
| • Average number of cattle owned | | |
| Male headed households: | 5.1 | 5.4 |
| Female headed households: | 4.5 | 4.7 |
| • Engaged in buffalo production (%) | | |
| Male headed households: | 55 | 29* |
| Female headed households: | 58 | 29* |
| • Average number of buffalo owned | | |
| Male headed households: | 3.3 | 3.5 |
| Female headed households: | 3.5 | 3.0 |
| • Engaged in pig production (%) | | |
| Male headed households: | 62 | 40* |
| Female headed households: | 58 | 26* |
| • Average number of local pigs owned | | |
| Male headed households: | 3.0 | 3.2 |
| Female headed households: | 2.3 | 2.8 |
| 8) Access to safe drinking water (%): (dry season) | | |
| Male headed households: | 58 | 61 |
| Female headed households: | 48 | 54 |
| 9) Access to electricity (%): | | |
| Male headed households: | 61 | 81 |
| Female headed households: | 77 | 88 |
| 10) Wood as main fuel for cooking (%): | | |
| Male headed households: | 81 | 74.7 |
| Female headed households: | 69 | 62.3 |
| * LCA, 2011 | | |

Chapter 1: Introduction

1.1. Background

The Government of Lao PDR (GoL) aims to eradicate poverty and upgrade the country from the status of least developed country (LDC) by the year 2020. The GoL is currently developing the 8th NSEDP for 2016-2020. Under the 7th and 8th NSEDP, the GoL is committed to promoting gender equality to improve the effectiveness of the poverty reduction program. An action plan to mainstream gender dimensions in the upcoming NSEDP 2016-2020 has been drafted by the National Commission for the Advancement of Women (Lao NCAW) and the Lao Women's Union. However, there is limited knowledge and data on the different ethnic groups, especially on gender roles and gender relations, decision-making, traditional beliefs, language, and other relevant factors. An improved understanding of the gender dimensions of poverty among the ethnic groups in Lao PDR is thus an important factor in enhancing the development effectiveness of poverty eradication in Lao PDR.

Although a number of national surveys such as the Agriculture Census 2010, LECS4 2007/08, and LECS5 2012/13 were implemented in the country, gender data related to agriculture often were inadequately tabulated, analyzed, and disseminated. The lack of relevant data on women in agriculture limits planners' understanding of the real situation in rural economies and constrains their potential to plan or act effectively. There is thus a strong need for incorporating a gender perspective in statistics. This research report provides more data on the gender gap between male and female headed households working in the agricultural and water resource sector in terms of access to productive resources, livelihood generation, and livelihood outcomes. The information in this profile can be used for planning and policy making purposes to address gender inequalities and to improve agricultural production for both rural men and women.

Understanding poverty and gender roles, and ethnic roles within the sectors in the case of Nam Ngum River Basin, a priority area of the GoL, is integral to achieving sustainable and broad-based pro-poor growth. This improved understanding of who is poor and why will enable development stakeholders to better identify opportunities for equitable growth that are relevant for these producers, workers and consumers who are suffering from poverty. Therefore, this research will attempt to analyze these various factors in comparison to men's situation and suggest possible solutions to enhance livelihoods of households in the Nam Ngum River Basin, with a focus on the role of rural women and men in agriculture and water management.

1.2. Objectives

The overall purpose of this study is to go beyond the mostly statistical studies on poverty. The objective of the study is to help improve the knowledge and understanding of the gender dimensions of poverty eradication among ethnic groups in the Lao PDR. This study provides understanding of the gender-based differences in the perception of poverty among female and male ethnic groups; examines gender roles and how gender is being mainstreamed in accessing water for agricultural productive uses in different villages; and identifies the key drivers of access and opportunity barriers encountered by female ethnic groups in the target villages.

1.3. Gender Analysis Framework

The following table indicates the key gender areas of investigation in this report. It highlighted the key points analyzed from a gender perspective.

| Table 1.1: Gender and Poverty Analysis Framework | |
|---|---|
| Thematic area | Statistics/indicators |
| Part A: Overall Gender and Poverty Analysis Framework | |
| Poverty | <ol style="list-style-type: none"> 1) Poverty rate by gender 2) Literacy rate 3) Scholl enrolments 4) Time poverty 5) Labour forces 6) Asset ownerships by head of household 7) Maternal mortality rate 8) Leadership |
| Part B: Gender Analysis Framework of the Agricultural Sector | |
| Demographic and social characteristics of agricultural households | <ol style="list-style-type: none"> 1) Female headship 2) Household size 3) Age 4) Sex ratio agricultural population 5) Marital status 6) Household labour force 7) Ethnicity 8) Educational attainment 9) Literacy |
| Access to and control over productive resources | <ol style="list-style-type: none"> 1) Farm labour 2) Land access 3) Land size 4) Land tenure 5) Irrigation and water management 6) Credit 7) Durable goods |
| Livelihood activities | Gender based differences in: <ol style="list-style-type: none"> 1) Crop production 2) Livestock production 3) Fishery 4) Non-agricultural businesses |
| Livelihood outcomes | Poverty proxies: <ol style="list-style-type: none"> 1) Food consumption 2) Poor housing conditions 3) Safe drinking water sources 4) Sources of energy. |

1.4. Key definitions

1.4.1. Definition of Lao Poverty

“Poverty is the deprivation of basic needs for the daily livelihood such as shortage of food that cannot provide the energy of 2100 Kcal/day/person, deprivation of clothes, durable shelter, inability to afford health care in case of sickness, inability to afford elementary education, inability to access public services”¹

1.4.2. Key definitions from LECS4 and LECS5

- A household is a group of people making common arrangements for food, shelter and other acts of daily living. A household usually consists of relatives such as a husband, a wife, children and parents, but sometimes includes unrelated people such as live-in household or farm workers.
- An agricultural household is a household with at least one member engaged in agricultural activities, regardless of whether the household owns, rents or uses land for free. It includes own account/self-employment, where agricultural activities may be either primary or secondary activities.

1.4.3. Gender-Related Definitions

- Sex refers to the biological differences between men and women.
- Gender refers to the social differences between women and men, i.e. the different responsibilities of women and men in a given culture or location. These roles of women and men are learned and they change over time. Gender roles are influenced by perceptions and expectations arising from social and cultural, political, environmental, economic, institutional factors, as well as class, age, ethnicity.
- Gender analysis is the study of the different roles of women and men to understand what they do, what resource they have and what their needs and priorities are.
- Gender statistics is a field of statistics which cuts across the traditional fields to identify, produce and disseminate statistics that reflect the realities of the lives of women and men and policy issues relating to gender equality².
- Sex-specific data: Data collected according to physical attributes³.
- Gender-disaggregated data: Analytical indicators derived from sex-disaggregated data on socio-economic attributes⁴.

1.5. Methodology

Secondary data sources: The existing research reports and survey were reviewed and analyzed from gender perspectives. Lao PDR has comparable nationwide Lao Expenditure and Consumption Surveys (LECS). These surveys were administrated by the Lao Statistics Bureau (LSB) in 2002/2003 (LECS 3), 2007/2008 (LECS 4) and in 2012/2013 (LECS 5). The surveys had a sample size of 8092, 8296 and

¹ Decree No. 201/PM

² World Bank Institute

³ Hedman, Perucci and Sundstrom 1996

⁴ Ibid

8200 households respectively and had modules covering poverty headcount and household expenditures as well as dwelling characteristics, durable goods ownership, education, health, etc. The survey collected data related to gender and ethnicity. However, gender analysis and ethnicity analysis among the poor villages are very limited. Therefore, this study was based on information from all three national surveys. A set of questionnaires for the LECS4 (2008), and LECS5 (2013) were revisited to select appropriate data items for re-tabulation.

Primary survey: Six poor villages were selected for an in-depth study. The well-being analysis endeavored to understand poor people's definition of well-being in order to widen the concept of poverty beyond economic criteria. The perception of problems and prioritization of problems by the poor cannot be seen as completely separate from well-being and institutional analysis. The team applied data-collection techniques for gender analysis including: gender-disaggregated focus group discussions; key informant interviews with poor females; and a matrix for the division of labour which explores the differences between men and women roles and perceptions of wellbeing. The study team conducted 42 focus group discussions in six villages. In each village, the field survey team selected one group of non-poor women, one group of poor women, one group of non-poor men, one group of poor men, one female and one male agriculture group, and one group of leaders. In addition to holding group discussions, the team also interviewed 249 individual men and women for their case studies.

Table 1.2: Number of Focus Group Discussions in Target Villages

| Village | Poor | | Non Poor | | Agriculture | | Leader | Total |
|--------------|----------|----------|----------|----------|-------------|----------|----------|-----------|
| | WG | MG | WG | MG | WG | MG | - | |
| Thamterb | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 |
| Houynamyen | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 |
| Houydokmai | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 |
| Seansai | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 |
| Nam Mo | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 |
| Namyone | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 |
| Total | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 42 |

Chapter 2: Lao Development Context

2.1. Socio-Economic Status

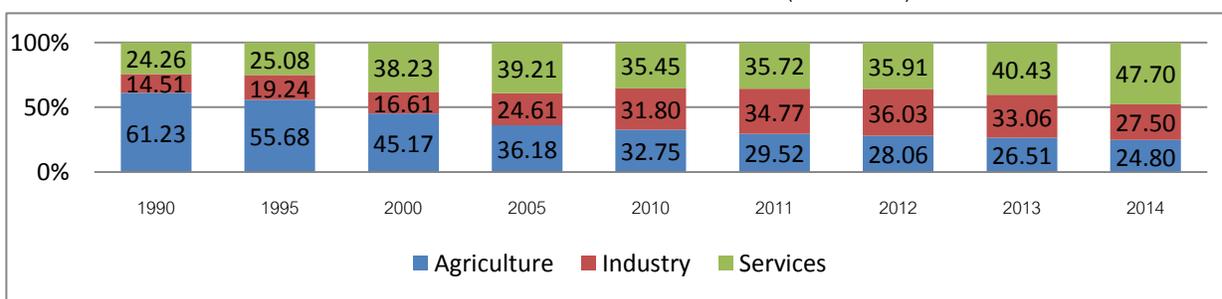
The Lao PDR has grown rapidly since the launch of the transition from central planning to a market economy more than two decades ago. Over the past 25 years, the economy has performed very well (see Table 2.1). From 1990 to 2013, GDP grew at an average of 6.85 percent, with a high of 8.62 percent in 2006 and a low of 3.97 percent in 1998. Economic growth is estimated at 7.4% for 2014. Nominal GDP grew to US\$12,120 million in 2014, mainly due to growth in the natural resources sector, including mining and quarrying, continued construction work in large FDI-financed power projects, accommodative macroeconomic policies, tourism-related industries, and services. One key factor driving economic growth is the level of investment – public investment, domestic private investment and foreign direct investment. In fiscal year 2013-2014, total investment is estimated to have reached about 34,877.41 billion Kip, slightly increased from 33,141.49 billion Kip for fiscal year 2012-2013 (MPI, 2014).

| | 1990 | 1995 | 2000 | 2005 | 2010 | 2011 | 2012 | 2013 | 2014 |
|----------------------------------|------|------|------|------|------|------|------|------|------|
| GDP (US\$ billion) | 0.86 | 1.76 | 1.73 | 2.73 | 7.2 | 8.3 | 9.4 | 11.1 | 12.1 |
| Real GDP growth (%) | 6.7 | 7.1 | 6.3 | 6.8 | 8.1 | 8.0 | 7.9 | 8.0 | 7.8 |
| GDP per capita (current US\$) | 203 | 362 | 321 | 472 | 1122 | 1265 | 1408 | 1628 | 1671 |
| GDP per capita growth (annual %) | 3.64 | 4.39 | 4.03 | 5.41 | 6.36 | 5.96 | 6.00 | 6.53 | - |
| Exports, fob (US \$m) | - | - | 330 | 553 | 1746 | 2190 | 2271 | 2264 | 2490 |
| Imports, cif (US \$m) | - | - | 535 | 882 | 2060 | 2404 | 3055 | 3020 | 3470 |
| Trade balance | - | - | -205 | -329 | -314 | -215 | -784 | -756 | -560 |

Sources: World Bank 2014, ADB, 2014

Lao PDR has been undergoing structural transformation, moving from a primarily agrarian economy to a more diversified economy. The structure of the economy has moved toward higher value added sectors over time. In 1990, the share of agricultural value added was 61.2 percent of total GDP. However, it declined substantially to 45.8 percent in 2000, 34.3 percent in 2005 and 26.5 percent in 2013. Over the same period, the share of services value added in GDP increased from 24.6 percent in 1990 to 38.2 percent in 2000, to 39.2 percent 2005, and to 40.4 percent in 2013. The share of industrial value added increased from 14.5 percent in 1990, to 16.6 percent in 2000, to 31.8 percent in 2010, to 31.8 percent in 2010, to 27.50 percent in 2014 (Chart 2.1).

Chart 2.1: Sector value added, 1990-2014 (% of GDP)



Source: World Bank (2014); MPI (2015)

The 2014 Human Development Report⁵ presents Human Development Index (HDI) values and ranks for 139 countries and UN-recognized territories, along with the Inequality-adjusted HDI for 132 countries, the Gender Inequality Index for 148 countries, and the Multidimensional Poverty Index for 104 countries. Although Lao PDR has a relatively low Gender Inequality Index (GII), the reality of gender exclusion is somewhat mixed. Female labor force participation was 77.7%, almost the same as for men (78.9%), women had higher life expectancy than men (69 years compared to 66) and in 2011 women won a quarter of the seats in the National Assembly, a relatively high number in the region.

Table 2.2: Lao Human Development Index in 2013

| Human development index value | | Life expectancy at birth(years) | | Mean years of schooling (years) | | Expected years of schooling (years) | | GII | GDI rank |
|-------------------------------|-------|---------------------------------|------|---------------------------------|-----------|-------------------------------------|-----------|------|----------|
| Female | Male | Female | Male | Female | Male | Female | Male | | |
| 2013 | 2013 | 2013 | 2013 | 2002-2012 | 2000-2012 | 2000-2012 | 2000-2012 | 2013 | 2013 |
| 0.537 | 0.599 | 69.7 | 66.9 | 3.8 | 5.4 | 9.5 | 10.8 | 118 | 112 |

Source: UNDP, 2014

2.2. Agriculture Sector

Lao PDR is a predominantly rural country, with 69% of households being in rural villages, including 85,000 households being located in rural villages without road access. In 2010/11, there were 783,000 farm households in the country. A farm household is a household engaged in agricultural production activities; that is, growing crops, raising livestock, or engaged in aquaculture. Of the 783,000 farm households, 209,000 live in upland villages and 188,000 live in villages in plateau areas. In rural villages, 90% of households are farm households. The last ten years has seen a significant shift from subsistence to market-oriented agriculture. In 1998/99, only 6% of farm households produced mainly for sale and now that figure has risen to 30%. The predominant crop is rice: 724,000 farm households grew rice in 2010/11, 71% of all households in the country. In 2010/11, 1.23 million hectares of temporary crops were planted on 1.43 million hectares of arable land in Lao PDR. In all, 22% of the 1.62 million hectares of agricultural land was irrigated during 2010/11. A total of 192,000 ha of rice were irrigated during 2010/11; 15% of the wet season rice crop was irrigated in 2010⁶.

The most common problem of farm households is lack of irrigation in 59% of rural villages. Lack of vaccination was reported as a constraint by 40% of rural villages. This is a major problem in upland areas. Low commodity prices were also often mentioned. Over 1,100 rural villages in Lao PDR – one in six rural villages – have agricultural land affected by UXO.

In 2014, the Agriculture Development Strategy to 2025 (ADS) and Vision 2030 were approved by the GoL. The overall objectives of the ADS is to contribute to rural development, preserve Lao culture, protect the environment and contribute to the stability of ecosystems. Both ADS 2015 and Vision 2030 are formulated with the dual aims of: 1) ensuring national food security through clean, safe and sustainable agriculture, and 2) building an agriculture production system which can greatly contribute to the nations' economy in line with its objectives of industrialization and modernization.

⁵ UNDP, 2014

⁶ LCA, 2012

2.3. Water Resources Sector

The Lao PDR has abundant water resources. The Mekong River is the main river and 90 percent of the country is located in the Mekong river basin, with about 12 main tributaries in the Mekong river basin. The Lao PDR reported freshwater availability of 53.78 thousand cubic metres per capita. The rate of freshwater withdrawal is also one of the lowest (1.3% per annum) compared with many of the countries (2.3% to 17%) in the region. These data suggest that the country has great water resource potential for the development of irrigation systems. As a result, the irrigated area in the country increased from 0.17 million ha during 1995 to 0.37 million ha during 2005 and then to 0.41 million ha during 2011. A notable aspect of the irrigation development was that the share of dry season irrigated area in the country increased from 20 percent during 1995 to almost 42 percent during 2010 (MAF, 2011).

The LCA 2010/11 provided some important information regarding the use of irrigation sources among farm households, especially rice growers. At the national level, the level of irrigation development reported was 22 percent, suggesting room for development of irrigation potential in regions and provinces that are not currently covered under the national development strategy. Regionally the proportion of irrigated area was relatively high in the Central (26%) and Northern (21%) provinces and lowest in the Southern (12%) provinces. The proportion of irrigated area also varied according to the location of households across geographical settings.

Both rounds of LCA reported that almost 65 percent to 70 percent of the households engage in aquaculture and fishing as part-time activities to add to household food security, as well as to supplement the household income and thereby ensure livelihood security. The number of farm households engaged in capture fishing increased by 13 percent between 1999 and 2011 (1% per annum), with the majority of the increase coming from the Northern provinces. The period witnessed an increase of about 23 percent (1.7% per annum) in the number of aquaculture holdings and in the area under aquaculture at the national level, with much of the increase in area reported from the Central provinces. As a result of the increase in area brought under aquaculture activities, there was also a sizeable increase in the average size of aquaculture holdings, with Southern and Central provinces reporting the availability of relatively larger size holdings than that reported in the Northern region.

2.4. Gender Policy

The Government of Lao PDR has policies conducive to promoting gender equality. As clearly stipulated in the revised Constitution of 2003 and other laws, women and men have equal rights in political, social, culture spheres and in the family. This creates a favorable condition for women of all ethnic groups to participate in the development process at all levels. The National Assembly is actively promoting the advancement of women through the legislative process. It has enacted the Law on Development and Protection of Women in 2004, the 2005 amendment of the Penal Law criminalizing discrimination against women in article 177, the revised labour law in 2006, and a revision of the Family Law in 2008. The Law on the Lao Women's Union was promulgated in 2013. Law on Prevention and Elimination of Violence Against women and Children was also passed in 2014.

Formally established in 2003, The Lao National Commission for the Advancement of Women (Lao NCAW) serves as the country's national women's machinery, responsible for formulating and implementing national policy for the advancement of women as well as mainstreaming gender in all sectors. The Lao National Commission for Advancement of Women and its Secretariat, often working with donors and CSOs as well as with the National Commission for Mother and Child, has continued to advocate on behalf of women and girls, and to raise awareness about the CEDAW and its requirements. The National Commission for the Advancement of Women has established the Sub commissions for the Advancement of Women at the ministerial and provincial and district levels.

The LWU, founded in 1955, is a mass organisation with a mandate to enhance women's capacity for self-development and promote women's role in society. The LWU has an existing network from the central to the village level. Through its membership, it also has LWU representatives within all ministries. As a mass organisation the LWU serves as a bridge between the People's Revolutionary Party and the government, and Lao women of various ethnic groups and social strata. It promotes education, training and the country's '3 Goods Campaign' (Good Citizens, Good Development and Good Cultural Family) for a better quality of life for women and children. There is broad recognition that while the LWU's outreach and political influence is indeed very broad, its real impact on gender equality, challenging traditional values and stereotyping and advancing equal rights of women, particularly of poorer, non-ethnic-Lao women, is fairly circumscribed, in that it primarily sees its function as mobilizing women to implement party policies at the grassroots level.

The Lao PDR has made progress in the promotion and protection of the rights and interests of women and children. This reflects in the adoption and implementation of various strategies and programs relating to mothers and children. The National Commission for Mothers and Children has currently developed the National Strategy on Mothers and Children (2011–2015), the National Action Plan on the Protection and Elimination of Violence against Women and Children (2014–2020).

| 7 th NSEDP 2011-2015 | 8 th NSEDP 2016-2020 ⁷ |
|--|---|
| Reduce maternal mortality to 260 per 100,000 live births | Maternal mortality rate reduced to 200/100,000 live births |
| Increase attended birth rate (with nurse assistance) to 50% of all women giving birth | Increase attended birth rate (with nurse assistance) to 60% of all women giving birth |
| Increase the number of women receiving training in agricultural technologies, processing, handicraft and services to 20%. | Increase the number of women receiving training in agricultural technologies, processing, handicraft and services to 50%. |
| Attempt to increase number of women who are high ranking officials to more than 15%, | Women should comprise at least 20% of leadership and decision making position in party-state organizations and mass organization |
| Increase the number of women who are members of the National Assembly to more than 30% | Increase the number of women who are members of the National Assembly to at least 30% |
| Increase the proportion of women in the paid workforce to 40% – all things being equal, women will be given priority when awarding jobs. | Increase the proportion of women in the paid workforce to 44% – all things being equal, women will be given priority when awarding jobs |
| <i>Sources: 7th NSEDP 2011-2015 and latest draft 8th NSEDP 2016-2020</i> | |

2.5. Ethnicity Policy

Lao PDR is one of the World's most ethnically diverse countries. While most of the non-Lao-Tai live in upland areas, there is a wide disparity in geographic, economic and social living conditions. The remoteness, low human development and rich diversity of cultures and community structure of ethnic provide additional dimensions to the already complex challenge of poverty reduction. The official terminology for describing the diverse population of Lao PDR is 'ethnic groups'. The Lao PDR officially recognizes 49 ethnic groups classified in four ethno-linguistic families: Lao-Tai, Mon-Lao, Sino-Tibetan, and Hmong-Mien⁸.

⁷ Latest draft

⁸ National Assembly, Decree on Ethnicity No 213 issued on 24 November 2008

Table 2.4: Overall Profile of Lao Ethnic Group⁹

| No | Family | Groups | Summary of characteristics |
|----|-------------|---|---|
| 1. | Lao-Tai | Xaek, Nhouan, Tai, Thaneua, Phouthay, Yang, Lao, Lue | 65% of the population, living mostly along the well-connected Mekong corridor along the Thai border or in Northern lowlands; settled cultivators with or urban dwellers; migrated to Lao PDR from 13th century onwards; Buddhist and animist. |
| 2. | Mon-Khmer | Khmou, Katang, K'tu, Kriang, Kree, Khmer, Ngouan, Pray, Cheng, Phong, Samtao, Oy, S'dang, Xuay, Xingmoun, Nhaheun, Ta Oi, Triang, Tri, Toum, Thaen, Bid, Brao, Pa Co, Makong, Moy, Yrou, Yae, Lamed, Lavi, Oedou, Harak | 24% of the population, living mainly in highland areas in the North and Central South, and smaller groups (Khmou) in the Northern lowlands; the most diverse ethnic group and the first to inhabit large areas of Lao PDR; animist and shifting cultivators; fairly assimilated due to hundreds of years of interaction with Lao-Tai, other communities live in isolation as hunter or gatherers. |
| 3. | Chine-Tibet | Singsily, Sila, Lahu, LoLo, Hor, Akha, Hanyi | 3% of the population, living mainly in poorly connected upland areas in the North; animist and shifting cultivators; migrated to Lao PDR in 19th century. |
| 4. | Hmong-Mien | Hmong and Mien | 8% of the population, living mainly in mid-and upland areas in the North; Hmong as largest subgroup; animist with strong ancestor cults. |

The 2003 revised constitution recognizes that Lao PDR is a multi-ethnic society. It gives all citizens, regardless of ethnicity, equality before the law, grants all ethnic groups the rights to protect, preserve and promote the fine customs and cultures of their own tribes and of the nation, and establishes the policy of promoting unity and equality among all ethnic groups. This terminology was introduced with the 2003 revised Constitution, where reference is often made to “citizens of all ethnic origins”. Articles 8 and 22, guarantee that there will be no discrimination on the basis of ethnicity or gender. The GoL is planning to develop the new decree on ethnicity and revise the Constitution in 2015.

Article 8 of the Lao Constitution: *“The State pursues the policy of promoting unity and equality among all ethnic groups. All ethnic groups have the right to protect, preserve and promote the fine customs and cultures of their own tribes and of the nation. All acts creating division and discrimination among ethnic groups are prohibited. The State implements every measure to gradually develop and upgrade the socio-economic levels of all ethnic groups”.*

Article 22 of the Lao Constitution: *“The State attends to developing education and implements compulsory primary education in order to build good citizens with revolutionary competence, knowledge and abilities. The State and society attend to developing high quality national education, to create opportunities and favorable conditions in education for all people throughout the country, especially people in remote areas, ethnic groups, women and disadvantaged children. The State promotes private sector investment in the development of national education in accordance with the laws”.*

⁹ <http://www.lao08.org>

Chapter 3: Poverty in the Lao PDR

3.1. Poverty incidence

The national poverty rate in the Lao PDR has declined steadily, dropping from 46.0% in 1993 to 23.2% in 2013 (LECS 5, 2014). Overall the Lao PDR is on track to achieving the targeted national poverty rate. However, it might be noted that the Gini coefficient, a commonly used measure of inequality, marginally increased from 35.0% in 2008 to 36.2% in 2013. Also, the poverty is geographically concentrated. Nationally, an overwhelming majority of the poor reside in rural areas which account for 87.6 % of all poor people in the country, despite rural residents accounting for only 71.2% of the total population. Poverty remains substantially higher in rural areas, at 28.6%, compared to 10.0% in urban areas. The poverty severity ratio improved from 3.9% to 1.9% during the period between 1992/93 and 2012/13, implying that the reduction of poverty did benefit the poorest. In 2013 (LECS5, 2014), about 36% of the poor lived in the Central region, about 17% and 34 % of the poor lived in the Southern region and the Northern region respectively.

Poverty is higher among (Non-Lao Tai) ethnic groups with the exception of the Chine-Tibet ethnic group. The poverty rate is highest among the Mon-Khmer and Hmong-Mien headed households with a poverty rate of 42.3% and 39.8% respectively. Poverty is higher among households headed by persons with lower levels of education, a disproportionate share of them ethnic groups, and those whose primary employment is in agriculture or who are unemployed. Education is strongly correlated to poverty. People living in households headed by a person with little or no formal education have the highest poverty headcount rate (41.7%), while poverty is lowest among households headed by highly educated people (3.7%)¹⁰.

Table 3.1: Poverty Incidence (head count, %)

| | 1992/93 | 1997/98 | 2002/03 | 2007/08 | 2012/13 |
|-------------------------------|---------|---------|---------|---------|---------|
| Total Population (million) | 4.46 | 5.08 | 5.51 | 5.6 | 6.5 |
| Number of Poor ('000) | 2054 | 1987 | 1849 | 1545 | 1521 |
| National Poverty Line | 46.0 | 39.1 | 33.5 | 27.6 | 23.2 |
| USD1.25 PPP Poverty Line | 55.7 | 49.3 | 44 | 34.9 | 28.8 |
| Urban | 26.5 | 22.1 | 19.7 | 17.4 | 10.0 |
| Rural | 51.8 | 42.5 | 37.6 | 31.7 | 28.6 |
| Rural with all-season road | 42.8 | 31.7 | 31.3 | 29.9 | 25.1 |
| Rural without all-season road | 60.4 | 50.8 | 46.2 | 42.6 | 27.7 |
| North | 51.6 | 47.3 | 37.9 | 32.5 | 25.8 |
| Central | 45.0 | 39.4 | 35.4 | 29.8 | 23.3 |
| South | 45.7 | 39.8 | 32.6 | 22.8 | 29.2 |
| Poverty Gap | 11.2 | 10.3 | 8.0 | 6.5 | 5.5 |
| Poverty Severity | 3.9 | 3.9 | 2.8 | 2.3 | 1.9 |
| Food poverty | - | 32.5 | 19.8 | 24.6 | 20.1 |

Source: LSB, 2014; World Bank, 2014

¹⁰ LSB, 2014: LECS5

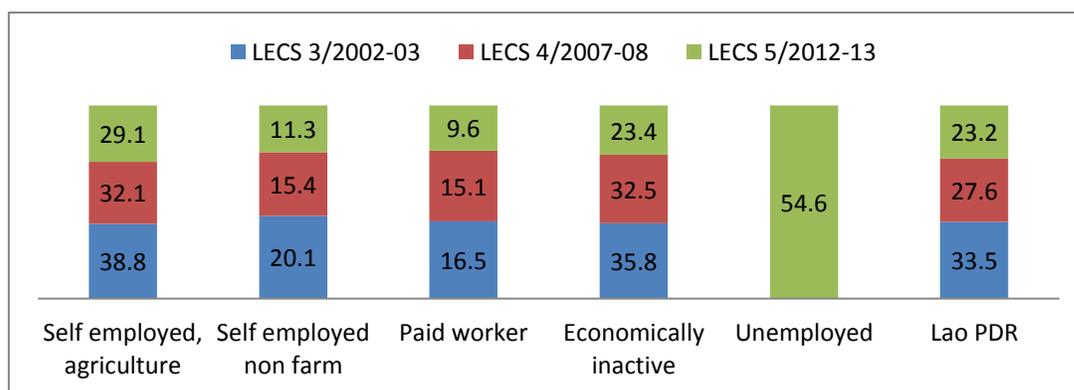
As indicated in Table 3.2, among those households with land, the households with most land have the lowest poverty rate. The incidence of poverty is very high among the rural households in the lowest quartile with crop farming accounting for 35.6% in 2013 while only 21.5% in the highest quartile.

| | All rural areas | | | Rural crop farmers | | |
|------------------------|-----------------|-------------|-------------|--------------------|-------------|-------------|
| | 2003 | 2008 | 2013 | 2003 | 2008 | 2013 |
| Lowest quartile | 37.4 | 35.9 | 31.1 | 40.7 | 38.9 | 35.6 |
| Second quartile | 41 | 33.3 | 28.6 | 42.4 | 36.1 | 30.8 |
| Third quartile | 37.1 | 31 | 29.8 | 38 | 31.9 | 33.3 |
| Highest quartile | 31.6 | 21.7 | 20.3 | 32.8 | 23.8 | 21.5 |
| Lao PDR – Rural | 37.6 | 31.7 | 28.6 | 38.5 | 32.5 | 30.1 |

Source: LECS5, 2013

The agricultural households have the highest poverty rates. The poverty rate among people with an unemployed household head is 54.6 percent. The poverty rate among people living in households headed by economically inactive persons is close to the national average. The poverty rate is high at 29.1 percent among households headed by someone primarily employed in family agriculture. The poverty rate for people living in households headed by a paid wage worker is at 9.6 percent.

Chart 3.1: Poverty rate (%) by Socio Economic Status of the Household Head in 2012-2013



Source: LECS 5, 2013

The large Lao-Tai group has substantially lower poverty incidence than the other ethnic groups. Poverty is higher among (Non-Lao Tai) ethnic groups with the exception of the Chine-Tibet ethnic group. The poverty rates are highest among the Mon-Khmer and Hmong-Mien headed households with poverty rates of 42.3% and 39.8% respectively. The Mon-Khmer have poverty incidence more than two and a half times the rate of the Lao-Tai.

Both two non-Lao-Tai groups (Mon-Khmer and Hmong-Mien) have poverty rates above 40%. These groups have seen a relatively slow decline in poverty incidence over the past 5 years compared to the Lao-Tai. All ethnic groups show substantially higher poverty headcount rates than the Lao-Tai group. The Mon-Khmer, Hmong-Mien and Chine Tibet groups are in particularly poorer positions. Among ethnic groups, the poverty rate among Mon-Khmer headed household is the highest at 42.4%, followed by Hmong-Mien headed household (39.8%), and Chine-Tibet (16.4%).

Table 3.3: Distribution of the Poor and Poverty Head Count Rate by Ethnicity of Household Head from 2003 to 2013

| Ethnicity | Distribution of Population | | | | Poverty head count | | | | Distribution of the poor | | | |
|----------------|----------------------------|--------------|--------------|------------|--------------------|-------------|-------------|-------------|--------------------------|--------------|--------------|------------|
| | 2003 | 2008 | 2013 | Change* | 2003 | 2008 | 2013 | Change* | 2003 | 2008 | 2013 | Change* |
| Lao-Tai | 66.4 | 66.0 | 66.7 | 0.7 | 25.1 | 18.4 | 15.4 | -3.0 | 49.6 | 44.0 | 44.2 | 0.2 |
| Mon-Khmer | 20.9 | 21.5 | 22.1 | 0.6 | 53.7 | 47.3 | 42.3 | -5.0 | 33.5 | 36.9 | 40.3 | 3.3 |
| Chine-Tibet | 3.3 | 3.1 | 3.4 | 0.2 | 40.0 | 42.2 | 16.4 | -25.8 | 4.0 | 4.8 | 2.4 | -2.4 |
| Hmong-Mien | 8.4 | 8.8 | 7.1 | -1.7 | 45.8 | 43.7 | 39.8 | -3.9 | 11.5 | 13.9 | 12.1 | -1.8 |
| Other | 1.0 | 0.6 | 0.7 | 0.1 | 48.1 | 22.0 | 33.1 | 11.5 | 1.5 | 0.5 | 1.0 | 0.6 |
| Lao PDR | 100.0 | 100.0 | 100.0 | 0.0 | 33.5 | 27.6 | 23.2 | -4.3 | 100.0 | 100.0 | 100.0 | 0.0 |

Source: LECS3,4,5 *Change is between 2008 and 2013

Poverty rates in the Lao PDR are higher than in the other Mekong countries. In the early 1990s the Lao PDR was one of the poorest countries among the ASEAN countries but has seen a rapid decrease in poverty, with about 30% of the population living on below \$1.25 a day by 2012/13. Although poverty reduction has been rapid, it still remains one of the poorest countries in South East Asia and progress has been slower than other countries.

Table 3.4: Poverty Headcount in Mekong Countries (%), PPP 2005, 1.25 dollars a Day

| Country Name | 1992 | 1997 | 2002 | 2007 | 2009 | 2012 |
|--------------|-------------|-------------|-------------|-------------|------------|-------------|
| Lao PDR | 55.6 | 47.5 | 41.2 | 35.1 | - | 30.2 |
| Cambodia | 44.5 (1994) | - | 32.8 (2004) | 30.82 | 12.9 | 10.0 (2011) |
| Vietnam | 23.5 (1993) | 14.9 (1998) | 11.21 | 3.7 (2008) | 0.8 (2010) | 0.55 |
| Thailand | 8.6 | 2.08 (1998) | 1.64 | 0.32 (2008) | 0.31(2010) | 0.1 |

Source: World Bank Database, 2014

3.2. Time Poverty

Lao women are poorer than Lao men in term of time poverty and work burden. The Lao Expenditure and Consumption Survey (LECS) 5 shows the time use per day and person classified by gender. It points out that women sleep slightly less than men, 8.6 hours for women and 8.8 hours for men. The same situation prevails for eating, drinking and self-care, 2.6 hours for women and 2.7 hours for men. Women used 1.8 hours for household work while men spend only 0.3 hours. The rest of the time is mostly spent on non-household work: 3.9 hours per day for men and 4.7 hours per day for women. The effects of this domestic burden on women's economic opportunities are damaging and predictable but often neglected in policies aimed at increasing female participation in productive paid employment. First, the time burden of rural women's domestic unpaid work and the lack of substitutability of female labour in household work by men serve to limit women's choices with regards to accessing paid employment. Second, female time poverty contributes to unequal education outcomes which, in turn, hinder women from competing with men for more skilled, better paid jobs.

3.3. Inequality Trend

Lao economic growth was more favorable for the non-poor than the poor, so inequality has increased over the past decade. The Gini coefficient, a measure of inequality, increased from 30.5 in 1992/93 to 36.1 in 2012/13. The rise in inequality was mainly driven by a widening rural-urban gap and rising inequality in urban areas within and across provinces. The rural-urban gap and inequality within urban areas further increased between 2007/08 and 2012/13, but the overall inequality only increased by a small margin during this period because inequality in rural areas went down due to a slowdown in the growth of incomes of rich people in rural areas. In the Lao PDR inequality (measured by GINI-index) in per capita expenditure is relatively low by international standards. It is greatest in urban areas.

| | 1992/93 | 1997/98 | 2002/03 | 2007/08 | 2012/13 |
|---------|---------|---------|---------|---------|---------|
| Lao PDR | 30.5 | 34.9 | 32.6 | 35.0 | 36.1 |
| Urban | 30.9 | 39.7 | 34.8 | 35.8 | 37.5 |
| Rural | 29.0 | 32.1 | 30.3 | 33.0 | 32.5 |

Source: LSB, 2014, World Bank, 2014

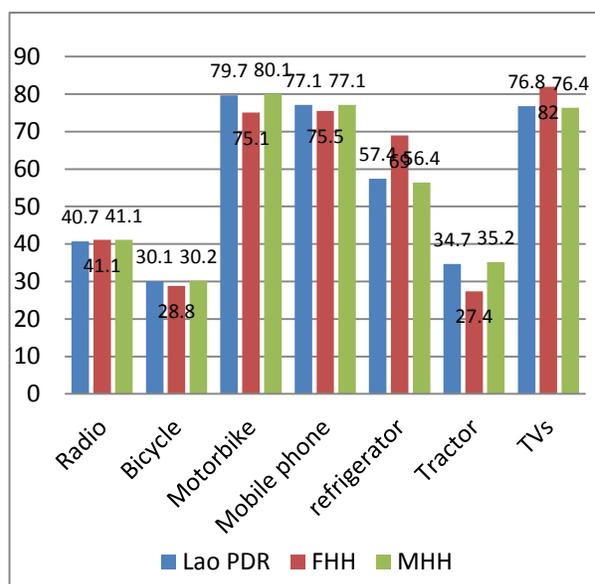
3.4. Asset Ownership

Generally speaking, Lao households' living conditions have improved over the past 15 years. They live in better houses and own more assets, even amongst the poor families. Durable goods ownership increased substantially between 2002/03 to 2012/13. Household ownership of televisions rose from 43 percent to 75.1 percent; from 24 percent to 79.5 percent for motorcycles; from 3 percent to 76 percent for mobile phone; and from 24 percent to 56.4 percent for refrigerators. At the same time, ownership of radios and bicycles declined. This should not be viewed as a sign of hardship. Rather, with increased incomes, households substituted higher technology durables for less advanced durables, progressing from radios to televisions and from bicycles to motorcycles. However, levels of durable goods ownership within poor households remains relatively low.

| Household asset | Lao PDR | | | Poor | | |
|-----------------|---------|---------|---------|---------|---------|---------|
| | 2002/03 | 2007/08 | 2012/13 | 2002/03 | 2007/08 | 2012/13 |
| Car | - | 8.2 | 16.4 | - | 2.3 | 3.6 |
| Motor bike | 24 | 58.6 | 79.5 | - | 33.6 | 62.7 |
| Bicycle | 55 | 43.7 | 29.8 | - | 31.6 | 21.1 |
| Television | 43 | 60.2 | 75.1 | - | 35.1 | 50.2 |
| Radio | 46 | 62.6 | 40.7 | - | 48.2 | 17.5 |
| Mobile phone | 3 | 48.1 | 76.0 | - | 21.1 | 56.1 |
| Computer | - | 2.0 | 7.5 | - | 0.4 | 1.3 |
| Refrigerator | 24 | 39.9 | 56.4 | - | 17.8 | 26.6 |

Sources: LSB, 2015

Chart 3.2: Percentage of Assets Ownership by Sex of Household Head in 2012/13



Source: SODA's calculations from LECS 5

Generally, Lao households own more assets. The proportion of households with a TV increased from 60.2 percent in 2008 to 76.8 percent in 2013. About 77.1 percent and 79.7 percent of Lao households have at least a mobile phone and a motorbike respectively.

In general, there is no big difference between female head of households and male head of household in term of asset ownership. However, male head of households own more tractors, mobile phone, and motor bike than female head of households. On the other hand, female head of households have more television and refrigerator. Chart 3.2 indicates the percentage of asset ownership among female and male head of household.

3.5. Education

Gender gaps persist at all levels of education and these disparities are worse amongst certain groups. The adult literacy rate for women (76%) remains lower than for men (90.7%) in the Lao PDR overall reflecting a legacy of gender bias in access to education. Table 3.7 indicates the literacy rate of females and males age 15+ from the population census 1995 to the latest LECS 5.

| Source of information | Female | Male | Lao PDR |
|------------------------|--------|------|---------|
| Population Census 1995 | 47.9 | 73.5 | 60.2 |
| LECS 2 (1997/98) | 55 | 82 | 68.5 |
| MICS II 2000 | 59.1 | 81.7 | 70.0 |
| LNLS 2001 | 60.9 | 77.0 | 68.7 |
| LECS 3 (2002/03) | 64 | 85 | 74 |
| Population Census 2005 | 63.2 | 82.5 | 72.7 |
| LECS 4 (2007/08) | 70 | 85 | 80.1 |
| LECS 5 (2012/13) | 76.0 | 90.7 | 83.2 |

The increase in years of schooling naturally translates into higher literacy, defined as having the ability to read and write. In Lao PDR, the female adult literacy rate increased from 65% in 2002 to 76% in 2012. Urban men have the highest literacy rate at 97 percent. Urban literacy rate rose slightly from 96% in 2002 to 97% in 2012. In rural areas, the literacy has risen from 81% to 87% for men and from 64% to 69% women.

| | 2002/03 | | 2007/08 | | 2012/13 | |
|------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Femal | Male | Female | Male | Female | Male |
| Lao | 65 | 86 | 70 | 85 | 76 | 90 |
| Urban | 86 | 96 | 90 | 95 | 90 | 97 |
| Rural | - | - | 64 | 81 | 69 | 87 |

Source: LECS 5, 2013

Table 3.9 shows the trend of literacy rates of household heads from 2003 to 2013. The literacy rate of the poor household head decreased from 78% in 2002/03 to 74.3% in 2012/13. This means that the literacy situation of the poor household head became worse, while in the same period the literacy rate of the non-poor household head was getting better, increasing from 88% in 2002/03 to 91.2% in 2012/13. In general, the literacy rates of the household heads from three ethnic groups improved. The literacy rates of female headed households also increased from 70% in LECS 4 in 2007/08 to 87.2% in LECS 5 in 2012/13.

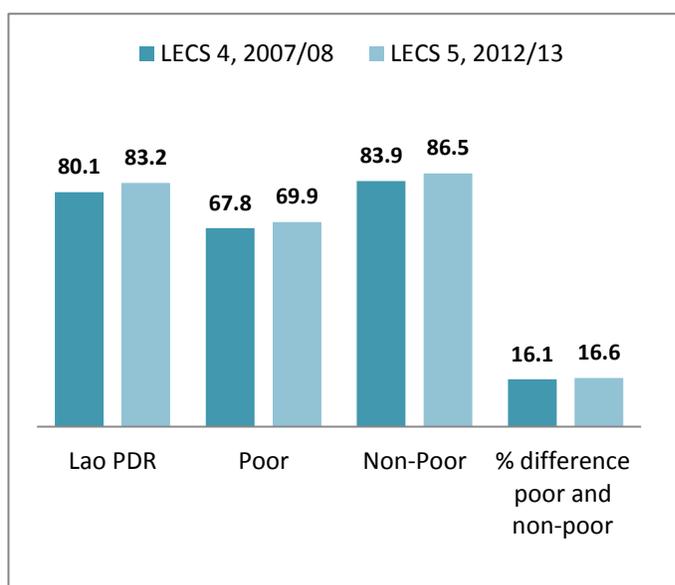
| | 2002/03 | 2007/08 | 2012/13 |
|-------------|---------|---------|---------|
| Lao PDR | 85 | 87 | 87.5 |
| Poor | 78 | 78 | 74.3 |
| Non-poor | 88 | 90 | 91.2 |
| Lao-Tai | 91 | 93 | 94.7 |
| Mon-Khmer | 78 | 80 | 75.6 |
| Chine-Tibet | 38 | 36 | 46.5 |
| Hmong-Mien | 69 | 71 | 72.6 |
| Other | 71 | 91 | 76.5 |
| Male | - | 88 | 89.1 |
| Female | - | 70 | 87.2 |

Sources: LECS 3,4, and 5

| | MHH | FHH |
|-----------------|-------------|-----------|
| Lao-Tai | 83.9 | 81.6 |
| Mon-Khmer | 62.8 | 45.3 |
| Hmong-Mien | 81.2 | 48.6 |
| Chinese-Tibetan | 43.1 | 30.1 |
| Lao PDR | 77.4 | 69 |

Source: LSIS, 2012

Chart 3.3: Literacy Rates of Adult Population Aged 15+ by Poverty Status (%)



Sources: SODA's calculation from LECS 5

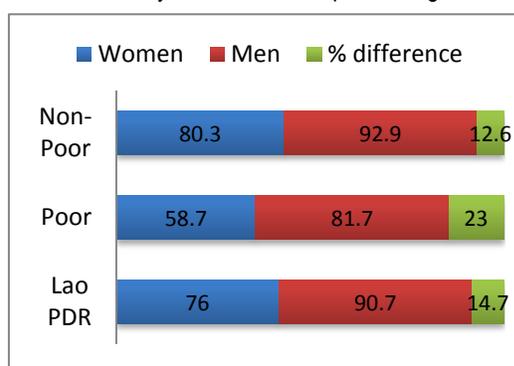
Chart 3.3 highlights the literacy rates of the adult population aged 15 years old and above by poverty status. During the two LECS surveys, the literacy rate of the non-poor people increases slightly from 83.9% in 2007/08 to 86.5% in 2012/13. Similarly, the literacy rate of the poor people was also increased from 67.8% in 2007/08 to 69.9% in 2012/13. The gap in literacy rates between the poor people and the non-poor people slightly increased from 16.1% in 2007/08 to a 16.6% difference in 2012/13. This indicates that there was inadequate improvement in the literacy of the poor people in the Lao PDR, resulting in the poor falling further behind the non-poor.

According to LSIS 2012, 68.7% of young women (age 15 – 24) and 77.4 % of young men were literate in Lao PDR. The literacy rate of young females in the poorest quintile was very low at 28.7% while the richest is the highest at 95.7%. Similarly there is a very large gap of literacy rate of young male between the poorest and the richest quintile at 48.9% and 95.5% respectively.

| Wealth index | Female | Male |
|----------------|-------------|-------------|
| Poorest | 28.7 | 48.9 |
| Second | 48.9 | 64.8 |
| Middle | 71.8 | 77.5 |
| Fourth | 83.9 | 91.0 |
| Richest | 95.7 | 95.5 |
| Lao PDR | 68.7 | 77.4 |

Source: LSIS, 2012

Chart 3.4: Literacy Rate of Adult Population aged 15+ by Gender



Source: SODA's calculation from LECS 5

The literacy rate of the female adult population aged 15+ is at 76 % which is about a 15 percentage point difference less than the male population. The gap of literacy rate is wider between the females and males in the poor groups, with the female adult aged 15 years old and above who can read and write without difficulty being only 58.7% while the male adults with these literacy skills being 81.7%; a striking difference of 23 percentage points in male literacy over female literacy.

Table 3.12 shows the education level of the household head by ethnicity. In general, Lao-Tai group has higher education level than other ethnic groups. About 7.1 percent of Lao Tai household head have no formal education, followed by Mon-Khmer (20.5%), Hmong-Mien (27.1%), and Chine-Tibet (59.7 %).

| Ethnic group | No formal education | Some primary school | Completed primary school | Lower secondary school | Upper secondary | Vocational training | University | All |
|--------------|---------------------|---------------------|--------------------------|------------------------|-----------------|---------------------|------------|------------|
| Lao-Tai | 7.1 | 16.9 | 49.7 | 6.3 | 11 | 6.8 | 2.1 | 100 |
| Mon-Khmer | 20.5 | 29.8 | 42.4 | 3 | 1.8 | 1.9 | 0.5 | 100 |
| Chine-Tibet | 59.7 | 12.2 | 20.7 | 2.5 | 2.2 | 2.6 | 0.1 | 100 |
| Hmong-Mien | 27.1 | 21.5 | 37.4 | 5.5 | 4.7 | 2.1 | 1.7 | 100 |
| Other | 3.2 | 39 | 51.3 | 1.5 | 2.4 | 0.7 | 1.9 | 100 |
| Total | 13.3 | 20.1 | 46.2 | 5.4 | 8.2 | 5.2 | 1.6 | 100 |

Source: SODA's calculation from LECS 5

The ratio between girls and boys at primary school is 0.95, at secondary school is 0.91, at high school is 0.84, and at vocational education is 0.60. Therefore it can be concluded the higher the level of education, the wider the gender parity becomes¹¹. Children fail to enroll in school for different reasons. Among children aged 9 to 18 years who have never attended school, nearly two in five are not interested in school; over one in four consider the schools as too far way; one in seven have to work instead; and less than one in ten claims to be too young. In urban areas, less than one in ten is not enrolling due to the distance to school, while it is almost three in ten in rural areas. Among the urban poor, almost three in ten never attended school due to work, compared to about one in seven among the rural poor.

There is a shortage of teachers in remote areas, and particularly of women teachers from different ethnic groups, largely due to the systemic barriers which prevent them from achieving the baseline level of education required to enter teacher training. Low teacher salaries and delayed payment of salaries also acts as a disincentive.

3.6. Economic Participation

Lao women have one of the highest labour force participation rates in the region, and remarkably, male and female rates are almost equal. Female labor force participation¹² was 76.3%, slightly less than men (78.9%) in 2011. The LECS 5 estimated the female labor force participation rate¹³ at 77.6%, slightly higher than men at 73.9% in 2012/2013. The labor market in Lao PDR is highly informal and agriculture-based. Within a total female workforce of 1.5 million, 1.1 million women or 72.3% were engaged in the agriculture and fishery sectors as their main activity and most of this work was in small-holder, family-run agricultural production. It is also interesting to note that the proportion of households participating in waged labor increased from 14% in 2007/08 to 17.8% in 2012/13 (LECS 5, 2014).

Table 3.13: Labor force participation in Lao PDR

| | 2010 | 2011 | 2012 | 2013 |
|---|------|------|------|------|
| Labor force participation rate for ages 15-24, female (%) | 69.1 | 68.8 | 68.5 | 68.1 |
| Labor force participation rate for ages 15-24, male (%) | 58.8 | 58.7 | 58.7 | 58.7 |
| Labor force participation rate, female (of female population ages 15- | 80.1 | 80.1 | 80 | 80 |
| Labor force participation rate, male (of male population ages 15-64) | 80.7 | 80.8 | 80.9 | 81.0 |
| Labor force participation rate, female (of female population ages 15+) | 76.4 | 76.4 | 76.3 | 76.3 |
| Labor force participation rate, male (of male population ages 15+) | 78.7 | 78.8 | 78.9 | 79.0 |

Source: World Bank, 2015

Generation of employment for Lao labor in domestic positions and for labor export was successful in creating additional employment for 207,611 people, 100,585 of whom were females. In terms of sectoral breakdown, employment generated in agriculture employed 57,109 people, 26,396 who were females; in industry 95,313 people gained employment, 45,731 females; and out of 55,189, 28,458 are females in the services sector. The share of women in wage employment in non-agriculture sectors increased from approximately 20% in 1990 to 34% in 2010, which is still a relatively low representation of females. This may be attributed to the high proportion of women engaged in unpaid family work. Amongst service workers or shop and market sales workers, 63 % are women whilst 37% are men. This is a vulnerable sector, with a significant proportion of the workforce either self-employed or engaged in unpaid work for the family. Clearly a far greater proportion of unpaid family workers (65%) are women as opposed to men (35%).

¹¹ 7th NSDEP 2011-2015

¹² % of female population ages 15+

¹³ % of female population ages 10+

Employment in the Lao PDR remains concentrated in agriculture. Women spend most of their time working in agriculture, followed by retail and hospitality, handicraft and services. In 2012/13, 72.9 % of all hours worked by women were in agriculture including forestry and fishing; 12.3% were spent working in their own businesses including wholesale, retail, hotel and restaurants; 2.8% were spent in textile and leather production. Generally there is no significant difference in the time spent in agricultural work between women and men.

The male workforce is better educated than the female workforce and it can be observed that women are mostly in vulnerable, non-stable employment, self-employed or engaged in unpaid family work (65%) as compared to men (35%). About 33% of the male workforce has completed secondary education, compared to 25% of the female workforce. About 28% of the female workforce is uneducated, compared to 17% of the male workforce. Some 6% and 7% of employed men respectively have tertiary and technical school education, compared to 3% and 5% of employed women (LECS 5, 2013).

Table 3.14: Percentage of Total Hours Worked by Women in Various Sectors in 2012/2013

| | Women | Men | Total |
|--------------------------------|--------------|--------------|--------------|
| Agriculture, forestry, fishing | 72.9 | 71.7 | 72.3 |
| Mining | 0.2 | 0.5 | 0.4 |
| Food processing, beverage, | 1.2 | 0.9 | 1.0 |
| Textile, leather production | 2.8 | 0.3 | 1.5 |
| Wood, paper, chemicals, | 2.2 | 3.3 | 2.8 |
| Production of equipment, | 0.1 | 0.5 | 0.3 |
| Electricity, water | 0.1 | 0.3 | 0.2 |
| Construction | 0.6 | 5.1 | 2.9 |
| Wholesale, retail, hotel and | 12.3 | 5.4 | 8.8 |
| Transport | 0.2 | 1.8 | 1.0 |
| Other services | 7.3 | 10.3 | 8.8 |
| Total | 100.0 | 100.0 | 100.0 |

Source: LECS 5, 2013

On average, women and girls work more hours per day than men and boys. LECS 5 data shows that income generating activities plus household work occupies female household members for 5.7 hours per day compared to 5 hours for male household members. However, the work of females is more likely to be unpaid domestic labor while 'men's work' is more likely to be income generating. The vast majority of the Lao workforce - both female and male - is 'self-employed'; however there are significant gender differences in how this work is valued. Women and girls not only work more hours per day men and boys, they also earn less income for their work.

Table 3.15: Time Used for Main Activities by Hours per Day

| Activity | Female | Male | All |
|------------------------------------|-----------|-----------|-----------|
| Income generating activities | 3.9 | 4.7 | 4.3 |
| Work as employed | 0.6 | 1.1 | 0.5 |
| Own business work | 0.9 | 0.6 | 0.6 |
| Agricultural work | 1.8 | 2.1 | 2.2 |
| Collecting firewood/fetching water | 0.2 | 0.1 | 0.3 |
| Hunting/fishing | 0.1 | 0.6 | 0.4 |
| Construction | 0.0 | 0.1 | 0.1 |
| Handicraft | 0.3 | 0.1 | 0.2 |
| Household work | 1.8 | 0.3 | 1.5 |
| School | 0.9 | 1.1 | 1.0 |
| Sleeping, eating, leisure time | 15.4 | 16.2 | 15.5 |
| Travel, others | 1.2 | 1.2 | 1.6 |
| Total | 24 | 24 | 24 |

Source: LECS 5, 2013

3.7. Gender and Governance

Lao PDR has amongst the highest proportions of women in national parliaments in the region. Twenty five of female parliamentarians are women. So, it is clear that some progress has been made on women's participation in central government as of 2014. Out of 84 ministers' and ministerial equivalent positions, 12 or 14 ministers are females. Five females (8 percent) are members of the Central Party Committee. Out of 105 Vice Ministers and equivalent positions, 21 (16.6 percent) are filled by women. In all Government departments at the ministerial level, there are 71 female Director Generals out of 366 Director Generals (19 percent), and of 760 Vice Director Generals, 186 (24 percent) are women.

However, these achievements are not mirrored at the sub-national level, where significant gender gaps persist. At the provincial level, there are no female Governors and out of 43 Vice-Governors only 3 are females. At district and village levels, women's representation is very low. For example, according to the statistics from the Government's Office in 2014, there were only 145 female village chiefs from the total of 8,651 villages (2%), while deputy female village chiefs were 1200 out of 16,786 post holders accounting for only 7.0 % (NCAW, 2014).

3.8. Gender and Health

Despite positive trends in maternal and reproductive health service indicators, the country's progress towards this Millennium Goal is not on track. The country still has one of the highest maternal mortality rates in the region, although the ratio declined from 405 in 2005 to 357 per 100,000 live births in 2013. Age-specific mortality rates for women and men aged 15-49 years for the seven-year period preceding the survey (2005-2011) indicate that the overall level of adult mortality was slightly higher among men (3.1 deaths per 1,000 population) than among women (2.3 deaths per 1,000 population) (MoH, 2012).

Lao PDR has eliminated tetanus in mothers and infants as verified by the World Health Organization. The birth delivery rate with skilled births attendants is 58 % while target for 2015 was 50 % which indicates that the targeted rate was exceeded. From 1990 to 2013 the child mortality rate for children under 1 year of age declined by 49.3 per 1000 births, reduced from 110 per 1,000 live births to 54 per 1,000 live births; during the same period the mortality rate for children under 5 years also declined by 45.1 from 160 per 1,000 live births to 72 per 1,000 live births. About 38 % of births were delivered in a health facility, the majority in public sector facilities. However, only 41 % of newborns received either a health check or post-natal care (PNC) visit within two days of delivery (MoH 2012).

Public health has also been improved by campaigns to raise awareness on '3 Cleans' principles, and to increase the provision of equipment and clean water to people. This has led to an increase in the proportion of the population using clean water to 70 %; the 2015 target is 80%. The proportion of the population using latrines has risen to 59 %; the 2015 target is 60%.

Over 90 % of women and men had heard of a modern contraception method. Both women and men were more familiar with modern methods of contraception (94% and 95%, respectively) than with traditional methods (68% and 69%, respectively). About 50 % of currently married women were using a method of contraception. The most popular method was the pill, used by 2 in 10 married women in Lao PDR; 42% of married women were using a modern method of family planning (MoH, 2012).

The result of the current survey shows that about 10% of the population had suffered from a health problem during the last 4 weeks. The 2012/2013 survey shows that in general, the share of women and men suffering from long term illness is slightly more: women 2.3 % and men 1.9%. Women face particular challenges in accessing care because of restrictions on their mobility due to social norms and domestic duties, as well as costs and difficulties of transportation. About 52 % of the population lived in villages within 10 km of a hospital while 62.5 % were within 10 km of a health center in 2013 (LECS 5, 2013).

Although health status of the people has improved, gaps between urban and rural areas still exists in terms of provision of health services. The poor still do not receive well health treatment at the hospital and health insurance due to inability to access these services. Social welfare is insufficient to cover all the people in society.

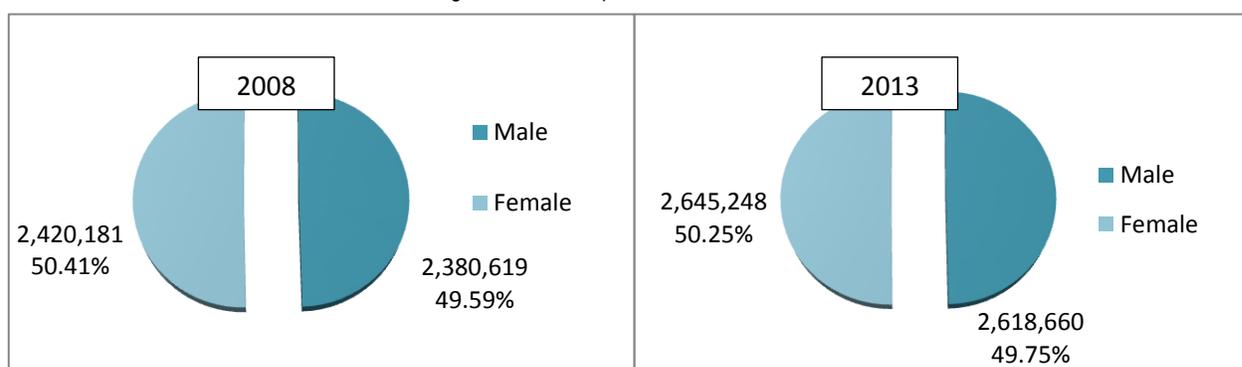
Chapter 4: Gender and Ethnic Issues in the Agriculture and Water Resource Sector

4.1. Agricultural Population

The agricultural population is composed of male and female members living in agricultural households. In Lao PDR, the total population living in agricultural households was 4,800,800 persons, out of a total population of 6 million (LECS4, 2009). Of the national agriculture population, 49.6 percent were males and 50.4 percent females. In 2013, the total population living in agricultural households was 5,263,908 persons, out of a total population of 6.5 million (LECS5, 2013). Of the national agricultural population, 49.75 percent were males and 50.25 percent are females. If compared, the agricultural population in 2013 and 2008 show that the numbers of the agricultural population have increased by 463,108 persons. However the percentage of female agricultural population decreased from 50.4 percent to 50.25 percent while the male counterparts are increased from 49.6 percent to 49.75 percent.

The total sex ratio engaged in agricultural production increased from 98.4 to 99 between the 2007-2008 survey and the 2012-2013 survey. However the sex ratio in the northern and southern regions had decreased if compared to the same period of the LECS 4 and LECS 5 surveys, while in the sex ratio in central region had increased significantly.

Chart 4.1: Agricultural Population in 2008 and 2013



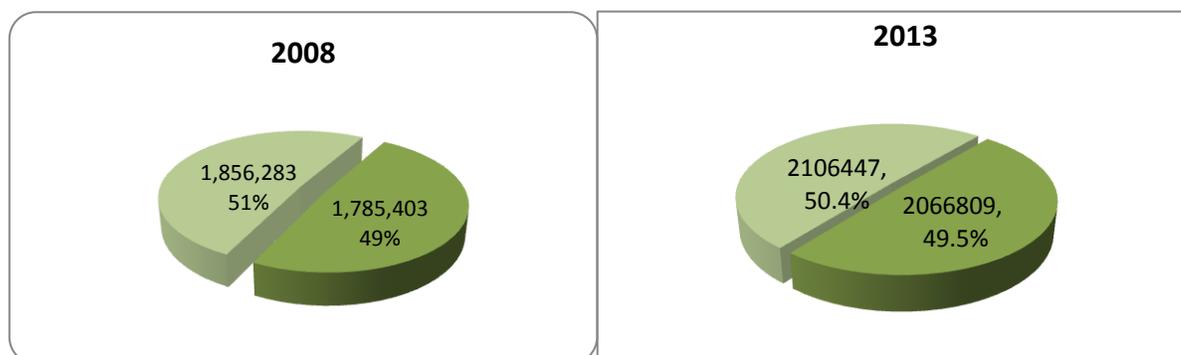
Source: SODA's calculation from LECS 5

| Region | Total Population | | | | Female Members | | | | Male Members | | | | Sex Ratio (Males per 100 Females) | |
|-----------------|------------------|------------|----------------|------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|-----------------------------------|-------------|
| | 2007-2008 | | 2012-2013 | | 2007-2008 | | 2012-2013 | | 2007-2008 | | 2012-2013 | | 2007-08 | 2012-13 |
| | Total | % | Total | % | Total | % | Total | % | Total | % | Total | % | | |
| Lao PDR | 4800800 | 100 | 5263908 | 100 | 2420181 | 50.4 | 2645248 | 50.3 | 2380619 | 49.6 | 2618660 | 49.7 | 98.4 | 99.0 |
| Northern Region | 1714935 | 100 | 1730095 | 100 | 866155 | 50.5 | 877466 | 50.7 | 848779 | 49.5 | 852630 | 49.3 | 98 | 97.2 |
| Central Region* | 2051712 | 100 | 2296660 | 100 | 1035331 | 50.5 | 1139887 | 49.6 | 1016382 | 49.5 | 1156773 | 50.4 | 98.2 | 101.5 |
| Southern Region | 1034153 | 100 | 1237153 | 100 | 518694 | 50.2 | 627896 | 50.8 | 515458 | 49.8 | 609257 | 49.2 | 99.4 | 97.0 |

Source: SODA's calculation from LECS 5; * The central region included Vientiane Capital

The active agricultural population (i.e. the population age 10 and older residing in agricultural households) in 2007-08 included a total of 3,641,686 persons (Chart 4.2). Women comprised 51 percent (1,856,283 persons) of the active agricultural population and men 49 percent (1,785,403). The active agricultural population from the 2012-2013 survey included a total of 4,173,256 persons. Women comprised 50.4 percent (2,106,447 persons) of the active agricultural population and men 49.5 percent (2,066,809). With compared to the 2007/08 survey, the percentage of women in active agricultural population had decreased slightly, from 51 percent to 50.4 percent in 2013. With the present migration trends, women's share in active agricultural population may increase.

Chart 4.2: Active Agricultural Population, by Sex in 2008 and 2013



Source: SODA's calculation from LECS 5

4.2. Agriculture Households

According to the 2005 Population Census, there were almost 952,386 private households in the country with a total population of almost 5.6 million persons. On average, 10 percent of these private households were headed by women. The data (LECS4, 2008) shows 985,000 private households, of which 825,892 were agricultural households. Most of the agricultural households were headed by men and less than 5 percent of all agricultural households at national level were female headed. Female headship ranged from 3 percent in the North Region to 6 percent in the central and southern regions. According to the LECS 5 (2013), there were a total of 979,093 agricultural households. Most of the agricultural households were headed by men and slightly more than 5 percent of all agricultural households at national level were female headed. Female headship ranged from 3.6 percent in the northern region to 7 percent in the central region (Table 4.2).

Table 4.2: Percentage of Household Heads by Sex and by Region

| | 2007-2008 | | 2012-2013 | |
|-----------------|-----------|------|-----------|------|
| | FHH | MHH | FHH | MHH |
| Lao PDR | 4.8 | 95.2 | 5.2 | 94.8 |
| Northern Region | 2.6 | 97.4 | 3.6 | 96.4 |
| Central Region* | 6.1 | 93.9 | 7.0 | 93.0 |
| Southern Region | 5.9 | 94.1 | 3.9 | 96.1 |

Source: SODA's calculation from LECS 5; the central region included Vientiane Capital

According to the 1999 LCA, there were a total of 667,900 holdings (i.e. economic units of agricultural production under single management) comprising all livestock raised and all agricultural land operated, regardless of ownership. About 9 percent of these holdings were managed by women and 91 percent by men. The majority (50%) of the female holders was aged between 45 and 64 years old and 37 percent were 25 to 44 years old.

According to the 2010/2011 data, more than 91.6 percent of farm households continued to be headed by males, while female-headed farm households increased to more than 8 percent of total farm households compared to 1998/99 data; the remaining 0.2% percent of households were jointly headed. The overwhelming predominance of male-headed households seems to imply strongly unequal gender relations. A study based on the 2008 Lao Expenditure and Consumption Survey found that widowhood was the primary reason for female headship (in 62 percent of female-headed households). The next most common reason (in 20 percent of female-headed households) was that married women became de facto heads of households when men migrated or left the household for other reasons (FAO and MAF 2010).

| | LCA 1999 | LCA 2011 |
|-------------------------------|----------|----------|
| Male headed households | 92.1 | 91.6 |
| Female male headed households | 7.9 | 8.2 |
| Joint Headed households | - | 0.2 |
| Lao-Tai | - | 10.2 |
| Mon-Khmer | - | 6.2 |
| Chine-Tibet | - | 3.4 |
| Hmong-Mien | - | 2.8 |

Source: LCA 1999, 2011

The proportion of female-headed farm households varied among the various ethnic groups as classified by 'language families', with female headship highest among the Lao-Tai groups (10.2 percent), Mon-Khmer (6.2 percent), Chine-Tibet (3.4 percent), and lowest among the Hmong-Mien groups (2.8 percent).

The LCA 2010/11 provides a detailed account of the farm households with respect to their ethnic backgrounds and the extent of their engagement in various farming and related activities in the country. The census shows that approximately 61 percent of farm households belong to Lao Tai owners, followed by Mon-Khmer (30%), Hmong-Mien (8%) and other ethnic groups (1%). The average household size was highest for Hmong-Mien groups, at 7.2 members, followed by 6 members for Mon-Khmer and 5.4 members for Lao Tai groups. Average farm size was in the range of 2-2.7 ha across these ethnic groups¹⁴.

| Farming activities | Area (ha) | Lao Tai | Mon-Khmer | Hmong- Mien | Other | Lao PDR |
|--------------------|-----------|---------|-----------|-------------|-------|---------|
| Farm households | 782,800 | 61.3 | 30.4 | 8 | 0.2 | 100 |
| Landholdings | 776,700 | 61.1 | 30.6 | 8.1 | 0.2 | 100 |
| Area of holdings | 1,870,200 | 63.7 | 27.3 | 8.8 | 0.2 | 100 |

Source: Adapted from LCA, 2012

¹⁴ LCA 2010/2011: Analysis of selected themes, Vientiane, October 2014

(1) Household Size

In LECS5 data, the national average household size for agricultural households is 5.4 members, with male headed households having an average of 5.4 members and female headed households 4.2 members. At the regional level, household size ranges between 5.4 (Center) and 5.6 (South) members for male headed households and between 3.9 (North region) and 4.4 (Center) members for female headed households. The difference in

| | 2007-2008 | | 2012-2013 | |
|-------------------|------------|------------|------------|------------|
| | FHH | MHH | FHH | MHH |
| Lao PDR | 4.8 | 5.9 | 4.2 | 5.4 |
| Vientiane Capital | - | - | 5.0 | 4.7 |
| North Region | 4.2 | 6 | 3.9 | 5.5 |
| Center Region | 5.2 | 5.7 | 4.4 | 5.4 |
| South Region | 4.2 | 5.9 | 4 | 5.6 |

Source: LECS 5, (-) FHH and MHH were included in Center region

household size between male and female headed households is 1.2 at national level. At regional level, female headed households have on average 1.0 to 1.6 members less than male-headed households. The difference in household size between male and female headed households is mostly due to the absence of a male head in female headed households but other factors are also likely to play a role.

(2) Age

For 2012-2013, the median age of the agricultural household heads in Lao PDR is 47 years old. The median age of male and female heads is 47 and 53 years, respectively. In all provinces, the majority of the median age of female heads is higher than male heads. Table 4.6 presents median age data for male and female heads of agricultural households for all provinces.

| All Agricultural | | Female Heads | | Male Heads | | All Agricultural | | Female Heads | | Male Heads | |
|------------------|--------|--------------|--------|------------|--------|------------------|--------|--------------|--------|------------|--------|
| 2007-08 | | 2007-08 | | 2007-08 | | 2012-13 | | 2012-13 | | 2012-13 | |
| Number | Median | Number | Number | Number | Number | Number | Median | Number | Median | Number | Median |
| 825892 | 46 | 39940 | 52 | 785952 | 45 | 979093 | 47 | 50758 | 53 | 928335 | 47 |

Source: SODA's calculation from LECS 5

(3) Distribution by Sex of Agricultural Population

Following the LECS 4 data, the age and sex-distributions of the agricultural population are shown in Table 4.7. About 50 percent of the agricultural population is younger than 20 years. Further, there is a slightly higher percentage (4 percentage points) of women than men for the age groups 15 to 44 years, due to male rural-urban migration for non-agriculture activities. In LECS 5 data, about 45 percent of the agricultural population is younger than 20 years. The women and men for the age groups 15 to 44 years is slightly the same percentage.

| Age group | Total (%) | | Female (%) | | Male (%) | |
|-----------|-----------|---------|------------|---------|----------|---------|
| | 2007-08 | 2012-13 | 2007-08 | 2012-13 | 2007-08 | 2012-13 |
| 0 - 4 | 11 | 9.5 | 10.6 | 9.4 | 11.5 | 9.6 |
| 5 - 9 | 13.1 | 11.2 | 12.7 | 11 | 13.5 | 11.4 |
| 10 - 14 | 13.9 | 13.2 | 13.4 | 13.2 | 14.4 | 13.2 |
| 15 - 19 | 11.8 | 11.2 | 12.2 | 11 | 11.4 | 11.5 |
| 20 - 24 | 8.2 | 8.4 | 8.6 | 8.7 | 7.7 | 8.0 |
| 25 - 29 | 6.2 | 7.2 | 6.4 | 7.4 | 5.9 | 7.1 |
| 30 - 34 | 5.6 | 5.6 | 5.8 | 5.7 | 5.5 | 5.6 |
| 35 - 39 | 5.9 | 6.1 | 6.4 | 6.5 | 5.3 | 5.7 |
| 40 - 44 | 5.7 | 6.0 | 5.8 | 6.0 | 5.6 | 5.8 |
| 45 - 49 | 5.6 | 5.9 | 5.5 | 6.3 | 5.8 | 5.4 |
| 50 - 54 | 4.1 | 5.4 | 3.8 | 5.0 | 4.5 | 5.9 |
| 55 - 59 | 3.0 | 3.7 | 2.7 | 3.4 | 3.2 | 4.1 |
| 60 - 64 | 1.9 | 2.4 | 1.8 | 2.2 | 2.0 | 2.6 |
| 65 + | 4.0 | 4.1 | 4.2 | 4.2 | 3.8 | 4.0 |

Source: SODA's calculation from LECS 5

(4) Marital Status

According to LECS4 and LECS5, the majority (98%) and (97%) of male headed agricultural households are married respectively. There are no significant differences between the regions (Table 4.8). The main reason for female headship is widowhood (62%) in 2008 and (67%) in 2013 and 5 percent increase if compare between LECS 4 and LECS 5. About 20 percent of female headed households are married and became *de facto* heads as men migrated or left for other reasons in 2008. The *de facto* head is reduced to 14% in 2013.

| Regions | All | | | | FHH | | | | MHH | | | |
|--------------------|---------------|------------|---------------|------------|--------------|------------|--------------|------------|---------------|------------|---------------|------------|
| | 2007/08 | | 2012/13 | | 2007/08 | | 2012/13 | | 2007/08 | | 2012/13 | |
| | Number | % | Number | % | Number | % | Number | % | Number | % | Number | % |
| Lao PDR | 825892 | 100 | 979093 | 100 | 39940 | 100 | 50758 | 100 | 785952 | 100 | 928335 | 100 |
| Never married | 6693 | 0.8 | 6827 | 0.7 | 1638 | 4.1 | 835 | 1.6 | 5055 | 0.6 | 5992 | 0.6 |
| Married | 775639 | 93.9 | 911022 | 93.0 | 8036 | 20.1 | 7037 | 13.9 | 767603 | 97.7 | 903985 | 97.4 |
| Divorced/Separated | 7648 | 0.9 | 11259 | 1.1 | 5427 | 13.6 | 8970 | 17.7 | 2221 | 0.3 | 2289 | 0.2 |
| Widowed | 35912 | 4.3 | 49985 | 5.1 | 24838 | 62.2 | 33916 | 66.8 | 11074 | 1.4 | 16069 | 1.7 |

Source: SODA's calculation from LECS 5; * Center region included the Vientiane Capital

(5) Household Labour Force

The active agricultural population in Lao PDR refers to the population at the age of 10 and higher residing in agricultural households. Lao PDR has an active agricultural population of 3,641,686 or 76 percent of the overall population living in agricultural households in 2008 (LECS 4), and 4,173,256 or 79 percent of overall population living in agricultural households in 2013 (LECS 5). This corresponds to 4.4 and 4.3 active members per households in 2008 and 2013 respectively (Table 4.9). According to LECS4 (2008), male headed agricultural households at national level have an average of 4.4 active members or 76 percent of its household members are presumptive active.

| | Female headed agricultural households | | | | Female headed agricultural households | | | |
|-------------------|---------------------------------------|---------------------------|---------------------|---------------------------|---------------------------------------|---------------------------|---------------------|---------------------------|
| | 2007-08 | | 2012-13 | | 2007-08 | | 2012-13 | |
| | % of active members | Average of active members | % of active members | Average of active members | % of active members | Average of active members | % of active members | Average of active members |
| Lao PDR | 78.5 | 3.8 | 81.4 | 3.5 | 75.7 | 4.4 | 79.2 | 4.3 |
| Vientiane Capital | - | - | 75.6 | - | - | - | 86.5 | - |
| North region | 82.7 | 3.5 | 86.4 | 3.3 | 74.7 | 4.5 | 77.6 | 4.3 |
| Center region | 76.3 | 4 | 81 | 3.6 | 77.4 | 4.4 | 80.3 | 4.3 |
| South region | 81.2 | 3.5 | 79.5 | 3.3 | 77.4 | 4.4 | 78.6 | 4.4 |

Source: SODA's calculation from LECS 5; (-) Information was included in center region

4.3. Ethnicity

According to the 2012-13 LECS 5, the female headed household in agriculture by linguistic group and ethnics show that 76 percent of female headed agricultural households are Lao-Tai linguistic family compared to 63.3 percent of male headed agricultural households. The female headed agricultural households of Mon-Khmer linguistic family is 21.4 percent compared to 26.3 percent of male headed household. Other linguistic family, the female headed households is related low if compare to male headed households.

| Ethnic group | Total | Percent | Male | Percent | Female | Percent |
|--------------|---------------|------------|---------------|------------|--------------|------------|
| Total | 979093 | 100 | 928335 | 100 | 50758 | 100 |
| Lao-Tai | 626168 | 63.9 | 587546 | 63.3 | 38622 | 76.1 |
| Mon-Khmer | 254953 | 26 | 244082 | 26.3 | 10871 | 21.4 |
| Chine-Tibet | 23307 | 2.4 | 22703 | 2.4 | 604 | 1.2 |
| Hmong- Mien | 61745 | 6.3 | 61150 | 6.6 | 595 | 1.2 |
| Other | 12920 | 1.3 | 12854 | 1.4 | 66 | 0.1 |

Source: SODA's calculation from LECS 5

4.4. Education

According to LECS 4 data, 65.3 percent of all members of agricultural households aged 10 and older can read and write without difficulty. Almost 73 percent of all male members aged 10 and above experience no difficulties in reading and writing compared to 57.9 percent of all female members, a difference of 15 percentage points. According to LECS 5 data, 68 percent of all members of agricultural households aged 10 and older can read and write without difficulty (Table 4.11). Almost 75.6 percent of all male members aged 10 and above experience no difficulties in reading and writing compared to 60.5 percent of all female members, a difference of 15 percentage points.

| | Both Sexes | | Male | | Female | |
|-------------------|------------|-------|---------|-------|---------|-------|
| | Number | % | Number | % | Number | % |
| LECS 5, 2012-2013 | 4647638 | 100.0 | 2310513 | 100.0 | 2337125 | 100.0 |
| | 3158530 | 68.0 | 1745639 | 75.6 | 1412891 | 60.5 |
| LECS 4, 2007-2008 | 4153850 | 100.0 | 2046367 | 100.0 | 2107483 | 100.0 |
| | 2713134 | 65.3 | 1493753 | 73.0 | 1219381 | 57.9 |

Source: SODA's calculation from LECS 5

4.5. Agricultural Land

4.5.1. Land access

At national level, 95.7 percent of all male and 87.8 percent of all female headed agricultural households have access to agricultural land; a slight difference of 7.9 percentage points (Table 4.12) in 2007-08. Particularly in the Southern region, fewer (16 percentage points) female headed households have access to agricultural land compared to male headed households. In the Northern and Center regions male and female headed households have more equal access to land with a percentage point difference of

| | 2007-2008 | | 2012-2013 | |
|---------------|-------------|-------------|-------------|-------------|
| | FHH | MHH | FHH | MHH |
| Lao PDR | 87.8 | 95.7 | 90.3 | 94.6 |
| North Region | 94.4 | 96.8 | 96.9 | 95.3 |
| Center Region | 89.4 | 94.5 | 95.3 | 95.8 |
| South Region | 79.1 | 94.5 | 94.4 | 96.2 |

Source: SODA's calculation from LECS 5 (-) have no data

only 2.4 and 5 percent, respectively. In 2012-2013, 94.6 percent of all male and 90.3 percent of all female headed agricultural households have access to agricultural land; a slight difference of 4.3 percentage points. In Northern region few (2 percent points) female headed households have access to agricultural land than male headed while in center region have more equal access to land of both headed households. However, in the south region, the female headed households have slight less male headed households' counterpart in access to the land (1.8 percent point's difference).

The majority of agricultural households have access to one plot of land (Table 4.13). In particularly female headed agricultural households own or lease one plot: 80 percent compared to 60 percent in 2007-2008 and 80 percent compare to 55 percent of all male headed households. Twice as many male headed households (36%) hold 2 to 3 plots compared to female headed households (18%) in 2007-08 and one and half as many male headed household (37%) hold 2-3 plots compared to female headed households (26 %) in 2012-13. Only a small proportion of agricultural households have access to more than 3 plots: 5 percent for 2007-08 and 7 percent for 2012-13 of male headed and 2 percent for 2007-08 and 3 percent for 2012-13 of female headed households.

| | 2007-2008 | | | | 2012-2013 | | | |
|---------------|--------------|------|---------------|------------|--------------|------------|---------------|------------|
| | FHH | | MHH | | FHH | | MHH | |
| | Count | % | Count | % | Count | % | Count | % |
| Lao PDR | 35083 | 100 | 752323 | 100 | 50758 | 100 | 928335 | 100 |
| One plot | 27311 | 77.8 | 458550 | 61.0 | 35979 | 70.9 | 511291 | 55.1 |
| 2 - 3 plots | 7328 | 20.9 | 260395 | 34.6 | 13051 | 25.7 | 346263 | 37.3 |
| 4 - 5 plots | 444 | 1.3 | 29503 | 3.9 | 1225 | 2.4 | 57194 | 6.2 |
| 6 - 9 plots | 0 | 0 | 3642 | 0.5 | 503 | 1 | 12614 | 1.4 |
| 10 - 14 plots | 0 | 0 | 233 | 0.0 | 0 | 0 | 973 | 0.1 |

Source: SODA's calculation from LECS 5

4.5.2 Land size and land type

At national level, male headed agricultural households have an average of 1.9 ha agricultural land compared to 1.6 ha for female headed households, which is about 16 percent more land per household in 2007-08. The average land size of male headed agricultural household is 0.2 hectare reduced during 2007-08 and 2012-2013, while the female headed agricultural household has the same size in the same period (Table 4.14). The difference in land size is smallest in the Centre region where male headed households have only 6 percent more agricultural land per household compared to female headed households in 2008.

| | 2007-2008 | | | | | 2012-2013 | | | | |
|-------------------|---------------|------------------------|---------------|------------------------|--------------------|---------------|------------------------|---------------|------------------------|--------------------|
| | Female Headed | | Male Headed | | Percent difference | Female Headed | | Male Headed | | Percent difference |
| | Number | Average land size (ha) | Number | Average land size (ha) | | Number | Average land size (ha) | Number | Average land size (ha) | |
| Lao PDR | 35083 | 1.6 | 752323 | 1.9 | 15.8 | 50758 | 1.6 | 928335 | 1.7 | 10 |
| Vientiane Capital | (-) | (-) | (-) | (-) | (-) | 3010 | 1.3 | 32927 | 1.4 | 10 |
| North | 7069 | 1.3 | 270628 | 1.8 | 27.8 | 11453 | 1.3 | 307654 | 1.6 | 30 |
| Central | 19719 | 1.7 | 320822 | 1.8 | 5.6 | 27570 | 1.7 | 371296 | 1.8 | 10 |
| South | 8217 | 1.8 | 157693 | 2.1 | 14.3 | 8725 | 1.9 | 216458 | 2 | 10 |

Source: SODA's calculation from LECS 5

Chart 4.3: Land side distribution of irrigated land holdings by type of household (%)

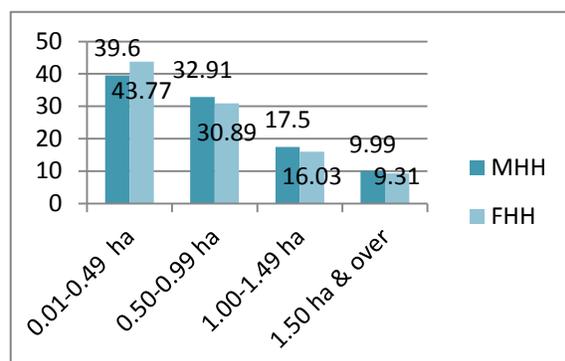


Chart 4.3 indicates the land side distribution of irrigated land holdings by type of household head. About 9.3 percent of female-headed farm households were in the smallest agricultural land size category (1.50 ha and above), while 9.9 percent of male-headed farm households were in that category. Forty-four percent of female-headed farm households were in the smallest irrigated land size category (0.01-0.49 ha), as opposed to 40 percent of male-headed farm households.

Source: Adapted from LCA, 2011

Chart 4.4: Average area (ha) of agricultural land operated by household head

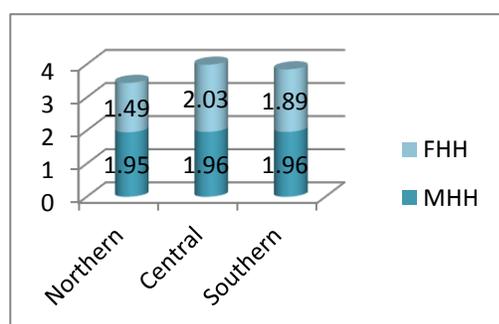


Chart 4.4 indicates an average area of agricultural land by the head of household. In the Central Region, the average area of agricultural land operated by female-headed households was slightly larger than the male-headed households; however, the difference of only a few tenths of a percentage point may not be statistically significant. In contrast, in the Northern Region, the female-headed households operated substantially (0.5 ha) smaller areas than the male-headed households.

Source: Adapted from LCA, 2011.

Table 4.15 shows the percentage of total land area of agricultural households that is used for temporary crops, permanent crops, grazing or forest. Most of the agricultural land is used for temporary crops in both surveys. About 93 percent of all agricultural land owned or leased by female headed households is used for temporary crops and only a very small portion of their total agricultural land base is used for permanent cropping or as forest land in 2007-08. For male headed households, 90 percent of the total agricultural land base is used for temporary cropping in the year. If compare to the 2012-13, all agricultural land owned or leased by female headed households is reduced by 3 percent points while the male headed household has only 1 percent point reduced.

| | 2007-2008 | | 2012-2013 | |
|---------------------------------|------------|------------|------------|------------|
| | FHH | MHH | FHH | MHH |
| Total | 100 | 100 | 100 | 100 |
| Arable land for temporary crops | 93.4 | 89.6 | 89.5 | 88.5 |
| Arable land for permanent | 4.6 | 6.4 | 6.1 | 7.3 |
| Grazing land | 0 | 0 | 0.1 | 0.1 |
| Forest land | 2 | 4 | 4.3 | 4.1 |

Source: SODA's calculation from LECS 5

At the national level, the average size of agricultural land operated by female-headed farm households was only slightly smaller than the land operated by male-headed farm households. Female-headed farm households operated, on average, 0.07 hectares (or 700 square metres) less agricultural land than male-headed households, a difference of only 3.5 percent). For irrigated lands, female-headed farm households operated, on average, 0.04 hectares (400 square metres) less than male-headed farm households, a difference of 5 percent (Table 4.16).

Table 4.16: Average area of agricultural and irrigated land holding, by household type

| | MHH | FHH |
|--|------|------|
| Average area of agricultural land holding (ha) | 1.96 | 1.89 |
| Average area of irrigated land holding (ha) | 0.75 | 0.71 |

Source: LCA, 2011

4.5.3. Land tenure

Generally, land is a national heritage and the State ensures the rights to use, transfer and inherit it in accordance with the laws. The main land tenure in Lao PDR is categorized into three types: private, communal and state ownership. LECS4 (2008) collected data on the tenure status of plots over a 12 months reference period. It distinguishes 2 types of land tenure: owned/free disposal and leased. Land ownership means the owner has a land certificate, which is an official document certifying the use right of agricultural land or forest land. This certificate is issued by the district or municipal administration to an individual or organisation that has the right to use such land¹⁵. Land lease means the holder rents the agricultural land from an individual, organization or the state.

Over 95 percent of all agricultural households own or have free disposal to land and only a small proportion of households lease agricultural land (Table 4.17). There are no notable differences between male and female headed households nor regional variations in both LECS surveys. Unfortunately, LECS 5 data does not provide data on land certificates nor in whose name land certificates are registered.

Table 4.17: Percentage of agricultural households that owned/leased any land by tenure status of the plot

| Tenure status | 2007-2008 | | 2012-2013 | |
|--------------------------|-----------|------|-----------|------|
| | FHH | MHH | FHH | MHH |
| Lao PDR | | | | |
| Owned/Free disposal | 95.6 | 95.3 | 95.3 | 96.9 |
| Leased | 4.4 | 4.7 | 4.7 | 3.1 |
| Vientiane Capital | | | | |
| Owned/Free disposal | - | - | 96.5 | 90.4 |
| Leased | - | - | - | - |
| North | | | | |
| Owned/Free disposal | 100 | 96.9 | 97 | 97.5 |
| Leased | - | 3.1 | 3 | 2.5 |
| Center | | | | |
| Owned/Free disposal | 92.8 | 94.7 | 93.8 | 96.7 |
| Leased | 7.2 | 5.3 | 6.2 | 3.3 |
| South | | | | |
| Owned/Free disposal | 97.1 | 93.9 | 96.5 | 97 |
| Leased | 2.9 | 6.1 | 3.5 | 3 |

Source: SODA's calculation from LECS 5

4.6. Livelihood Outcomes

4.6.1. Housing conditions

LECS included data on the housing conditions of the main house. About 73 percent of male headed and 71 percent of female headed agricultural households live in houses with external walls constructed from brick, concrete, unbaked brick or wood in 2007-08; while about 80 percent of male headed and 76 percent of female headed agricultural households live with external walls constructed from brick, concrete, unbaked brick or wood in 2012-13 (Table 4.18). Further, 83.7 percent of male headed and 89.2 percent of female headed agricultural households used concrete, wood, metal sheets/zinc, or tiles as the major material for

¹⁵ Land Law, 2003

the roof of the housing unit in 2007-08; while 92 percent of male headed and 93 percent of female headed agricultural households used concrete, wood, metal sheets/zinc, or tiles as the major material for the roof of the housing unit in 2012-13 (Table 4.18).

Table 4.18: Number and percentage of agricultural households, by sex of the household head and first major construction material of the external wall of the housing unit

| Construction materials | 2007-2008 | | | | 2012-2013 | | | |
|------------------------|--------------|------------|---------------|------------|--------------|--------------|---------------|------------|
| | FHH | | MHH | | FHH | | MHH | |
| | Count | % | Count | % | Count | % | Count | % |
| Lao PDR | 39940 | 100 | 785952 | 100 | 50758 | 100.0 | 928335 | 100 |
| Brick/unbaked brick | 8903 | 22.3 | 163849 | 20.8 | 11520 | 22.7 | 239662 | 25.8 |
| Concrete | 192 | 0.5 | 2300 | 0.3 | 2337 | 4.6 | 56166 | 6.1 |
| Wood | 19330 | 48.4 | 409672 | 52.1 | 24711 | 48.7 | 448936 | 48.4 |
| Bamboo | 8743 | 21.9 | 184722 | 23.5 | 11225 | 22.1 | 175511 | 18.9 |
| Tin | - | - | 761 | 0.1 | 392 | 0.8 | 3070 | 0.3 |
| Mud | 1442 | 3.6 | 2969 | 0.4 | 249 | 0.5 | 2339 | 0.3 |
| Other materials | 58 | 0.1 | 2266 | 0.3 | 324 | 0.6 | 2651 | 0.3 |
| Missing | 1272 | 3.2 | 19414 | 2.5 | - | - | - | - |

Source: SODA's calculation from LECS 5

Table 4.19: Number and percentage of agricultural households, by sex of the household head and major material of the roof of the housing unit

| Construction materials | 2007-2008 | | | | 2012-2013 | | | |
|------------------------|--------------|------------|---------------|------------|--------------|--------------|---------------|--------------|
| | FHH | | MHH | | FHH | | MHH | |
| | Count | % | Count | % | Count | % | Count | % |
| Lao PDR | 39940 | 100 | 785952 | 100 | 50758 | 100.0 | 928335 | 100.0 |
| Concrete | - | - | 1045 | 0.1 | 319 | 0.6 | 6445 | 0.7 |
| Wood | 886 | 2.2 | 39891 | 5.1 | 1000 | 2.0 | 14212 | 1.5 |
| Metal sheets/zinc | 30655 | 76.8 | 480543 | 61.1 | 36552 | 72.0 | 560749 | 60.4 |
| Tile | 4075 | 10.2 | 136931 | 17.4 | 9403 | 18.5 | 272386 | 29.3 |
| Grass | 3515 | 8.8 | 98580 | 12.5 | 1699 | 3.3 | 49651 | 5.3 |
| Leaves | 81 | 0.2 | 7509 | 1 | 612 | 1.2 | 2724 | 0.3 |
| Other materials | 728 | 1.8 | 21454 | 2.7 | 1173 | 2.3 | 22168 | 2.4 |

Source: SODA's calculation from LECS 5

4.6.2. Access to improved drinking water sources

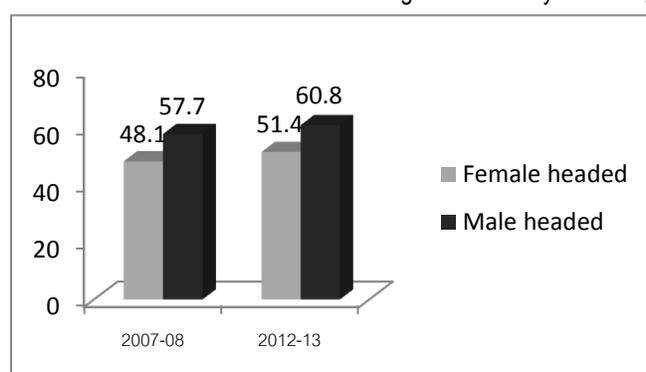
Following LECS4, about 57 percent of all agricultural households have access to safe/improved water sources (piped water or protected well/boreholes) during the dry season, leaving a large proportion of agricultural households with no access to safe drinking water sources.

Table 4.20: Main source of drinking water in rainy season by sex of the household head

| | 2007-2008 | | | | 2012-2013 | | | |
|------------------------------|--------------|------------|---------------|------------|--------------|------------|---------------|------------|
| | FHH | | MHH | | FHH | | MHH | |
| | Count | % | Count | % | Count | % | Count | % |
| Lao PDR | 39940 | 100 | 785952 | 100 | 50758 | 100 | 928335 | 100 |
| Piped water in/outside | 3030 | 7.6 | 55177 | 7 | 2913 | 5.7 | 45115 | 4.9 |
| Well/Borehole protected | 16180 | 40.5 | 398437 | 50.7 | 21854 | 43.1 | 503251 | 54.2 |
| Well/Borehole unprotected | 7902 | 19.8 | 139374 | 17.7 | 4270 | 8.4 | 86511 | 9.3 |
| River, dam, lake, etc. | 4931 | 12.3 | 108468 | 13.8 | 1110 | 2.2 | 33575 | 3.6 |
| Rain water from tank/jar | - | - | 943 | 0.1 | 6371 | 12.6 | 70763 | 7.6 |
| Other drinking water sources | 7896 | 19.8 | 83553 | 10.6 | 14240 | 28.1 | 189120 | 20.4 |

Source: SODA's calculation from LECS 5

Chart 4.5: Access to safe drinking water in dry season, by sex of household head



Further, about 58 percent and 61 percent of all male headed agricultural households have access to improved drinking water sources compared to 48 percent and 51 percent of all female headed households in 2007-08 and 2012-13 respectively: a difference of 10 percentage points of both surveys (Chart 4.5.) Other important sources of drinking water in the dry season are unprotected wells/boreholes and natural water sources like the river, dam and lakes.

Source: SODA's calculation from LECS 5

4.6.3. Access to electricity

Access to electricity for lighting through the public network is common among 55 percent and 78 percent of all agricultural households in Lao PDR in 2007-08 and 2012-13. Female headed agricultural households have greater access to electricity for lighting (77% and 88%) than male headed households (60% and 72 %) during 2007-08 and 2012-13: a difference of 17 and 16 percentage points respectively.

Table 4.21: Main sources of energy for lighting by the head of agricultural households

| | 2007-2008 | | | | 2012-2013 | | | |
|---------------------------------|--------------|------------|---------------|------------|--------------|------------|---------------|------------|
| | FHH | | MHH | | FHH | | MHH | |
| | Count | % | Count | % | Count | % | Count | % |
| Lao PDR | 39940 | 100 | 785952 | 100 | 50758 | 100 | 928335 | 100 |
| Electricity from public network | 29185 | 73.1 | 427968 | 54.5 | 44016 | 86.7 | 723012 | 77.9 |
| Electricity from generator | 843 | 2.1 | 15869 | 2 | 244 | 0.5 | 9313 | 1.0 |
| Electricity from battery | 861 | 2.2 | 33439 | 4.3 | 589 | 1.2 | 21850 | 2.4 |
| Kerosene lamp | 6374 | 16 | 209919 | 26.7 | 3475 | 6.8 | 89771 | 9.7 |
| Candle | 1446 | 3.6 | 29183 | 3.7 | 1237 | 2.4 | 10045 | 1.1 |
| Other sources of energy | 1231 | 3.0 | 69574 | 8.8 | 1197 | 2.4 | 74344 | 8.0 |

Source: SODA's calculation from LECS 5

In two surveys, there is a slightly difference in access to main sources of electricity for lighting. Male headed households have more access to electricity from generator and battery (6.3% and 3.4%) compared to female headed households (4.4 % and 1.7 %) respectively, while female headed households have more access to electricity through the public network. Less than 1 percent of all agricultural households have access to electricity for cooking in 2007-08, while 2.8 percent of all agricultural households have access to electricity for cooking in 2012-13. The

main source used by both male and female headed agricultural households is wood: 81 percent and 75 percent of male headed agricultural households use wood as the source of energy for cooking compared to 69 percent and 62 percent of female headed households in 2007-08 and 2012-13 respectively. Further; 16 percent and 20 percent of male headed, and 25 percent and 33 percent of female headed households use charcoal as a source of energy for cooking during the same period of two surveys.

Table 4.22: Main sources of energy for cooking by the head of agricultural household

| | 2007-2008 | | | | 2012-2013 | | | |
|-------------|-----------|------|--------|------|-----------|------|--------|------|
| | FHH | | MHH | | FHH | | MHH | |
| | Count | % | Count | % | Count | % | Count | % |
| Lao PDR | 39940 | 100 | 785952 | 100 | 50758 | 100 | 928335 | 100 |
| Electricity | 460 | 1.2 | 4996 | 0.6 | 1289 | 2.5 | 22454 | 2.4 |
| Paraffin | 284 | 0.7 | 3217 | 0.4 | 133 | 0.3 | 5122 | 0.6 |
| Wood | 27543 | 69 | 635583 | 80.9 | 31628 | 62.3 | 706890 | 76.1 |
| Coal | 1560 | 3.9 | 13637 | 1.7 | 676 | 1.3 | 13491 | 1.5 |
| Charcoal | 10025 | 25.1 | 126755 | 16.1 | 16833 | 33.2 | 176500 | 19.0 |
| Sawdust | - | - | 814 | 0.1 | 0 | 0.0 | 584 | 0.1 |
| Gas | 67 | 0.2 | 655 | 0.1 | 199 | 0.4 | 3294 | 0.4 |
| Missing | - | - | 295 | 0 | 0 | 0.0 | 0 | 0 |

Source: SODA's calculation from LECS 5

4.7. Access to information

There was not much difference between types of household head in where they obtain information for their agricultural production activities. Other farmers and television were the most popular sources of information accounting for 22% and 21% among female headed farmers, followed by radio and state organizations at 16% and 12% respectively.

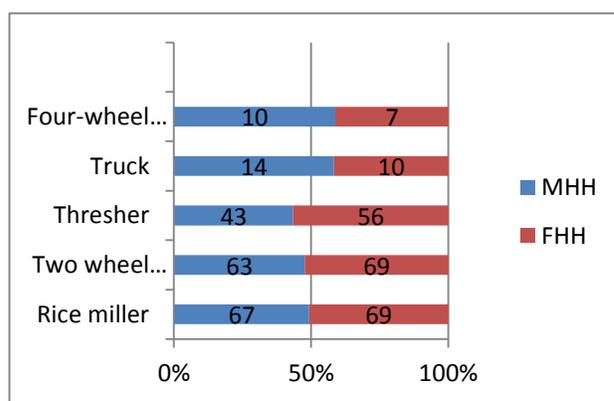
Table 4.23: Information sources of agriculture

| | MHH | FHH |
|---------------------|-----|-----|
| State organizations | 13 | 12 |
| Extension services | 7 | 7 |
| Radio | 16 | 16 |
| Television | 20 | 21 |
| Newspapers | 3 | 3 |
| Input suppliers | 9 | 7 |
| Other farmers | 21 | 22 |
| Other sources | 12 | 13 |

Source: LCA, 2011

4.8. Improved Technologies

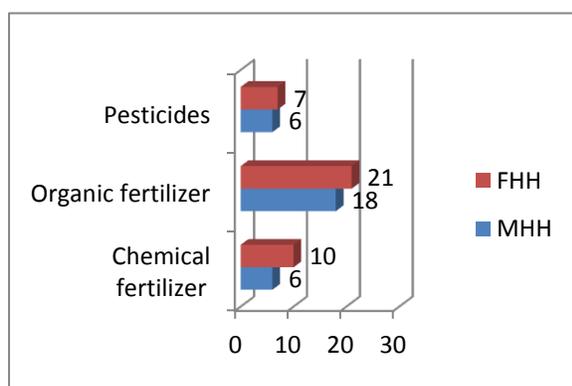
Chart 4.6: Farm machinery by sex of household head (%)



Source: LCA, 2011

Generally, the utility of rice millers and two-wheel tractors did not have a big difference much between MHH and FHH. Use of threshers among female decision-maker households was over 10 percent higher than among male or joint decision-maker households. In contrast, the use of large machinery (such as trucks and four-wheel tractors) was slightly lower in female decision-maker households (Chart 4.6).

Chart 4.7: Farm inputs by sex of household head (%)



As indicates in Chart 4.7, the majority of households did not use any of agriculture inputs. The utility of agricultural inputs such as fertilizers and pesticides were somewhat higher among FHH compared with other types of households. The reasons for the slightly higher use of agricultural inputs among FHH are not clear and merit further study. This gap was largest in the case of chemical fertilizers, with 10 percent of FHH using them compared with 6 percent of MHH.

Source: LCA, 2011

4.9. Credit

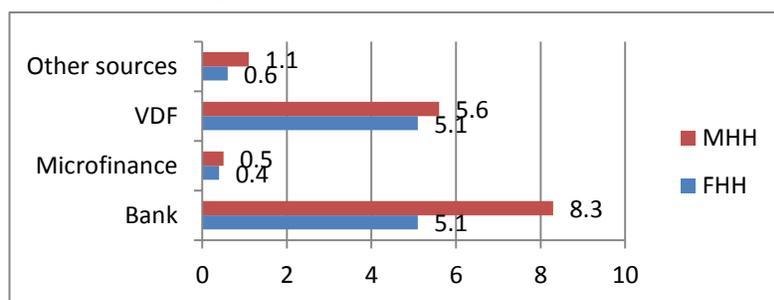
In 2003, at national level, only 15 percent of all male and 10 percent of all female headed agricultural households owned money or goods to anyone at the time of the census. Among those households owning money and goods to others, the neighbor is the main source for borrowing. This is particularly for female headed agricultural households: almost 74 percent of all female headed households with outstanding loans borrowed from neighbors compared to 52 percent of male headed households. A second important source of borrowing is the bank (state enterprise bank), particularly for male-headed households: 22 percent of male headed agricultural households had outstanding loans with the bank compared to 14 percent of female headed households (Table 4.24). The sources of loan for household agriculture fund in Lao Agriculture of Census in 2011 were shown in Chart 4.8.

Table 4.24: Percentage of agricultural households owing money or goods to anyone, by sex of household head

| | All Household | | FHH | | MHH | |
|-------------------------|---------------|------|-------|------|-------|------|
| | Count | % | Count | % | Count | % |
| Total households | 753605 | - | 32040 | - | 72156 | - |
| Total households Owning | 111403 | 14.8 | 3049 | 9.5 | 10835 | 15.0 |
| Source of Loans: | | | | | | |
| Neighbors | 58051 | 52.1 | 2240 | 73.5 | 55811 | 51.5 |
| Friend | 7319 | 6.6 | 268 | 8.8 | 7051 | 6.5 |
| Moneylender | 6492 | 5.8 | 65 | 2.1 | 6427 | 5.9 |
| Bank | 24110 | 21.6 | 411 | 13.5 | 23699 | 21.9 |
| Private bank | 555 | 0.5 | - | 0.0 | 555 | 0.5 |
| Other sources | 14876 | 13.4 | 65 | 2.1 | 14811 | 13.7 |

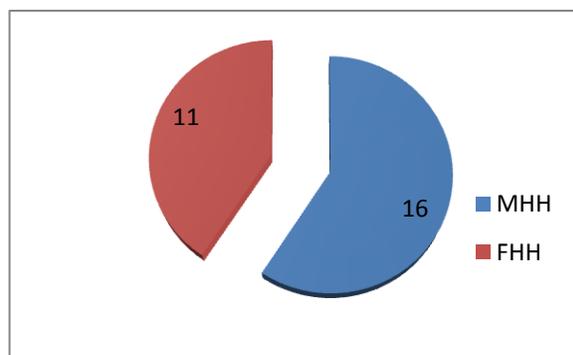
Source: DoS/LECS3 (2004)

Chart 4.8: Percentage distribution of source of loans by type of household



Source: LCA, 2011

Chart 4.9: Loan of farm households for agricultural work, by sex of household head (%)



There is no big change in term of access to credit by the agriculture households between year 2003 and 2011. The use of credit among all agricultural households was very low, and over 84 percent of all households did not use any credit (Chart 4.9). As with other inputs, credit use was even lower among FHH accounting for 11 percent compared with slightly more than 16 percent among MHH.

Source: LCA, 2011

4.10. Market Access

Male and female headed households only sell small proportions of the total production (i.e. less than 3 percent). Glutinous rice and maize are an exception. Female headed agricultural households sell 13 percent of their total glutinous rice production (Table 4.25). For male headed households this is 17 percent; a slight difference of only 4 percentage points. The difference between male and female headed households is greater for maize production. Female headed households sell 9 percent of their total maize produced while male headed households sell 26 percent of their maize production (i.e. 18 percentage points more).

Table 4.25: Percent of total household production sold by sex of household head

| | FHH | MHH |
|----------------|------|------|
| Glutinous rice | 12.9 | 17.2 |
| Maize | 8.6 | 26.3 |

Source: LECS4 (2009)

4.11. Crop production

Crops are the most important income source for rural families. The main staples of glutinous rice, ordinary rice, maize and cassava provide the basis for food security in the subsistence-oriented economy. In 2011, for both male- and female-headed farm households, lowland rice is the dominant temporary crop, followed by upland rice and other cereals. The most widely grown permanent crops are rubber, coffee and bananas. However, some differences can be observed between different household types.

A smaller proportion of female-headed households grow crops other than rice, while a higher proportion of male-headed households grow a diverse range of crops, particularly temporary crops, in the wet season.

Table 4.26: Main permanent crops grown by agriculture households in 2011

| Crop | FHH | | MHH | |
|-----------------|---------------------------------------|-------------------------------|---------------------------------------|-----------------------------|
| | Average area (ha) planted per holding | % of female-headed households | Average area (ha) planted per holding | % of male-headed households |
| Rubber | 1.7 | 29 | 1.39 | 33 |
| Coffee | 1.55 | 21 | 1.9 | 16 |
| Banana | 0.51 | 15 | 0.5 | 12 |
| Cinnamon | 0.61 | 6 | 0.51 | 9 |
| Mango | 0.49 | 5 | 0.36 | 6 |
| Tea | 0.43 | 5 | 0.45 | 4 |
| Pineapple | 0.45 | 3 | 0.42 | 3 |
| Other permanent | 1.81 | 1 | 0.61 | 2 |
| Mandarin and | 0.68 | 1 | 0.45 | 2 |
| Lemon | 0.61 | 1 | 0.68 | 1 |

Source: LCA, 2011

Table 4.27: Main dry-season temporary crops grown by agriculture households in 2011

| Crop | Average area | | Average area (ha) | |
|---|--------------------------|----------|---------------------|----------|
| | (ha) planted per holding | % of FHH | planted per holding | % of MHH |
| Lowland rice/Irrigation rice | 0.66 | 55 | 0.64 | 40 |
| Upland rice | 5.18 | 1 | 0.71 | 5 |
| Cereals used as fodder crops (e.g. maize) | 3.97 | 1 | 0.93 | 3 |
| Cassava | 0.66 | 3 | 0.35 | 5 |
| Sweet corn | 0.28 | 4 | 0.41 | 4 |
| Makdeay | 0.34 | 3 | 1.22 | 1 |
| Groundnut (peanut) | 0.39 | 2 | 0.41 | 2 |
| Sesame | 0.19 | 2 | 0.27 | 3 |
| Sugar cane | 0.11 | 4 | 0.14 | 4 |
| Grasses | 0.23 | 2 | 0.09 | 6 |

Source: LCA 2011

The average area planted did not differ much between the different household types. But female-headed households cultivated slightly larger areas of lowland rice, while male-headed households cultivated slightly larger areas of upland rice.

Table 4.28: Main wet-season temporary crops grown by agriculture households in 2011

| Crop | Average area | | Average area | |
|--|--------------------------|-------------------------------|--------------------------|-----------------------------|
| | (ha) planted per holding | % of female-headed households | (ha) planted per holding | % of male-headed households |
| Lowland rice/Irrigation rice | 1.58 | 76.8 | 1.27 | 72.3 |
| Upland rice | 0.84 | 11.7 | 0.95 | 22.2 |
| Cereals used as fodder crops (e.g. maize), | 1.29 | 3.7 | 1.32 | 9.6 |
| Cassava | 1.37 | 1.4 | 1.02 | 5 |
| Sweet corn | 0.58 | 2.8 | 0.57 | 7 |
| Makdeay | 0.79 | 2 | 0.53 | 3.3 |
| Groundnut (peanut) | 0.4 | 1.4 | 0.58 | 2.3 |
| Sesame | 0.52 | 0.8 | 0.38 | 2.4 |
| Sugar cane | 0.68 | 0.2 | 0.61 | 0.7 |
| Grasses | 0.62 | 0.2 | 0.15 | 1.3 |

Source: LCA 2011

Table 4.29 provides a concise picture of the composition of farm households by ethnic groups and their engagement in farming operations, including livestock, fishery and forestry. Among the four major ethnic groups in the country, Lao Tai and Mon-Khmer communities together constitute the majority (92%) of the farm households. The most striking aspect of the farming practices is that an overwhelming majority of the farm households (87%) grow the dominant variety of glutinous rice. This proportion is highest among the Lao Tai (92%) and lowest among the Hmong-Mien (54%). The Hmong-Mien farm households allocate the largest share of their holdings (59%) for growing non-glutinous rice varieties, produced mainly for self-consumption. Farm households belonging to other community groups reported growing as much as 19 percent non-glutinous rice.

Table 4.29: Percentage of crop cultivation household holdings by ethnic groups

| Parameter | Total | Lao Tai | Mon- Khmer | Hmong- Mien | Other |
|-------------------------------|-------|---------|------------|-------------|-------|
| No. of farm households ('000) | 782.8 | 479.8 | 238.3 | 63 | 1.7 |
| Glutinous rice holdings | 92.0 | 84.0 | 54.0 | 81.0 | 87.0 |
| Non-glutinous rice holdings | 6.0 | 14.0 | 59.0 | 19.0 | 13.0 |
| Irrigated rice holdings | 34.0 | 18.0 | 22.0 | 30.0 | 28.0 |
| Dry season rice holdings | 16.0 | 4.0 | 1.0 | 11.0 | 11.0 |
| Improved rice seed holdings | 52.0 | 18.0 | 8.0 | 24.0 | 38.0 |
| Permanent crop holdings | 53.0 | 51.0 | 42.0 | 45.0 | 51.0 |
| Use of two-wheeled tractors | 77.0 | 34.0 | 40.0 | 48.0 | 61.0 |
| Use of chemical fertilizers | 57.0 | 16.0 | 14.0 | 35.0 | 42.0 |

Source: LCA, 2011

4.12. Livestock

Following LECS4 data, 57 percent of all agricultural households in Lao PDR raised livestock. More male headed agricultural households are engaged in livestock production: 58 percent (455,627) of all male headed agricultural households raise livestock compared to 39 percent (15,684) of all female headed households; a difference of 19 percentage points.

For both male and female headed agricultural households engaged in livestock production, local pigs, buffaloes and cattle are the main livestock raised: 62 percent of male headed households engaged in livestock production keep local pigs, 55 percent keep buffaloes and 52 percent cattle. For female headed agricultural households these numbers are 58 percent, 58 percent and 47 percent, respectively. Similarly, FHH raised less livestock than MHH. According to the LCA 2010/2011, the percentage of agricultural households raised cattle are less compared to LECS 4 at 36% for FHH and 38% for MHH.

Table 4.30: Livestock and poultry raising by head of households (%)

| | LECS4 2007/08 | | LCA 2011 | |
|--------------------|---------------|------|----------|-----|
| | FHH | MHH | FHH | MHH |
| Cattle | 46.7 | 52.1 | 36 | 38 |
| Buffaloes | 57.5 | 55.0 | 29 | 29 |
| Pigs | 57.5 | 62.2 | 26 | 40 |
| Goats | 12.5 | 11.2 | 4 | 6 |
| Sheep | - | - | 0.2 | 0.2 |
| Local chicken | - | - | 54 | 63 |
| Commercial chicken | - | - | 0.5 | 0.5 |
| Ducks | - | - | 26 | 27 |

Source: LECS4, 2007; LCA, 2012

The difference in the average number of livestock owned between male and female headed agricultural households engaged in livestock production varies per type of livestock (Table 4.31). At national level, male headed households have an average of 5.4 cattle compared to 4.7 among female headed households (i.e. 14 percent more). Further, male headed households have 15 percent more pigs per household than female headed household. Male headed households have 17 percent more buffaloes per household and 175 percent more commercial chickens compared to female headed households.

Table 4.31: Average number of livestock/poultry per household head

| Livestock and poultry | FHH | MHH | % difference |
|-----------------------|------|-------|--------------|
| Cattle | 4.7 | 5.4 | 14 |
| Buffaloes | 3.0 | 3.5 | 17 |
| Pigs | 2.8 | 3.2 | 15 |
| Goats | 4.8 | 5.0 | 4 |
| Sheep | 11.1 | 13.4 | 21 |
| Local chickens | 14.5 | 18.0 | 24 |
| Commercial | 62.3 | 171.0 | 175 |
| Ducks | 7.7 | 8.5 | 10 |

Source: LCA, 2012

As shown in Table 4.32, a large proportion of the farm households across all ethnic groups engage in livestock and fishery-related activities. A greater proportion (63%) of the Hmong-Mien farm households raised pigs, which is substantially higher than the national average of 39 percent. Mon-Khmer and Hmong I ethnic groups involved capture fisheries than Lao Tai group.

| Parameter | Total | Lao Tai | Mon- Khmer | Hmong- Mien | Othe |
|---|-------|---------|------------|-------------|------|
| No. of farm | 782.8 | 479.8 | 238.3 | 63 | 1.7 |
| % of Households with livestock& poultry | | | | | |
| Cattle | 38 | 39 | 31 | 61 | 31 |
| Buffaloes | 29 | 29 | 30 | 26 | 27 |
| Pigs | 39 | 28 | 55 | 63 | 30 |
| Local chickens | 62 | 60 | 64 | 78 | 52 |
| Livestock raised | 26.0 | 29.0 | 30.0 | 30.0 | 31.0 |
| Capture fisheries | 72.0 | 38.0 | 71.0 | 67.0 | 69.0 |

Source: LCA, 2012

The difference in the average number of livestock owned between ethnic agricultural households engaged in livestock production varies per type of livestock. As shown in Table 4.33, at national level, agricultural households have an average of 5.3 cattle compared to 5.8 among Lao Tai households (i.e. 9.4 percent more). Further, Hmong headed households have 38 percent more pigs per household than the national average. Mon-Khmer headed households, on the other hand, have 2.9 or 17 percent less buffaloes per household and 28 percent less chicken compared to the national average number.

| Parameter | Total | Lao Tai | Mon- Khmer | Hmong-Mien | Other |
|---|-------|---------|------------|------------|-------|
| No. of farm households ('000) | 782.8 | 479.8 | 238.3 | 63 | 1.7 |
| Average number of livestock/poultry per holding | | | | | |
| Cattle | 5.3 | 5.8 | 3.9 | 5.8 | 5.8 |
| Buffaloes | 3.4 | 3.6 | 2.9 | 4.3 | 3.5 |
| Pigs | 3.2 | 3.2 | 2.9 | 4.4 | 3.1 |
| Local chickens | 17.8 | 19.7 | 13.9 | 18.7 | 17.7 |

Sources: LCA, 2012

As shown in Table 4.34, farm households have different main income sources. The majority of the farming households have mainly gained incomes from cropping accounting for 53 percent of all farm households. The household income source from livestock is small with only 7 percent, followed by 5 percent from forest and 1 percent from aquaculture and fisheries. There is a

| Parameter | Total | Lao Tai | Mon- Khmer | Hmong- Mien | Other |
|-------------------------------|-------|---------|------------|-------------|-------|
| No. of farm households ('000) | 782.8 | 479.8 | 238.3 | 63 | 1.7 |
| Cropping | 53 | 54 | 52 | 53 | 53 |
| Livestock | 7 | 6 | 7 | 17 | 9 |
| Aquaculture and fisheries | 1 | 1 | - | - | 1 |
| Forestry | 5 | 2 | 13 | 7 | 7 |
| Other | 34 | 38 | 28 | 24 | 31 |

Sources: LCA, 2012

slightly difference between household income sources among the ethnic group. About 17 percent of the Hmong-Mien households have income sources from livestock which is higher a national average at 7 percent. About 13 percent of the Mon-Khmer households have main incomes sources from forestry.

4.13. Fishery

In 2008, there were 455,325 or 58 percent of all male headed and 15,684 or 39 percent of all female headed agricultural households are engaged in any form of fish culture; a difference of 19 percentage points. The main type of fish culture for both male and female headed agricultural households are fish ponds followed by rice fields. About 59 percent of all male headed households engaged in fish culture have a fish ponds and 21 percent use rice fields to catch fish. Among female headed households engaged in fish culture 72 percent have a fish pond and 21 percent use rice fields to catch fish (Table 4.35).

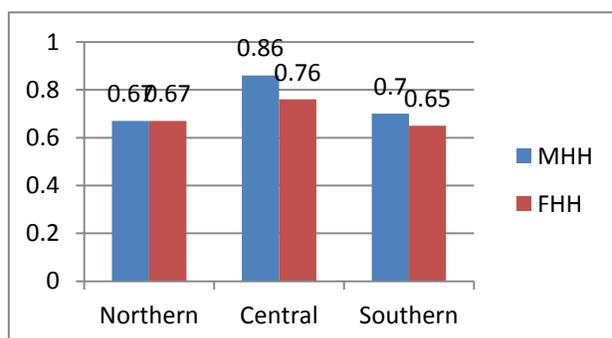
Table 4.35: Number and percentage of agricultural households engaged in any fish culture, by sex of household head and kind of fish culture.

| Kind of Fish Culture | FHH | | MHH | |
|----------------------|--------------|-------------|---------------|-------------|
| | Number | % | Number | % |
| Lao PDR | 15684 | 39.3 | 455325 | 57.9 |
| Rice field | 687 | 20.8 | 36022 | 21.2 |
| Pond | 2380 | 72.1 | 99467 | 58.6 |
| Cage | 113 | 3.4 | 12726 | 7.5 |
| Integrated pond | 122 | 3.7 | 8701 | 5.1 |
| Community fish | 0 | 0.0 | 6646 | 3.9 |
| Fish seed | 0 | 0.0 | 1890 | 1.1 |
| Other kinds of fish | 0 | 0.0 | 4349 | 2.6 |

Source: DoS/LECS4 (2009)

4.14. Irrigation

Chart 4.10: Average area (ha) of irrigated land operated by household head



Across all regions, there were small differences between female-headed and male-headed farm households in the average operated area of irrigated land. Male-headed farm households operated the same, or slightly larger, areas as female-headed farm households in the LCA 2010/11 (Chart 4.10).

Source: LCA, 2011

Chapter 5: Profile of Nam Ngum River Basin

5.1. The Nam Ngum River Basin

The Nam Ngum River Basin (NNRB) is one of the most important rivers in Lao PDR, in terms of size (7% of the country area), annual flows (14% of the Mekong River flow) and population (9% of the country's population). The Nam Ngum catchment covers 8,460 km². In its lower part, the Vientiane Plain is one of the largest food production areas in the country. It includes one third of the national irrigated areas. While food demand is expected to continue to increase in the future with several irrigation projects planned in the Vientiane Plain, hydropower dams are also under rapid development in the upstream part of the NNRB. These rapid changes are modifying the seasonal availability of water resources, and increasing the water demand for agricultural production¹⁶.

The NNRB also includes mountainous areas where many ethnic people live. Through providing sustainable livelihoods for upland communities, improved watershed management in the NNRB effectively contributes to poverty reduction and inclusive economic growth in the country. The NNRB development plan has been prepared and needs to be implemented. The plan serves as the sector development plan together with the NNRB profile and national water resources profile. The Nam Ngum River Basin Committee (NNRBC) and its secretariat have been established and need to be strengthened, and the NNRBC is expected to be a model for river basin management in other priority river basins.

The NNRB is a true multi-purpose river basin. The basin is rich in hydropower. There are currently four hydropower plants with a total storage capacity of almost 7,300 million m³ and a generation capacity of 255 MW. An additional six dams are at various stages of planning and construction. They are all expected to be completed within the next ten years, bringing the total storage volume to around 17,000 million m³ and a generation capacity of 1,622 MW¹⁷.

The NNRB is also rich in mineral resources, forestry, fisheries and upland agriculture, and so there is considerable potential for conflict between these water impacting sectors. Development of the water resource also has potential for negative impacts on local communities and livelihoods as well as further downstream including in the wider Mekong river basin. The lower part of the NNRB is located in Vientiane Province where the target villages in the survey are taking place. Below is socio-economic profile of Vientiane Province.

Chart 5.1: Watersheds in Lao PDR (NNRB in red)

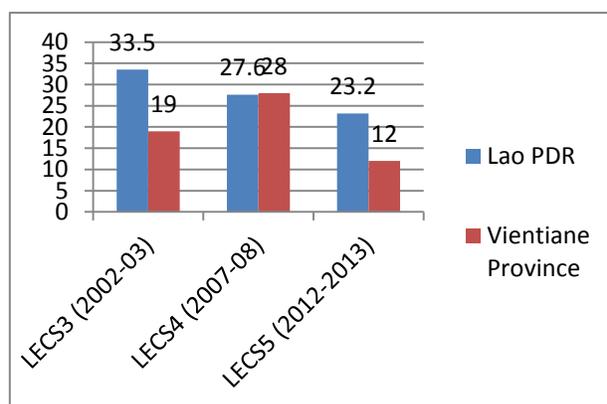


¹⁶ Scoping and planning of the MWD Integrated Water Resources Management (IWRM) and River Basin Management (RBM) Component in Lao PDR and Thailand

¹⁷ IWRM-based Water Planning Approach in Lao PDR

5.2. Social Economic Context of Vientiane Province

Chart 5.2: Poverty rate in Vientiane Province (%)



Vientiane Province is not a poor province. The number of poor accounted for 4.2 percent of the poor. The poverty rate is at 12 percent in 2012/2013 decreased from 28 percent in 2007/2008. There is an evidence of improvements in household welfare over the five year period which can be seen in the changes in housing conditions. Chart 5.2 indicates the poverty rate in Vientiane province during the past ten years.

Sources: LECS 3, 4, & 5

Table 5.1 indicates household ownership of assets related to agricultural activities. About 99.8 percent of the households has accessed to some type of lands either resident area or agricultural land which is higher than the national average at 97.5 percent. Similarly land ownership in Vientiane province is also high at 99.8 percent.

Table 5.1: Households access to land and productive assets in Vientiane province in 2013 (%)

| | Access to land | Owning land | Access to agric. Building | Two- wheeled tractor | Four- wheeled tractor | Boat | Cart | Fishing net |
|--------------------|----------------|-------------|---------------------------|----------------------|-----------------------|------|------|-------------|
| Lao PDR | 97.5 | 95.8 | 14.1 | 32.7 | 4.6 | 11.8 | 1.8 | 75 |
| Vientiane province | 99.8 | 99.8 | 13.8 | 40.8 | 3.9 | 9.3 | 10.7 | 87.4 |

Source: LECS5, 2013

Table 5.2 shows the agricultural land for farm households in Vientiane province. Generally, farm households in Vientiane province have more land areas than the average households at the national level. For example, about 29.6 percent has more than 3 ha compared to 26.7 percent at the national level.

Table 5.2: Distribution of farm landholdings and area in Vientiane province in 2011

| Province | Distribution of number of landholdings (%) | | | | Farm HHs ('000) | Distribution of area of holdings (%) | | | | Total area ('000 ha) |
|--------------------|--|--------|--------|------------|-----------------|--------------------------------------|--------|--------|------------|----------------------|
| | Below 1 ha | 1-2 ha | 2-3 ha | Above 3 ha | | Below 1 ha | 1-2 ha | 2-3 ha | Above 3 ha | |
| Vientiane Province | 26.9 | 26.5 | 16.8 | 29.6 | 62.72 | 5.7 | 14.0 | 15.1 | 65.2 | 164.45 |
| Lao PDR | 21.9 | 31.4 | 19.2 | 26.7 | 782.83 | 5.2 | 17.9 | 18.7 | 58.2 | 1 870.18 |

Source: LCA 2010/11: Analysis of selected themes

Due to the large areas are mountainous, the majority of households in Vientiane province practice rotation or shifting cultivation for upland rice farming, which is accounted for 94.4 percent of the agricultural households. According to the recent statistics, about 79.2 percent of the villages received agricultural extension workers, 88.3 percent of the villages implemented land allocation projects; and 64 percent of the village have some types of development projects.

| Agriculture practices mostly used in the villages | | Village with receiving agriculture extension workers | Land and forestry land allocation project implemented | Village with development project |
|---|-----------------------------|--|---|----------------------------------|
| Rotational (shifting cultivation) | Pioneering (slash and burn) | | | |
| 94.4 | 5.6 | 79.2 | 88.3 | 64.3 |

Source: LECS5, 2013

Overall, there are more development projects in rural villages in Vientiane provinces than the national average. Table 5.4 indicates the availability of development projects in rural villages in Vientiane province. About 40.5 percent of rural villages have crops project, followed by 36.0 percent are livestock, 3.2 percent are fisheries, 14.8 percent are forestry projects, 39.8 percent are control shifting cultivation projects.

| Province | % of villages with projects | Sector (% of rural villages) | | | | | |
|--------------------|-----------------------------|------------------------------|-----------|-----------|----------|---------------------------------|--------------------------|
| | | Crops | Livestock | Fisheries | Forestry | Control of shifting cultivation | Environmental protection |
| Vientiane Province | 67.2 | 40.5 | 36.9 | 3.2 | 14.8 | 39.8 | 27.9 |
| Lao PDR | 51.2 | 33.9 | 30.4 | 3.0 | 7.4 | 19.8 | 13.6 |

Source: LCA 2010/11: Analysis of selected themes

Based on LCA 2010/2011, major constraints and problems faced by rural villages in Vientiane province are 29.6 percent cited land issues; 41.1 percent cited farm inputs are not enough, 60 percent are irrigation problems and do not have sufficient water for agricultural purposes; 33.4 percent are livestock vaccination; and 36.5 percent said no market for agriculture products.

| | Percentage of rural villages reporting the lack of: | | | | | | | Low commodity prices |
|--------------------|---|-------------|------------|--------|---------|------------------------------|-------------|----------------------|
| | Land | Farm inputs | Irrigation | Labour | Markets | Draught animals or machinery | Vaccination | |
| Vientiane Province | 29.6 | 41.1 | 60.4 | 9.3 | 36.5 | 9.8 | 33.4 | 41.3 |
| Lao PDR | 29.0 | 42.9 | 58.9 | 10.2 | 24.5 | 16.4 | 39.7 | 37.9 |

Source: LCA 2010/11: Analysis of selected themes

Chapter 6: Findings of the Field Survey

6.1. Respondents' Profile

6.1.1. Respondents' profile

The research team interviewed 249 respondents in six villages. About 168 female and 81 male respondents were selected for interviews by the research team. Both female and male headed household were selected based on simple sampling method procedure. The majority of the respondents are from ethnic groups due to ethnicity status is one of the key criteria for selection.

| | Women | | Men | | Total | |
|--------------|------------|--------------|-----------|--------------|------------|------------|
| | Count | % | Count | % | Count | % |
| Thamtherb | 12 | 52.17 | 11 | 47.83 | 23 | 100 |
| Houynamyen | 14 | 66.67 | 7 | 33.33 | 21 | 100 |
| Houydokmai | 5 | 41.67 | 7 | 58.33 | 12 | 100 |
| Seansai | 27 | 49.09 | 28 | 50.91 | 55 | 100 |
| Namyone | 50 | 90.91 | 5 | 9.09 | 55 | 100 |
| Nammo | 60 | 72.29 | 23 | 27.71 | 83 | 100 |
| Total | 168 | 67.47 | 81 | 32.53 | 249 | 100 |

Source: Field survey in six villages

Table 6.2 shows educational attainment of respondents, 28.9 percent of women and 3.6 percent of men do not attend a formal school. Many of the female villagers have a primary school (22.1 per cent), lower secondary school (14.1 per cent) and upper secondary school (1.2 per cent) education. The male respondents have a slightly higher education level than women villagers.

| | | Lao Tai | | Mon-Khmer | | Hmong-Mien | | Total | |
|-------------------|--------|-----------|--------------|------------|--------------|------------|--------------|------------|--------------|
| | | Count | % | Count | % | Count | % | Count | % |
| No school | Male | 0 | 0.0 | 8 | 5.1 | 1 | 1.6 | 9 | 3.6 |
| | Female | 5 | 16.7 | 38 | 24.2 | 29 | 46.8 | 72 | 28.9 |
| Primary grade 1-3 | Male | 0 | 0.0 | 9 | 5.7 | 0 | 0.0 | 9 | 3.6 |
| | Female | 3 | 10.0 | 15 | 9.6 | 4 | 3.2 | 22 | 8.8 |
| Primary grade 4-5 | Male | 7 | 23.3 | 19 | 12.1 | 4 | 3.2 | 30 | 12.1 |
| | Female | 5 | 16.7 | 21 | 13.4 | 7 | 11.3 | 33 | 13.3 |
| Lower secondary | Male | 3 | 10.0 | 17 | 10.8 | 2 | 3.2 | 22 | 8.8 |
| | Female | 4 | 13.3 | 19 | 12.1 | 12 | 19.4 | 35 | 14.1 |
| Upper secondary | Male | 3 | 10.0 | 5 | 3.2 | 2 | 3.2 | 10 | 4.0 |
| | Female | 0 | 0.0 | 3 | 1.9 | 0 | 0.0 | 3 | 1.2 |
| Vocational school | Male | 0 | 0.0 | 1 | 0.6 | 0 | 0.0 | 1 | 0.4 |
| | Female | 0 | 0.0 | 2 | 1.3 | 1 | 1.6 | 3 | 1.2 |
| Total | | 30 | 100.0 | 157 | 100.0 | 62 | 100.0 | 249 | 100.0 |

Source: Individual interviews in six villages

6.1.2. Jobs and household income

Table 6.3 shows that about 81% of female and 77.8 % of male respondents are farmers. Only 4.2 per cent of women entrepreneurs and 2.5 per cent of men entrepreneurs ran some business. There are 6.8 % of respondents are government staff and 3.2% are wage worker and 6.4% are private company employee. All respondents are involved in some types of agriculture practice beside other occupations.

| | Female | | Male | | Total | |
|------------------|------------|--------------|-----------|--------------|------------|--------------|
| | Count | % | Count | % | Count | % |
| Farmer | 136 | 81.0 | 63 | 77.8 | 199 | 79.9 |
| Wage laborer | 8 | 4.8 | 0 | 0.0 | 8 | 3.2 |
| Company employee | 8 | 4.8 | 8 | 9.9 | 16 | 6.4 |
| Entrepreneurs | 7 | 4.2 | 2 | 2.5 | 9 | 3.6 |
| Government staff | 9 | 5.4 | 8 | 9.9 | 17 | 6.8 |
| Total | 168 | 100.0 | 81 | 100.0 | 249 | 100.0 |

Source: Individual interviews in six villages

| Income group | MHH | | FHH | | Total | |
|--------------------|------------|--------------|-----------|--------------|------------|--------------|
| | Count | % | Count | % | Count | % |
| Below 100000 | 7 | 3.3 | 3 | 7.5 | 10 | 4.0 |
| 100000-500000 | 26 | 12.4 | 3 | 7.5 | 29 | 11.6 |
| 5000001-1000000 | 29 | 13.9 | 6 | 15.0 | 35 | 14.1 |
| 1000001-1500000 | 26 | 12.4 | 5 | 12.5 | 31 | 12.4 |
| 1500001-2000000 | 27 | 12.9 | 4 | 10.0 | 31 | 12.4 |
| 2000001-2500001 | 15 | 7.2 | 2 | 5.0 | 17 | 6.8 |
| 2500001-3000000 | 25 | 12.0 | 2 | 5.0 | 27 | 10.8 |
| 30000001 and above | 47 | 22.5 | 11 | 27.5 | 58 | 23.3 |
| N/A | 7 | 3.3 | 4 | 10.0 | 11 | 4.4 |
| Total | 209 | 100.0 | 40 | 100.0 | 249 | 100.0 |

Source: Individual interviews in six villages; 1 USD=8000 Kip

Nobody knows exactly how much each household earn. However, during the field interview, the research team tried to find out their household incomes. About 40% of villagers earned between 2.1 million kip and above per month, while 12.4% of the respondents earned from 1.51 million to 2 million. An average monthly income of MHH is 2,281,164 Kip which is higher than FHH at 2,068,055 Kip.

About 61 percent of villagers reported that their household income had improved during the previous three-year period. Some villagers (12.4%) considered that their monthly income had actually declined. Another 26.5 % cited that their incomes are constant. As indicated in Table 6.5, MHH have increased their household incomes as cited by 64.6% of the respondents which is about 22.1% point difference more than FHH.

| | MHH | | FHH | | Total | |
|--------------|------------|--------------|-----------|--------------|------------|--------------|
| | Count | % | Count | % | Count | % |
| Increase | 135 | 64.6 | 17 | 42.5 | 152 | 61.0 |
| Decrease | 21 | 10.0 | 10 | 25.0 | 31 | 12.4 |
| Constant | 53 | 25.4 | 13 | 32.5 | 66 | 26.5 |
| Total | 209 | 100.0 | 40 | 100.0 | 249 | 100.0 |

Source: Individual interviews in six villages

6.1.3. Household assets and land ownership

By assigning the domestic sphere to women, the sexual division of labour causes an “inequality of opportunities for women, as a gender, to gain access to material and social resources (ownership of productive capital, paid labour, education and training). As a result from the field survey, women have less access to household asset. MHH has more radio, washing machine, electric cooking pots, bicycle, cell phone while FHH has more television and rice cooker. This finding is coherent with the national level statistics.

Table 6.6: Household assets by head of households and by ethnicity (N=249)

| | MHH | | FHH | | Lao-Tai | | Mon-Khmer | | Hmong-Mien | | Total | |
|-----------------------|-------|------|-------|------|---------|------|-----------|------|------------|------|-------|------|
| | Count | % | Count | % | Count | % | Count | % | Count | % | Count | % |
| Radio owner | 36 | 17.2 | 5 | 12.5 | 5 | 16.7 | 25 | 15.9 | 11 | 17.7 | 41 | 16.5 |
| Washing machine | 19 | 9.1 | 3 | 7.5 | 4 | 13.3 | 12 | 7.6 | 6 | 9.7 | 22 | 8.8 |
| Rice cooker | 66 | 31.6 | 13 | 32.5 | 11 | 36.7 | 33 | 21.0 | 35 | 56.5 | 79 | 31.7 |
| Electric cooking pots | 46 | 22.0 | 5 | 12.5 | 9 | 30.0 | 26 | 16.6 | 16 | 25.8 | 51 | 20.5 |
| Bicycle | 38 | 18.2 | 7 | 17.5 | 5 | 16.7 | 31 | 19.7 | 9 | 14.5 | 45 | 18.1 |
| Television | 161 | 77.0 | 34 | 85.0 | 28 | 93.3 | 121 | 77.1 | 46 | 74.2 | 195 | 78.3 |
| Cellphone | 186 | 89.0 | 31 | 77.5 | 27 | 90.0 | 137 | 87.3 | 53 | 85.5 | 217 | 87.1 |
| Motorbike | 159 | 76.1 | 27 | 67.5 | 4 | 13.3 | 50 | 31.8 | 9 | 14.5 | 186 | 74.7 |

Source: Individual interviews in 6 villages

Table 6.7: How many plot of land do you have?

| | FHH | | MHH | | Total | |
|--------------|-----------|------------|------------|--------------|------------|--------------|
| | Count | % | Count | % | Count | % |
| None | 4 | 10 | 16 | 7.7 | 20 | 8.0 |
| One plot | 22 | 55 | 84 | 40.2 | 106 | 42.6 |
| 2 Plots | 11 | 27.5 | 64 | 30.6 | 75 | 30.1 |
| 3 Plots | 3 | 7.5 | 45 | 21.5 | 48 | 19.3 |
| More than 3 | 0 | 0 | 0 | 0.0 | 0 | 0.0 |
| Total | 40 | 100 | 209 | 100.0 | 249 | 100.0 |

Source: Individual interview in six villages

Table 6.7 compared the land ownership between female and male headed households. Generally MHH has more land than FHH. Among the male headed household, 21.5 percent of them has 3 plots of land compared to only 7.5 percent among the FHH. About 30.6 percent of MHH has 2 plots while about 27.5 percent of FHH have.

6.1.4. Household Food Security

Rice is the most important crop for many households; especially for the poor. About half of the household has rice shortage. Female Headed household has more rice shortage accounting for 60% of the respondents which is higher than the male head of households at 49.7%. An average time of rice shortage is four months a year. Low productivity of rice production, not enough rice field, labour shortage, and natural disaster are the main causes for rice shortage.

Table 6.8: Household with rice shortage by the head of

| | Yes | | No | | Total | |
|-------|-----|------|-----|------|-------|-----|
| | N | % | N | % | N | % |
| FHH | 24 | 60 | 16 | 40 | 40 | 100 |
| MHH | 104 | 49.7 | 105 | 50.2 | 209 | 100 |
| Total | 128 | 51.4 | 121 | 48.5 | 249 | 100 |

Source: Individual interview in six villages

Traditionally, the target villages practice slash and burn cultivation and rely heavily on their own production as a source of food. Food insecurity or rice shortage usually happens in the rainy season and when the rice prices increase at the peak point during the year. The situation will be more difficulty for village with poor road access and market limitation. According to the focus groups discussion, female and male participants shared their views on the value on rice consumption. Followings are some citations:

"My household has 5 months lack of rice every year. It is the most difficult time to live with insufficient rice because it is our main food menu. Therefore, we have to seek for additional food. We do not have enough land area for upland rice farming" a single mother in Thamtherb village said.

"Rice is the main food for rural poor like us. You could not live without rice. If we have enough rice, we do not worry so much about our life. Other foods can be second priority for a daily life. Our family has some rice shortage, but we still can manage and can buy in the local market, but the rice price is not cheap. We would like to have other permanent job and income so that we have enough cash to buy rice". A male head of household in Seansai village said.

6.1.5. Household finance

During the field survey, the respondents were also asked about their financial debt. About 30% of the households have the financial debt. An average of debt is 4,420,000 Kip per household or about USD 552. About 29.6 percent of MHH has the financial debt compared to 32.5 percent of the female headed households.

| | Yes | | No | | Total | |
|-------|--------|------|--------|------|--------|-----|
| | Number | % | Number | % | Number | % |
| FHH | 13 | 32.5 | 27 | 72.5 | 40 | 100 |
| MHH | 62 | 29.6 | 147 | 70.3 | 209 | 100 |
| Total | 75 | 30.1 | 174 | 69.8 | 249 | 100 |

Source: Individual interview in six villages

It is very clear that the main sources of loan among rural households are from informal sources. The main source of loan is from relatives cited by 55.5 percent of the households, followed by formal commercial bank (12.3 percent); village saving groups (12.3 percent); money lender (11.1 percent); and friend. FHH relied on village saving scheme as the main sources of loan.

6.1.6. Access to water and sanitation

| | FHH | | MHH | | Total | |
|----------------|-----------|------------|-----------|------------|-----------|------------|
| | Number | % | Number | % | Number | % |
| Relative | 10 | 71.4 | 35 | 52.2 | 45 | 55.5 |
| Friends | 0 | 0 | 6 | 8.9 | 6 | 7.4 |
| Lender | 0 | 0 | 9 | 13.4 | 9 | 11.1 |
| Public bank | 1 | 7.1 | 10 | 14.9 | 11 | 13.5 |
| Village saving | 3 | 21.4 | 7 | 10.4 | 10 | 12.3 |
| Total | 14 | 100 | 67 | 100 | 81 | 100 |

Source: Individual interview in six villages

About 61 percent of all households had access to water from pipes or gravity fed system, followed by 17% has used water from open well, 12.9 percent used water from the river as the main source for household consumption. About 4.4 percent has used pure drinking water, 3.6 percent has used underground water; 0.4 percent has used water from pond or lake. Among the ethnic households, Lao-Tai household used water supply more than the other ethnic groups.

| | Lao-Tai | | Mon-Khmer | | Hmong-Mien | | Total | |
|----------------------------------|-----------|--------------|------------|--------------|------------|--------------|------------|--------------|
| | Count | % | Count | % | Count | % | Count | % |
| Tributary river | 1 | 3.3 | 28 | 17.8 | 3 | 4.8 | 32 | 12.9 |
| Pond/lake | 0 | 0.0 | 1 | 0.6 | 0 | 0.0 | 1 | 0.4 |
| Water supply(gravity fed system) | 26 | 86.7 | 75 | 47.8 | 51 | 82.3 | 152 | 61.0 |
| Underground water | 2 | 6.7 | 3 | 1.9 | 4 | 6.5 | 9 | 3.6 |
| Open water well | 0 | 0.0 | 44 | 28.0 | 0 | 0.0 | 44 | 17.7 |
| Pure drinking water | 1 | 3.3 | 6 | 3.8 | 4 | 6.5 | 11 | 4.4 |
| Other | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Total | 30 | 100.0 | 157 | 100.0 | 62 | 100.0 | 249 | 100.0 |

Source: Individual interview in six villages

According to Table 6.12, about 51.8 percent of the households said that they have not enough water for domestic utility, especially during the dry seasons. Water scarcity from the water sources are the key problems. There is no big difference between female and male headed household in term of sufficiency.

| | Yes | | No | | Total | |
|-------|-----|------|-----|------|-------|-----|
| | No | % | No | % | No | % |
| FHH | 15 | 37.5 | 25 | 62.5 | 40 | 100 |
| MHH | 105 | 50.2 | 104 | 49.8 | 209 | 100 |
| Total | 120 | 48.2 | 129 | 51.8 | 249 | 100 |

Source: Individual interview in six villages

| | MHH | | FHH | | Total | |
|-------|-------|-------|-------|-------|-------|-------|
| | Count | % | Count | % | Count | % |
| Yes | 166 | 79.4 | 30 | 75.0 | 196 | 78.7 |
| No | 43 | 20.6 | 10 | 25.0 | 53 | 21.3 |
| Total | 209 | 100.0 | 40 | 100.0 | 249 | 100.0 |

Source: Individual interview in six villages

The majority of household has used toilets. The most common toilet is a "normal" toilet (water toilet without flush) which used by 78.7 percent of the households. More males than females headed household has accessed to the toilets at 79.4 percent and 75 percent respectively.

6.1.7. Access to health care service

| | Female | | Male | | Total | |
|---------------------|--------|------|------|------|-------|------|
| | No | % | No | % | No | % |
| Village volunteer | 84 | 50 | 35 | 43.2 | 119 | 47.7 |
| District hospital | 52 | 30.9 | 25 | 30.8 | 77 | 30.9 |
| Provincial hospital | 13 | 7.7 | 4 | 4.9 | 17 | 6.8 |
| Traditional | 5 | 2.9 | 3 | 3.7 | 8 | 3.2 |
| Pharmacy | 4 | 2.3 | 3 | 3.7 | 7 | 2.8 |
| Others | 10 | 5.9 | 11 | 13.5 | 21 | 8.4 |
| Total | 168 | 100 | 81 | 100 | 249 | 100 |

Source: Individual interview in six villages

As shown in Table 6.14, about 47.7 percent of the households cited that they have used the village volunteers as a main source for health care service. About 30.9 percent of households have used district hospital, 6.8 percent have used provincial hospital. A small proposition of households has used traditional medicine. Village pharmacy is another source of health treatment, but the service by villagers is very small which only 2.8 percent have accessed to this source.

According to the focus groups discussion, the provision of health services in the target villages is significantly affected by limited funding and the poor have very little money to buy the health care service. There is considerable limited facilities and resources available for health care. Some citations are followings:

"I do not have money to buy some medicine when I was sick therefore I have to use the local herb to take care of my health" A poor woman in Thamterb village said. The village volunteers have only the basic health care treatment. If we have major health problem, we have to travel to the provincial or central hospital in Vientiane Capital, which is very far away and cost big money for the poor like me could not afford this cost of health care". A poor man in Namyone village said.

6.1.8. Agricultural Products

According to the field survey, 100 percent of household have raised some type of livestock for their own consumptions or for some commercial purpose. Table 6.15 indicates major problems of livestock rearing by the villagers. About half of the household said that animal disease and the death of animal is the main problem; followed by not enough water for raising animal (39%), insufficient food for animal (38.2%); not enough grass land (36.5%); not enough capital or fund for livestock investment.

Table 6.15: Livestock raising problems faced by farmers in 6 villages (N=249, Multiple responses)

| | Female | | Male | | Total | |
|---|------------|--------------|------------|--------------|------------|--------------|
| | N | % | N | % | N | % |
| Animal disease | 83 | 49.4 | 44 | 54.3 | 127 | 51.0 |
| Not enough water for animal | 65 | 38.7 | 32 | 39.5 | 97 | 39.0 |
| Insufficient food for animal | 60 | 35.7 | 35 | 43.2 | 95 | 38.2 |
| Not enough grass land | 62 | 36.9 | 29 | 35.8 | 91 | 36.5 |
| Low price of animal sell | 50 | 29.8 | 38 | 46.9 | 88 | 35.3 |
| Not enough capital for livestock investment | 53 | 31.5 | 25 | 30.9 | 78 | 31.3 |
| Animal loss | 47 | 28.0 | 26 | 32.1 | 73 | 29.3 |
| No market for selling animal | 29 | 17.3 | 27 | 33.3 | 56 | 22.5 |
| Total | 449 | 267.3 | 256 | 316.0 | 705 | 283.1 |

Source: Individual interview in six villages

As indicated in Table 6.16, the major problems faced by the farmers were: lack of land (44% of villagers); low yield (43.4%); lack of water due to insufficiency of irrigation (30.5%); high investment cost (29.3%) and pest destroy (28%).

Table 6.16: Agronomy problems faced by farmers in 6 villages (Multiple responses)

| | Female | | Males | | Total | |
|----------------------------------|------------|--------------|------------|--------------|------------|--------------|
| | N | % | N | % | N | % |
| Lack of land | 70 | 41.7 | 41 | 50.6 | 111 | 44.6 |
| Low productivity/yield | 66 | 39.3 | 42 | 51.9 | 108 | 43.4 |
| Not enough water for cultivation | 47 | 28.0 | 29 | 35.8 | 76 | 30.5 |
| High investment cost | 39 | 23.2 | 34 | 42.0 | 73 | 29.3 |
| Pest | 40 | 23.8 | 31 | 38.3 | 71 | 28.5 |
| Total | 262 | 156.0 | 177 | 218.5 | 439 | 176.3 |

Source: Individual interview in six villages

When asked about the problem of water utility for agriculture practice, only 16.9 percent found no any problem at all. Not enough water or lack of irrigation was the key challenges as cited by 47 percent of households. Lack of water in dry seasons (or drought) is another constraint. A small problem is floods in wet season which damage villagers' crop. About 6 percent said that they have water sources, but do not have capacity to deliver it to the agriculture plots, for example, no water pipe or pump is available.

Table 6.17: Problem of water utility for agriculture

| | Yes | | No | | Total | |
|-----------------------------|------------|------------|-----------|------------|------------|------------|
| | No | % | No | % | No | % |
| No problem | 39 | 18.7 | 3 | 7.5 | 42 | 16.9 |
| Not enough water | 91 | 43.5 | 26 | 65.0 | 117 | 47.0 |
| Lack of water in dry season | 53 | 25.4 | 9 | 22.5 | 62 | 24.9 |
| Flood in wet season | 11 | 5.3 | 2 | 5.0 | 13 | 5.2 |
| Difficult to delivery water | 15 | 7.2 | 0 | 0.0 | 15 | 6.0 |
| Total | 209 | 100 | 40 | 100 | 249 | 100 |

Source: Individual interview in six villages

6.2. Perceptions of Poverty

6.2.1. Perceptions from individual interviews

As shown in Table 6.18, villagers define poverty in different dimensions including lack of basic need, asset ownership, job security, and social perspective. Most villagers (22.8 percent) of women said that lack of land was a sign of poverty. Low income, not enough food, unemployment, poor health is defined as a poor household. Generally there is no big different perspective between women and men in determination of poverty. However, some women define a household with no husband, family work burden, and a household which has the laziness of family members are defined as a poor household. Male respondents do not give this perspective. This reflect the fact that women are more involved in household works than male family members and some female members are depended on male members or husband for making a living. Single mother or female headed households defined this type of household is poor.

| | Women | | Men | | Total | |
|--------------------------|------------|------------|------------|------------|------------|------------|
| | Count | % | Count | % | Count | % |
| Lack of land | 92 | 25.7 | 27 | 16.6 | 119 | 22.8 |
| Low household income | 63 | 17.6 | 40 | 24.5 | 103 | 19.8 |
| Not enough food (rice) | 50 | 14 | 37 | 22.7 | 87 | 16.7 |
| Unemployment | 49 | 13.7 | 14 | 8.6 | 63 | 12.1 |
| Poor health | 30 | 8.4 | 16 | 9.8 | 46 | 8.8 |
| Low education | 28 | 7.8 | 9 | 5.5 | 37 | 7.1 |
| Poor housing | 15 | 4.2 | 17 | 10.4 | 32 | 6.1 |
| Lack of household labour | 12 | 3.4 | 1 | 0.6 | 13 | 2.5 |
| Poor clothes | 4 | 1.1 | 1 | 0.6 | 5 | 1 |
| Laziness of family | 5 | 1.4 | 0 | 0 | 5 | 1 |
| No husband | 4 | 1.1 | 0 | 0 | 4 | 0.8 |
| Family work burden | 4 | 1.1 | 0 | 0 | 4 | 0.8 |
| Family debt | 2 | 0.6 | 1 | 0.6 | 3 | 0.6 |
| Total | 358 | 100 | 163 | 100 | 521 | 100 |

Source: Individual interviews in six villages; Note: Multiple responses

6.2.2. Perceptions from Focus Group Discussions

There are no big differences between women and men, regarding the various well-being categories, their criteria and proportions of households in each category. Both groups were more concerned with the issues of employment, food security, land for agricultural product, household asset as well as those of nonuse of family planning methods and the consequent fertility and high production of babies on the part of the poor. More female than male defined a poor household with domestic violence and poverty is a meaning of low participation in decision making. Table 6.19 summaries the criteria of well-being and poverty.

| Table 6.19: Criteria for well-being and poverty cited by different village groups | | |
|---|--|---|
| Group | Well-being criteria | Poverty criteria |
| FGNP | <ul style="list-style-type: none"> • Have strong health and happiness family • Have money • Have car, good house, land, have equipment, have animals • Have enough rice to eat • Children can go to school • Permanent job and stable salary • Who is active and patience (not lazy) | <ul style="list-style-type: none"> • Weak health • Too many children • Have no sufficient land for agriculture • lack of job and income • Low education and illiteracy • Rice shortage • Low education • Lack of economic opportunity • Lack of skill labour for livelihood • Do not have permanent job • Lack of political participation • Domestic violence |
| MGNP | <ul style="list-style-type: none"> • Have strong health and happiness family • Have money • Have car, good house, land, have equipment, have animals • Have enough rice to eat • Children can go to school Permanent job and stable salary • Have enough land for agriculture cultivation • Eat good food and sleep well (no pressure) • Have high education | <ul style="list-style-type: none"> • Poor health • Have many children • Lack of agriculture land • Lack of job and income • Low education and illiteracy • Lack of fund • Lack of labor • Lack of seed • Lack of vocational skills • Have no new concept |
| FGP | <ul style="list-style-type: none"> • Have strong health and happiness family • Have money • Have car, good house, land, have rice to eat, have equipment, have animals • Have enough rice to eat • Children can go to school • Permanent job and stable salary | <ul style="list-style-type: none"> • Have weak health • Have many children • Have no sufficient land for agriculture • Lack of job and income • Low education and illiteracy • No life skill • Insecure livelihood • No husband • Was excluded from decision making • Domestic violence • Hard life and no time to rest |
| MGP | <ul style="list-style-type: none"> • Have strong health and happy family • Have money • Have good house, • Have land • Have household assets, • Have animals • Have enough rice to eat • Children can go to school • Have permanent job and stable salary | <ul style="list-style-type: none"> • Have weak health • Have many children • Have no sufficient land for agriculture • Not enough land and forest area for livelihood • Lack of job and income • Low education and illiteracy • Have no fund for agriculture investment |

View of the non-poor groups

Most common perception of well-being of a household is to have enough income and employment opportunity throughout the year. Some villagers refer to the basic needs. To maintain a good quality of life, a household or an individual should own a good house and accommodate healthy and disease and anxiety free family members. Wearing good clothes and taking food to the satisfaction as well as sending children to schools are also features of these households. Wellbeing can be defined by certain characteristics such as being the owner of a house, having a job, food, facility services, good health and some animals. In many cases, land is usually mentioned as an important factor that points out good living conditions. In all villages, the non-poor groups were perceived to have money and live in beautiful and good houses with boreholes or tap water. They eat good food, wear good clothes, have access to medical services and are healthy.

The characteristics of each category according to men and women showed notable variations. Besides the above features, in some places, men linked these features with the ability to live in extended family. A significant number of women placed emphasis on having a male earning member – good husband or son.

Case Study 1

Mrs. Vanh (fictitious name) is a 55 year old widowed woman who lives in Nammo Village, Anouvong district, Saisomboun Province. She is ethnic Thaidam and animistic, believing in the powers of various spirits over her life and well-being. In total she has four children, two of them married and living in their own separate houses. The other two children who live with her dropped out of school after grade five.

Since Mrs. Vanh's husband died in 1995 she has been the main provider for her family. When her husband was alive, he was the main laborer. She and her husband worked together, cultivating upland rice for their family's consumption. The rice production was enough to support the family. After her husband died she was very distraught about losing the head of the family. She did not have anyone to care about her, or to provide income for the family in order to send her children to school. Since her husband's death she has tried to work hard to support her children and enable them to survive. Now, because of all the hard labor, she has many health issues such as stomach and liver pain, lung problems and heart disease.

Mrs. Vanh said that considers herself to be poor, and becoming poorer all the time because of the rice shortage in her family. She has no money for her child to study school beyond 5th grade, or to care for her family's clothes and other needs. She does not have land appropriate for building a house, or sufficient land for agricultural cultivation. She feels lonely; many people look down on her because she is a poor widow, and she lacks connections with outside society. Even though her family is poor, she tries to supplement her income by growing more vegetables along the bank of a nearby stream, which she sells to the Lane Xang Mineral Company to make additional income. She also collects Non-Timber Forest Products (NTFP) and weaves bamboo to sell. At some very difficult times, some neighbors have shared food for her family to eat, and the Lao Red Cross has provided the clothes for them. Her aspirations are to secure permanent land for agricultural cultivation, and to have enough income to send her children to continue to study to a higher level, and care for herself and her family.

Women's definitions of *well-being* were more diverse than those of the men in some villages. All groups defined them predominantly in terms of access to income and asset ownership, quality of health, nutrition and access to development opportunities. Women's definitions of well-being also included significantly more aspects of family and community life, i.e. "harmonious family life or family security, have voice in community development and have good relationship *with neighbors*". Men's choices for family and community life aspects of well-being were more often linked to social prestige.

The common source of livelihood of the non-poor households is farming on moderate amount of land (between one and two hectares). They have their own cattle, draught power and agricultural equipment. In

Nammo site, due to the closeness of the community to a mining zone, some members of these households earn from working at factories.

The “non-poor households” were associated with a proportionately high level of household asset ownership with assured sufficiency. They had regular and sufficient incomes, owned their homes and more capital assets, and could access necessary health and educational services even if not the best quality. Their children could expect to complete high school and aspire to a better future with regular jobs. They do not have housing problem although structures of their houses are not always as good as of the rich. Some of the households can afford electric fan and TV set. They can buy sufficient clothes a year and are able to bear cost of education of children and health care of family members.

View of the poor groups

Land less

The poor are landless. Wage labour is the main source of their livelihood. In all villages, regardless of the seasonality, the helpless poor suffer from food deficit and go on hungry, particularly the children. In many cases, both men and women of these households work as wage labourers.

Illness of one member, particularly earning member, causes further helplessness to these households. They do not own cattle or any other domestic resources to fall back upon during crises. On the other hand, their frequent crisis and subsequent indebtedness to moneylenders compel them to use up a substantial portion of their better income in the peak season. They do not have access to bank loan. Women at a village in said that the poor also do not get help from neighbours.

Case Study 2

Mum Khamla (fictitious name) is 60 years old and has been living in the Nammo village since she was born. She is ethnic Khmu and has two children: one son who lives with her, and a married son who lives with his wife. Her religious beliefs are animistic, worshipping various spirits that she believes control or influence health, prosperity, crops and other aspects of her life. Since her husband died in 2003, she has been the head of the household.

When her husband was alive, he was the main laborer of the family. They cultivated upland rice, producing enough for their family’s consumption and support. After her husband died, Mum Khamla worried desperately because of the loss of the main laborer in the family, and the family suffered a rice shortage even though she continued to practice slash and burn cultivation of the upland rice.

Mum Khamla says that her family is poor because of she is not able to produce enough rice to provide for her family’s needs. They did not have any money to send her child to school, or any opportunity to join a development project to improve her situation. Even though her family is poor, she tries to help herself through slash and burn cultivation of upland rice, and growing vegetables to sell for additional rice. She also engages in Non-Timber Forest Production (NTFP), collecting and weaving bamboo to sell for additional income.

A major problem is that Mum Khamla’s health is not good. Some health problems prevent her from being able to do heavy work, therefore she cannot hire out as a laborer. Her family’s survival is largely dependent on the labor of her second child. The only possible solution she sees to solve the problem of supporting her family is to increase her income by the cultivation of the more vegetables and the collection of more NTFP. Mum Khamla’s only other hopes are that her son will secure a permanent job for her son, or that they would have more land for agricultural practice and son will continue to be able to work hard and provide the labor.

The poor were widely perceived across villages to food insecurity. They are unable to feed themselves and their family adequately and lack of money. The poor own very small house and some are living with their parents, or their living conditions might be unhygienic and inadequate. In some cases participants noted that the poor are often in debt or have to sell inherited assets to survive.

They are unable to afford or access medical facilities, electricity, water and other basic services. Lack of security and peace was manifested in some instances in alcoholism and in domestic arguments, with frequent quarreling widely cited as a characteristic of poverty. The vulnerability of the poor was described in one community. The perceived physical or pathological characteristics of the poor were also noted in some instances, including physical handicap and indolence.

Case Study 3

Mrs. Noy (fictitious name) is a 53 year old divorced woman, living in Nammo village, Anouvong district, Saisomboun Province. She is ethnic Khmu and has animistic beliefs in many spiritual powers. Her livelihood is slash and burn agriculture. When she was only 14 years old, her parent wanted her to marry so she married in 1995. They were married for 6 years and had two children.

Then her husband began to drink and gamble more and more. Mrs. Noy decided that she could not continue to stay with him, and so she divorced him. Later on she met and fell in love with another man, and thought that this man was good. She decided to marry with him. Unfortunately for her, the second husband was worse than the first one and she decided to divorce again. Now she lives with her children and does not want to marry any more.

Mrs. Noy said that her disadvantage is the lack of warmth and care, lack of support from family and friends, loneliness, and no opportunity to participate in development projects. Lack of land for building a house, lack of water for family consumption, lack of agriculture land for cultivation, lack of money, a shortage of rice and lack of clothes are all problems for her. Because of she is so poor, her relatives do not want to get involved, and so do not help when she gets sick. As a result, she must use credit to take medicine from the health center, and then repay afterwards. Even though now days she feels better and does not think about her husband anymore, still her income is not enough to support her family. Mrs. Noy would like for her children to study to a high level, and for them to have permanent jobs. She would also like to secure permanent land for agricultural cultivation.

Live Stock and Farming/Cultivation

In four out of the six rural sites, the possession of bovine cattle is a criterion of wellbeing. It is possible to note that such persons known as the ones who have the most are those who have cattle. This type of property is directly associated with the size of the land: “more land”- “cows”, cattle raising and pasture ground”.

6.3. Causes and Impact of Poverty

6.3.1. Results of individual interviews

Causes of poverty are primarily seen by all groups as the lack of the means to generate income. All forces which take these means away from people are the factors causing poverty. Table 6.20 and 6.21 show the main causes of poverty. The most important causes of poverty were identified as: 1) lack of agriculture land; 2) low education; 3) Natural resources degradation; 4) lack of capital for income generation activities; 5) lack of job opportunities. These being the primary causes, people mapped them along with secondary causes which arise from the primary ones and cause further impoverishment, e.g. family indebtedness, gambling

and drinking. There were no major gender differences in identifying the causes of poverty, except that the women identified “having many wives or many children’ as a direct cause far more often than men did.

Table 6.20: Main causes of poverty in the villages cited by respondents (multiple responses)

| Causes of poverty | Women | | Men | | Total | |
|--|-------------|------------|------------|------------|-------------|------------|
| | No | % | No | % | No | % |
| Lack of land for production activity | 146 | 6.7 | 58 | 7.3 | 204 | 7.0 |
| Low education and illiteracy | 128 | 6.0 | 50 | 6.3 | 178 | 6.1 |
| Natural resources degradation | 129 | 6.1 | 44 | 5.5 | 173 | 5.9 |
| Lack of fund/credits for investment and IGA | 107 | 5.0 | 63 | 7.9 | 170 | 5.8 |
| No job/unemployment | 114 | 5.4 | 47 | 5.9 | 161 | 5.5 |
| Illness and poor health care | 78 | 3.7 | 43 | 5.4 | 121 | 4.1 |
| Lack of fish and difficult to collect forest foods | 83 | 3.9 | 31 | 3.9 | 114 | 3.9 |
| Low wage rate | 83 | 3.9 | 26 | 3.3 | 109 | 3.7 |
| Family indebtedness and homeless | 84 | 4.0 | 25 | 3.1 | 109 | 3.7 |
| Lack of water use in household | 78 | 3.7 | 25 | 3.1 | 103 | 3.5 |
| Lack of opportunity/Overlooking | 85 | 4.0 | 15 | 1.9 | 100 | 3.4 |
| No market | 70 | 3.3 | 30 | 3.8 | 100 | 3.4 |
| Lack of water for agriculture production | 67 | 3.2 | 31 | 3.9 | 98 | 3.4 |
| Lack of vehicle | 55 | 2.6 | 43 | 5.4 | 98 | 3.4 |
| Lack of transportation infrastructures | 62 | 2.9 | 35 | 4.4 | 97 | 3.3 |
| Lack of support and service | 69 | 3.2 | 25 | 3.1 | 94 | 3.2 |
| Laziness and drinking | 72 | 3.4 | 18 | 2.3 | 90 | 3.1 |
| High of productive cost | 61 | 2.9 | 26 | 3.3 | 87 | 3.0 |
| Drug addiction | 68 | 3.2 | 14 | 1.8 | 82 | 2.8 |
| Lack of electricity | 53 | 2.5 | 25 | 3.1 | 78 | 2.7 |
| Wasteful/careless of spending money | 63 | 3.0 | 15 | 1.9 | 78 | 2.7 |
| Gambling | 58 | 2.7 | 16 | 2.0 | 74 | 2.5 |
| Lack of rice production equipment | 46 | 2.2 | 26 | 3.3 | 72 | 2.5 |
| No small and medium enterprise | 56 | 2.6 | 15 | 1.9 | 71 | 2.4 |
| Traditional practice | 54 | 2.5 | 11 | 1.4 | 65 | 2.2 |
| Have many wives | 42 | 2.0 | 16 | 2.0 | 58 | 2.0 |
| Unlucky | 52 | 2.4 | 6 | 0.8 | 58 | 2.0 |
| Over consumption | 36 | 1.7 | 8 | 1.0 | 44 | 1.5 |
| Lack of fishing equipments | 29 | 1.4 | 13 | 1.6 | 42 | 1.4 |
| Total | 2128 | 100 | 800 | 100 | 2928 | 100 |

Source: Individual interview in six villages

The main causes of poverty across both MHH and FHH are lack of land for agricultural production, natural resource degradation, low education, lack of fund for investment, and unemployment. However, although the main causes of poverty are similar, the rankings of the issues differ. The FHH emphasized the lack of good health care service is the most important factor influencing poverty.

Table 6.21: Cause of poverty in the villages cited by the head of households

| | | MHH | | FHH | | Total | |
|--|---------------|------------|--------------|-----------|--------------|------------|--------------|
| | | Count | % | Count | % | Count | % |
| Natural resources degradation | Main cause | 144 | 68.9 | 29 | 72.5 | 173 | 69.5 |
| | Second cause | 15 | 7.2 | 5 | 12.5 | 20 | 8.0 |
| | Not the cause | 50 | 23.9 | 6 | 15.0 | 56 | 22.5 |
| Lack of land for production activity | Main cause | 174 | 83.3 | 30 | 75.0 | 204 | 81.9 |
| | Second cause | 14 | 6.7 | 8 | 20.0 | 22 | 8.8 |
| | Not the cause | 21 | 10.0 | 2 | 5.0 | 23 | 9.2 |
| Lack of water use in household | Main cause | 93 | 44.5 | 10 | 25.0 | 103 | 41.4 |
| | Second cause | 58 | 27.8 | 16 | 40.0 | 74 | 29.7 |
| | Not the cause | 58 | 27.8 | 14 | 35.0 | 72 | 28.9 |
| Lack of water for agriculture production | Main cause | 87 | 41.6 | 11 | 27.5 | 98 | 39.4 |
| | Second cause | 73 | 34.9 | 20 | 50.0 | 93 | 37.3 |
| | Not the cause | 49 | 23.4 | 9 | 22.5 | 58 | 23.3 |
| Low education and illiteracy | Main cause | 149 | 71.3 | 29 | 72.5 | 178 | 71.5 |
| | Second cause | 35 | 16.7 | 7 | 17.5 | 42 | 16.9 |
| | Not the cause | 25 | 12.0 | 4 | 10.0 | 29 | 11.6 |
| Lack of fund/credits for investment | Main cause | 148 | 70.8 | 22 | 55.0 | 170 | 68.3 |
| | Second cause | 40 | 19.1 | 13 | 32.5 | 53 | 21.3 |
| | Not the cause | 21 | 10.0 | 5 | 12.5 | 26 | 10.4 |
| No job/unemployment | Main cause | 137 | 65.6 | 24 | 60.0 | 161 | 64.7 |
| | Second cause | 39 | 18.7 | 9 | 22.5 | 48 | 19.3 |
| | Not the cause | 33 | 15.8 | 7 | 17.5 | 40 | 16.1 |
| Illness and poor health care | Main cause | 92 | 44.0 | 29 | 72.5 | 121 | 48.6 |
| | Second cause | 68 | 32.5 | 5 | 12.5 | 73 | 29.3 |
| | Not the cause | 49 | 23.4 | 6 | 15.0 | 55 | 22.1 |
| Low wage rate | Main cause | 84 | 40.2 | 25 | 62.5 | 109 | 43.8 |
| | Second cause | 71 | 34.0 | 9 | 22.5 | 80 | 32.1 |
| | Not the cause | 54 | 25.8 | 6 | 15.0 | 60 | 24.1 |
| Lack of natural fish and difficult to collect forest foods | Main cause | 93 | 44.5 | 21 | 52.5 | 114 | 45.8 |
| | Second cause | 53 | 25.4 | 4 | 10.0 | 57 | 22.9 |
| | Not the cause | 63 | 30.1 | 15 | 37.5 | 78 | 31.3 |
| Total | | 209 | 100.0 | 40 | 100.0 | 249 | 100.0 |

Sources: Individual interview from six poor villages

Lack of agricultural land: It was reported from most discussion groups that most households have less land holding for adequate sustainable agricultural production comparing with their family sizes. In all sites, participants said that many poor people do not have even a single piece of land to farm on so as to supplement their livelihood resources. The target villages were cultivating less than an average of 1 hectare per household for upland rice farming, which is far below the minimum of 1.4 ha per person usually considered necessary for rice or staple sufficiency for an average household of five¹⁸.

Lack of farm inputs: Several factors were again cited as having led to the scarcity of farm inputs. One of the factors that were cited was the rise in the prices of fertilizer beyond the affordability of most people. The

¹⁸ Lamet (1937), *Hill Peasants in French Indochina*

other factor that was reported to have made farm inputs to be scarce was the non-existent of farmer's association through which, the participants said most people were getting input credits in the past years.

Poor health care: The poor health is the cause of poverty. According to the focus group discussions, loss of key family members can lead to poverty because there is no main earner for a living. The household, especially FHH becomes more vulnerable. Women have no strategy to deal with them. Following highlights a case study.

Case Study 4

Mrs. Chanthy (fictitious name) is a 45 year old widow who lives in Namyone village, Anouvong district, Saisomboun Province. She is ethnic Khmu and animistic, believing in the powers of various spirits. She was married to a soldier, with whom she had 3 children (one boy and two girls). Her husband died from a disease in 2008, and since that time she has been the main person to provide for and take care of her family.

Mrs. Chanthy was born in Natou village, where she had 0.6 hectare of paddy land. Although Natou village (Anouvong district) did not have as good road access as Namyone village does, she and her husband nevertheless had good living conditions there. But when Natou village was flooded as a result of the Namngum II hydro power project, they needed to be resettled, and were moved to Namyone village. Her husband suffered from a long sickness which cost a lot of money. Although they did receive some financial compensation from the Namngum II Hydro Power Project, most of the money was spent on caring for her sick husband. When her husband was alive, Mrs. Chanthy depended on him for most of their family's income. After her husband died she faced many problems in caring for her family. She cannot read or write, and her capacity for earning an income is small. She lacks training about managing money, generally has little knowledge, and lacks property and labor for agriculture production to support children to school. The house where she lives is a temporary structure; there is a shortage of rice, and not enough money to buy food, clothes and medicine for health care in her family. Sometimes she is not invited to community social events because of her poverty.

When she and her children have illnesses that are not very serious, they go to the community health center for free care. Mrs. Chanthy tries to help herself by cultivating vegetables and fishing for fish for her family to eat. She cuts fire wood to sell, and collects Non-Timber Forest Production (NTFP) and weaves bamboo to sell to supplement her family's income.

Economy: The economic diversity of households is limited. The majority of people depend upon livestock and up rice farming. Forest resources are under-exploited locally by foreign investors. Many young people have moved into the urban cities where the opportunities for employment were meager. Men do little useful economic activity and local employment is very limited. Women are often the bread-winners of a family. The absences of nearby markets for the local products like livestock and farm produce is another cause of poverty.

The inequality of opportunities regarding women's access to paid employment is prejudicial to their chances of achieving economic autonomy. This perspective reveals the habitually hidden poverty that exists in certain groups. For example, individuals may live in non-poor households, but do not have their own income that would allow them to satisfy their needs in an autonomous manner. This is the situation of a great number of married women living in households who, due to their predominantly domestic activity, are placed in a position of dependence as regards the head of household.

Unemployment: Most men and women mainly depend on agriculture. The agriculture can provide employment to the wage labourers only during the sowing and harvesting periods of rice. Unemployment was described a reason for poverty and a result of poverty in that it is difficult to find another a job once your living standard has been affected by it. Loss of employment was also identified by poor groups in different sites, both male and female, as a loss of self-esteem. People discussed their inability to find a

regular job as making them feel worthless to themselves and to their families. Unemployment was reported to have made most people to be poor because they do not have the required livelihood resource such that finding money, food, clothes, and peace of mind are nightmares to most of the unemployed people. Unemployment was also reported to have made some people to resort to stealing as their survival strategy.

Laziness: The main cause of poverty identified by some focus groups discussion was 'laziness'. This is characterized as having low interest in a good life, passivity, lack of motivation and low interest in life development, dependency thinking, and reliance on assistance from others. Some households were reported that they normally have less agricultural production because its household members, particularly the male head of households who are lazy and that all family members are dependent on his career.

Case Study 5

Mrs. Nang (fictitious name) is ethnic Khmu and 44 years old. She married in 1989 and has 4 children. Two of her children are married and live in their separate houses; the other two children dropped out of school after grade 3 and still live with her. Her home is in Seansai village, Vientiane Province. She is animistic, worshiping and believing in various spirits.

In the past, Mrs. Nang's husband was in the Lao military and their family life was happy. Her husband came out of the military 7 years ago due to mental problems. Her husband is very lazy. Since then her family has fallen into a very difficult situation.

She explained that her main disadvantages are health problems and disability. She also lacks money for health care, and opportunities for improving her life. Mrs. Nang does not have support or friends. She has limited communication with the society around her. She is very much concerned about her health as well as her husband's health. Sometimes she has to go into debt to the health center in order to buy medicine for herself and her husband. Collection of NTFP is the primary way she earns a living.

6.3.2. Results of focus group interviews

Poverty and ill-being were attributed to numerous and varied causes and a whole range of consequent impacts. The villagers identified four main causes of poverty/ill-being namely; 1) too many dependents, illness, lack of capital/access to capital to operate the livelihood; 2) unemployment and loss of jobs along with lack of alternative earning opportunities; 3) low-educational levels and lack of skills for earning; and 4) exorbitant rise in prices of food and essential commodities. This study indicates that high prices of commodities, poor or reduced harvests, diseases, unemployment and illiteracy were the common main causes of poverty that were reported in all the sites that were visited. At the same time, most participants from across the sites also indicated that poverty mainly leads to malnutrition, debts, worries, theft/murders, dependency on casual labour, hunger and illiteracy.

The main cause of poverty across both poor and non-poor group is unemployment. However, although the remaining causes of poverty are similar, the rankings of the issues differ. The poor emphasized the lack of education and skills training as the next most important factor influencing poverty due to their reliance on industries for employment. All groups concluded that two main causes of poverty are unemployment, lack of agriculture land, and lack of education.

Table 6.22: Causes and impacts of poverty cited by non-poor groups in 6 villages

| Causes of Poverty | Impacts of Poverty |
|--|---|
| <ol style="list-style-type: none"> 1) Limited agricultural land 2) Lack of job 3) Little knowledge 4) Traditional method use for agricultural production 5) Reduction of natural food (NTFP) 6) People not actively work (lazy) 7) Health problem and sickness of family members 8) Natural disaster (low water level in river in dry season and soil erosion in rainy season), 9) Animal disease (buffalo and cow dead), 10) Climate change (the rain is not come in time) 11) Men get more than one wife 12) Lack of marketing skills 13) No grazing land for animal raising (cow and buffalo) 14) Pest 15) Low price of agriculture production 16) Too many children 17) Low education level/ illiteracy 18) Low income 19) Lack of labor 20) Population is increasing 21) Bad road 22) School (primary grade 4 and 5 and secondary school is far). | <ol style="list-style-type: none"> 1) Social change and uncertain livelihood 2) Hunger and malnutrition 3) Primary or lower secondary students get out of the school to work with mining company 4) Social problem of thief and drug addicts 5) Husband and wife argument caused by drinking 6) Bad environment due to the chemical problem from the mining site, people get sick 7) Family could not support their family members to continue higher education/university level 8) Malnutrition, weak and sickness 9) Hopelessness 10) Children don't attend school because they must help their parents 11) Divorce 12) Poor care of children - sickness, truancy, drugs, 13) Women become sex workers |

Sources: Results of 42 focus group discussions in six villages

| Causes of poverty | | Impacts of poverty | |
|-------------------|---|--------------------|---|
| 1) | Lack of an appropriate agriculture land | 1) | Exclusion from social contact |
| 2) | Health problem | 2) | Become sex workers |
| 3) | Lack of labor | 3) | Theft and crime increased |
| 4) | Have no permanent job | 4) | Food insecurity (Hunger) |
| 5) | Low education level | 5) | Migration to urban and other countries seeking for jobs |
| 6) | High investment cost in agriculture work | 6) | Lack of thrust in public services |
| 7) | Lack of equipment for agriculture practice | 7) | Lack of education |
| 8) | No agriculture land | 8) | Health is getting worse |
| 9) | Lack of job | 9) | Stereotyped |
| 10) | No vocational skills | 10) | No incomes |
| 11) | Too many children | 11) | No jobs |
| 12) | None Timber Forest Product is scarcity | 12) | Social change and uncertain livelihood |
| 13) | Drug addict | 13) | More social problems |
| 14) | Have more than one wife | | |
| 15) | Some women could not speak well in Lao-Tai language, | | |
| 16) | Women and certain ethnic groups underrepresented in local leadership | | |
| 17) | Lack of non- farm income activities | | |
| 18) | Poor development | | |
| 19) | Lack of or limited land for agriculture production | | |
| 20) | None Timber Forest Production is scarcity and heavy reduction | | |
| 21) | Lack of labor in their families | | |
| 22) | Death of family members who are the main income earning in the family | | |
| 23) | Lack of opportunity to get work (especially to work in Lane Xang Mineral company) | | |
| 24) | Limited credit access | | |
| 25) | Natural disaster (agricultural land damage by landslide/erosion) | | |

Source: Results of 42 focus group discussions in six villages

6.4. Poverty Changes

The respondents were asked if the poverty was changed within their households. In general, about 57 percent of the participants said that their poverty level was decreased. While about 27.7 percent of the households said that their poverty are increasing. About 9.2 percent cited the same level of poverty and no change during the last ten years. Lacks of permanent job, lack of agricultural land, insecure livelihood, and loss of family members who are main family earners are main reasons for poverty increase.

| | Lao Tai | | Mon Khmer | | Hmong Mien | | Women | | Men | | Total | |
|--------------|-----------|------------|------------|------------|------------|------------|------------|------------|-----------|------------|------------|------------|
| | No | % | No | % | No | % | No | % | No | % | No | % |
| Increased | 9 | 30.0 | 43 | 27.6 | 17 | 27.4 | 40 | 23.8 | 29 | 35.8 | 69 | 27.7 |
| Decreased | 18 | 60.0 | 87 | 55.8 | 37 | 59.7 | 99 | 58.9 | 43 | 53.1 | 142 | 57.0 |
| Stable | 2 | 6.7 | 18 | 11.5 | 3 | 4.8 | 15 | 8.9 | 8 | 9.9 | 23 | 9.2 |
| Do not know | 1 | 3.3 | 6 | 3.9 | 3 | 4.8 | 10 | 6.0 | 0 | 0.0 | 10 | 4.0 |
| N/A | 0 | 0 | 2 | 1.3 | 2 | 3.2 | 4 | 2.4 | 1 | 1.2 | 5 | 2.0 |
| Total | 30 | 100 | 156 | 100 | 62 | 100 | 168 | 100 | 81 | 100 | 249 | 100 |

Source: Individual interviews in six villages

6.5. Priorities of the Poor

The common problems that run through all villages are food insecurity, not enough agricultural land, lack of potable water, lack of markets for their agricultural products, lack of health facilities, lack of educational facilities, and poor sanitation. We have seen that experiences of poverty differ significantly according to social distinctions and gender dimension. Perhaps even to a greater extent, the priorities for action expressed by the poor are diverse and contextually specific. FHH have more problems than MHH such as lack of income (95% Vs. 76.6%), rice shortage (87.5% Vs. 52.6%), unemployment (72.5% Vs.50.2%), Lack of land or land loss (70% Vs.44%). Moreover, FHH are lacking of opportunity for development or participation in the public space than MHH as well as facing more family workload and labor shortage. This is more difficult among FHH who practice slash and burn cultivation which require intensive labor during the cycle of upland rice farming system.

Table 6.25: Problems faced by the head of households (multiple responses)

| | MHH (209 households) | | FHH (40 households) | | Total (249 households) | |
|---------------------------------------|-----------------------|------|---------------------|------|------------------------|------|
| | Count | % | Count | % | Count | % |
| Lack of income | 160 | 76.6 | 38 | 95 | 198 | 79.5 |
| Lack of knowledge/skills | 114 | 54.5 | 34 | 85 | 148 | 59.4 |
| Rice/food shortage | 110 | 52.6 | 35 | 87.5 | 145 | 58.2 |
| Unemployment | 105 | 50.2 | 29 | 72.5 | 134 | 53.8 |
| Lack of land or land loss | 92 | 44 | 28 | 70 | 120 | 48.2 |
| Poor houses | 88 | 42.1 | 23 | 57.5 | 111 | 44.6 |
| Lack of clean water | 76 | 36.4 | 24 | 60 | 100 | 40.2 |
| Lack of development opportunity | 58 | 27.8 | 26 | 65 | 84 | 33.7 |
| No kindergarten | 59 | 28.2 | 22 | 55 | 81 | 32.5 |
| Family debt | 62 | 29.7 | 13 | 32.5 | 75 | 30.1 |
| Labor shortage | 57 | 27.3 | 10 | 25 | 67 | 26.9 |
| Business does not make profits | 46 | 22 | 21 | 52.5 | 67 | 26.9 |
| Health problem | 52 | 24.9 | 13 | 32.5 | 65 | 26.1 |
| Low capacity/not confident to speak | 49 | 23.4 | 15 | 37.5 | 64 | 25.7 |
| Travelling | 39 | 18.7 | 15 | 37.5 | 54 | 21.7 |
| Family workload/burden | 28 | 13.4 | 15 | 37.5 | 43 | 17.3 |
| High cost of electricity or no access | 25 | 12 | 14 | 35 | 39 | 15.7 |
| Domestic violence | 23 | 11 | 0 | 0 | 23 | 9.2 |
| Lonely/exclusion | 20 | 9.6 | 2 | 5 | 22 | 8.8 |
| Druq addiction | 9 | 4.3 | 3 | 7.5 | 12 | 4.8 |
| Gambling | 6 | 2.9 | 1 | 2.5 | 7 | 2.8 |

Source: Individual interviews in six villages

According to results in different focus group discussions, the most common problem are food insecurity, lack of job; no livelihood skills, lack of agricultural land and inputs, lack of capital to start a business, low level of education, and poor health care services. Followings are detail explanations:

Not enough land

Most land plots are small, especially in the dry season. In 2012/13, arable land of poor farmers averaged just over 0.25 hectare per family member during the wet season. Land is critical for agricultural production. Currently, many farmers suffer from lack of arable land. Throughout the villages this is one of the most important problems, especially for the new generations that are dependent on their parents small land extensions. Soil was degraded because of the excessive use of chemical fertilizer result in low productivity.

Traditionally, these fields have been managed without any form of irrigation. Farmers now see irrigation as an alternative strategy that would enable them to positively manage their productive cycle.

No job

Although everything is equally important which indicated their difficulty in ranking the problems and priorities of the village, unemployment was one of the common problems followed by natural calamity, health and sanitation, education, infrastructure. Job scarcity was mentioned as a problem both for men and women despite slight variations in ranking. A little explanation is relevant in this regard. More often job scarcity referred to the seasonal unemployment. It did not discount the fact that agriculture, the main source of livelihood in the rural areas with tremendous seasonal variation, had limited scope to employ large number of men and women labourers. Absence of alternative employment opportunity forces the poor to seek for wage labour in the agriculture.

Lack of water

Water or its shortage emerged as the main problem in all rural sites. Women scored water as their important priority. This was explained by the fact that economic production in their area is very much based on water in some villages. They also reported that water shortage is a very common problem which affects everyone, even those who have capital, which is mostly in the form of livestock and domestic consumption.

Poor education

During the focus group discussion, when we asked about why there seemed to be more children out of school. The response was emphatic: “We have tried our best to send our children to school” But the poor cannot meet the payments for fees, uniforms and supplementary costs and so our children are turned away. They were shy and did not go to school because they do not have good clothes like other rich children.

Lack of health care access

Similarly, health care dispensaries lack medicines. Health care for the pregnant and those under five is often did not meet their demand by mothers. In sum, the costs of these services are making people more difficulty. The poor could not pay or do without the service, resulting in poor health education among the youths and health consequences associated with minimal health care.

Family working burden

Women in most villages said that they have spent considerably more time on the family work than men in addition to their other duties. Chronic illness of the family members, especially husband deprives a woman both of an additional breadwinner and of her ability to work herself, as she needs to take days off from wage labor to care for the chronically ill. A maternal health failure also cuts severely into women’s ability to manage family income.

| No | PROBLEM | Thamtherb | | | | Houvnaymen | | | | Houvdokmai | | | |
|----|---|-----------|------|-----|-----|------------|------|-----|-----|------------|------|-----|-----|
| | | FGNP | MGNP | FGP | MGP | FGNP | MGNP | FGP | MGP | FGNP | MGNP | FGP | MGP |
| 1 | Lack of agricultural land | - | - | 1 | 3 | - | - | 2 | 1 | - | 6 | 1 | 2 |
| 2 | Inadequate food – hunger | - | 10 | 2 | 2 | - | - | 1 | 2 | - | - | 2 | 1 |
| 3 | Lack of livelihood skills | - | 4 | 8 | 7 | 10 | 9 | - | 4 | - | 3 | - | 3 |
| 4 | Lack of job/Unemployment | 11 | - | 5 | 1 | 9 | 7 | - | 3 | 3 | 8 | 3 | 4 |
| 5 | Too many children | - | 12 | 7 | 6 | - | - | 11 | - | 12 | - | - | 10 |
| 6 | Lack of agriculture input and extension | 2 | 2 | 4 | 5 | 2 | 8 | 8 | 11 | 4 | 4 | 4 | 7 |
| 7 | Illiteracy and low education | 1 | 3 | 6 | 4 | 5 | 2 | 7 | 6 | 2 | 7 | 5 | 9 |
| 8 | Lack of financial access for investment | 4 | 1 | - | - | 1 | 5 | - | 9 | 8 | 1 | 11 | - |
| 9 | Labor shortage for agriculture activities | - | 9 | 10 | - | - | 10 | - | - | 9 | 2 | 7 | 6 |
| 10 | Low participation in decision making | 9 | - | - | 11 | - | - | - | 12 | 5 | - | 10 | 12 |
| 11 | Lack of water and sanitation | 12 | 11 | - | - | - | - | 6 | - | - | - | - | 11 |
| 12 | Poor health care | 3 | - | 3 | - | - | 6 | 5 | 12 | 1 | 5 | 9 | - |
| 13 | Low wage | - | 8 | - | - | - | - | - | 5 | - | 9 | 6 | 5 |
| 14 | Domestic violence | 8 | - | - | 8 | 12 | - | - | - | 6 | - | - | - |
| 15 | Family burden (household work) | 10 | - | 11 | - | 3 | - | 12 | - | - | - | 12 | - |
| 16 | Not enough resident land for housing | - | - | - | - | - | 3 | 10 | - | 7 | - | - | - |
| 17 | Family debt | - | - | - | - | 11 | - | - | - | - | 10 | 8 | 8 |
| 18 | Lack of irrigation | - | - | 9 | 9 | 6 | 4 | 9 | 10 | 10 | - | 13 | - |
| 19 | Lack of market | 5 | 7 | - | - | 8 | - | 3 | - | - | 11 | - | - |
| 20 | No or little institutional support | 7 | 6 | - | 10 | - | - | - | 8 | 11 | - | - | - |
| 21 | Lack of transportation | 6 | - | - | - | 7 | - | - | - | - | - | - | - |
| 22 | Bad roads/ no roads | - | 5 | - | - | 4 | 1 | 4 | 7 | - | - | - | - |

Source: Results of focus group discussion in the villages

| No | PROBLEM | Seansai | | | | Nam Mo | | | | Namvone | | | |
|----|---|---------|------|-----|-----|--------|------|-----|-----|---------|------|-----|-----|
| | | FGNP | MGNP | FGP | MGP | FGNP | MGNP | FGP | MGP | FGNP | MGNP | FGP | MGP |
| 1 | Lack of agricultural land | 2 | 3 | 2 | 1 | - | - | 2 | 1 | 4 | 6 | 1 | 1 |
| 2 | Inadequate food – hunger | - | 13 | 1 | 2 | - | - | 4 | 2 | 8 | 7 | - | 2 |
| 3 | Lack of livelihood skills | - | 4 | 7 | 3 | 1 | 2 | 6 | 5 | 6 | 3 | 2 | 7 |
| 4 | Lack of job/Unemployment | 6 | - | 3 | 5 | 2 | 3 | 1 | 3 | 5 | 5 | 4 | 3 |
| 5 | Too many children | - | 8 | - | 6 | - | - | 10 | 8 | 7 | 8 | 3 | 9 |
| 6 | Lack of agriculture input and extension | 1 | 5 | 4 | - | 5 | 7 | 3 | 4 | 1 | 4 | 5 | 4 |
| 7 | Illiteracy and low education | 5 | 2 | 6 | 8 | 6 | 4 | 11 | 7 | 2 | 1 | 10 | 5 |
| 8 | Lack of financial access for investment | 7 | 1 | 8 | 9 | 7 | 1 | 5 | 6 | 3 | 9 | 6 | 6 |
| 9 | Labor shortage for agriculture activities | 4 | 6 | 5 | 7 | - | - | 8 | 11 | - | 2 | 11 | 8 |
| 10 | Low participation in decision making | - | - | 9 | 10 | - | - | 9 | 9 | 10 | - | 8 | - |
| 11 | Lack of water and sanitation | 8 | 9 | - | - | 3 | 8 | 7 | - | - | - | - | 10 |
| 12 | Poor health care | 3 | - | - | - | 4 | 11 | 12 | 10 | 11 | - | 9 | 11 |
| 13 | Low wage | 13 | 7 | 5 | 4 | - | - | - | - | - | 10 | - | - |
| 14 | Domestic violence | 9 | - | 10 | - | - | - | - | - | 12 | - | - | - |
| 15 | Family burden (household work) | 10 | - | 11 | - | 8 | - | - | - | - | - | 7 | - |
| 16 | Not enough resident land for housing | - | - | - | - | - | 12 | - | - | - | - | - | - |
| 17 | Family debt | - | 12 | - | 11 | 9 | - | - | - | - | - | - | 12 |
| 18 | Lack of irrigation | 11 | - | 12 | 13 | - | 6 | - | - | - | - | - | - |
| 19 | Lack of market | - | 10 | - | - | 10 | 5 | - | 12 | 9 | - | - | - |
| 20 | Little institutional support | 12 | - | - | - | - | - | - | - | - | - | - | - |
| 21 | Lack of transportation | - | - | - | 12 | - | 9 | - | - | - | - | - | - |
| 22 | Bad roads/ no roads | - | 11 | - | - | - | 10 | 13 | - | - | - | - | - |

Source: Results of focus group discussion in the villages

During the individual interview, the respondents were asked about their most urgent needs. About 61.8% of the total respondents said that they need agricultural land, followed by 60.6% need fund or capital for livelihood investment. These were followed by creation of permanent job in the local community, vocational training, and farming equipment. It is clearly to indicate that villagers need to improve economic aspects than the social aspects like education and health care.

Table 6.28: The most urgent needs of the respondents (N=249 and multiple responses)

| | MHH | | FHH | | Total | |
|-------------------------------|------------|--------------|------------|--------------|------------|--------------|
| | Count | % | Count | % | Count | % |
| Agricultural land | 133 | 64.3 | 21 | 52.5 | 154 | 61.8 |
| Fund/capital | 127 | 61.4 | 24 | 60.0 | 151 | 60.6 |
| Employment/permanent job | 50 | 24.2 | 11 | 27.5 | 61 | 24.5 |
| Improved livelihood knowledge | 39 | 18.8 | 4 | 10.0 | 43 | 17.3 |
| Bridge/road | 35 | 16.9 | 4 | 10.0 | 39 | 15.7 |
| Farming equipment | 25 | 12.1 | 3 | 7.5 | 28 | 11.2 |
| Animal raising | 26 | 12.6 | 1 | 2.5 | 27 | 10.8 |
| Good house | 26 | 12.6 | 0 | 0.0 | 26 | 10.4 |
| Market | 16 | 7.7 | 9 | 22.5 | 25 | 10.0 |
| Health care | 15 | 7.2 | 8 | 20.0 | 23 | 9.2 |
| Clean water | 13 | 6.3 | 4 | 10.0 | 17 | 6.8 |
| School | 13 | 6.3 | 3 | 7.5 | 16 | 6.4 |
| Irrigation | 13 | 6.3 | 1 | 2.5 | 14 | 5.6 |
| Weaving promotion | 3 | 1.4 | 4 | 10.0 | 7 | 2.8 |
| Rice seed | 4 | 1.9 | 0 | 0.0 | 4 | 1.6 |
| Land for construction | 3 | 1.4 | 0 | 0.0 | 3 | 1.2 |
| Fish pond | 3 | 1.4 | 0 | 0.0 | 3 | 1.2 |
| Truck for transportation | 2 | 1.0 | 0 | 0.0 | 2 | 0.8 |
| Drainage system | 2 | 1.0 | 0 | 0.0 | 2 | 0.8 |
| Electricity | 2 | 1.0 | 0 | 0.0 | 2 | 0.8 |
| Insurance card | 1 | 0.5 | 0 | 0.0 | 1 | 0.4 |
| Total | 627 | 302.9 | 120 | 300.0 | 747 | 300.0 |

Source: Individual interview in six villages

Participants identified a range of solutions necessary to alleviate the problems caused by the Government action. Job creation, income generation activities, education and training, and improvement of land access emerged as the highest priority, followed by increased agriculture extension, better village infrastructure, and creation of industry zone. Over 69.5% said employment and income assistance are the high benefits.

Table 6.29: Type of needs for the Government action (Multiple responses)

| Measures | MHH | | FHH | | Total | |
|--------------------------------|------------|--------------|------------|--------------|------------|--------------|
| | Count | % | Count | % | Count | % |
| Create job and IGA | 146 | 69.9 | 27 | 67.5 | 173 | 69.5 |
| Vocational training | 137 | 65.6 | 30 | 75.0 | 167 | 67.1 |
| Improve land access for the | 130 | 62.2 | 26 | 65.0 | 156 | 62.7 |
| Increase agriculture extension | 106 | 50.7 | 29 | 72.5 | 135 | 54.2 |
| Improve village infrastructure | 100 | 47.8 | 25 | 62.5 | 125 | 50.2 |
| Create industry zones | 67 | 32.1 | 21 | 52.5 | 88 | 35.3 |
| Total | 686 | 328.2 | 158 | 395.0 | 844 | 339.0 |

Source: Individual interview in six villages

6.6. Institutional Analysis

The field survey provided information on public services and development institutes or mechanisms in the target villages. These mechanism and services included: village administrative committee, social organization, rice bank; livestock bank; cooperative; trade group; village development fund (VDF), agricultural production groups, and private company. Table 6.30 presents the institutional status of the target villages in term of the availability of these important mechanisms. In all villages, the governmental institutes are existing including the party, village administrative committee, Lao Women's Union, Lao Youth' Union, Lao Front for National Construction. These mechanisms usually have insufficient financial supports.

| Organization | Thamtheb | Houynamyen | Houydokmai | Seansai | Nam Mo | Namyone |
|-------------------------------------|----------|------------|------------|---------|--------|---------|
| Village administrative | Yes | Yes | Yes | Yes | Yes | Yes |
| Lao Women's Union | Yes | Yes | Yes | Yes | Yes | Yes |
| Lao Youth's Union | Yes | Yes | Yes | Yes | Yes | Yes |
| Lao Front for National Construction | No | No | No | No | Yes | Yes |
| Student's Parent Association | Yes | Yes | Yes | Yes | Yes | Yes |
| Old Soldier Association | No | No | No | Yes | No | No |
| Trade center | Yes | No | No | No | No | No |
| Rice bank | No | No | No | No | No | No |
| Commercial Bank | No | No | No | No | No | Yes |
| Animal Bank | No | No | No | No | No | No |
| Credit Institute | No | No | No | No | No | No |
| Agriculture Co-operative | No | No | No | No | No | No |
| Village Development Fund | No | No | No | No | No | Yes |
| Minina companv | No | No | No | No | Yes | Yes |
| Other services | No | No | No | No | No | No |

Sources: Village Administration Interviews

| Project name | Thamtheb | Houynamyen | Houydokmai | Seansai | Nammo | Namyone |
|------------------------|----------|------------|------------|---------|-------|---------|
| Crop cultivation | No | No | No | Yes | Yes | Yes |
| Irrigation | Yes | No | No | No | No | No |
| Forestry | Yes | Yes | No | No | No | No |
| Trade | No | No | No | No | Yes | Yes |
| Transportation | No | Yes | No | No | No | No |
| Handicraft | No | No | No | No | Yes | No |
| Education | Yes | Yes | No | No | No | Yes |
| Health | Yes | Yes | No | Yes | No | Yes |
| Water and sanitation | Yes | Yes | No | Yes | Yes | Yes |
| Other (Animal raising) | Yes | No | No | No | Yes | No |

Although there are some improvements in infrastructure, school, and health facilities in some villages, the actual services provided are below those needed by the villagers. Similarly the development projects in the target villages are also limited, especially economic projects. Social development projects, especially health and education project are more existing in some villages. Although the health and education project existed in the villages, its capacity to provide the service is low. In some villages, lack of teachers and health medical doctors. They can do a very basic health care service. The heavy sickness must be take care in the provincial or central hospital in Vientiane Capital which cost more in which poor people could not bear the treatment cost.

Female respondents are less involved in these projects compared to the male villagers. Several reasons for less participation from female include lack of opportunity, officials do not invite them, females do not have time to participate, and low education.

| | Female | | Male | | Total | |
|--------------|------------|--------------|-----------|--------------|------------|--------------|
| | Count | % | Count | % | Count | % |
| Yes | 69 | 41.1 | 44 | 54.3 | 113 | 45.4 |
| No | 99 | 58.9 | 37 | 45.7 | 136 | 54.6 |
| Total | 168 | 100.0 | 81 | 100.0 | 249 | 100.0 |

Source: Individual interview in six villages

Male respondents are more involved in economic project activities such as agricultural extension (35.8%), employment in dam and mining projects (3.7%), land projects (3.7%). Female respondents are more involved in social projects such as health care projects (8.3%) and education projects (4.2%). Therefore, female villagers have less economic opportunities compared to the male counterpart. Both female and male respondents are involved in village development fund.

Table 6.33: If yes, what project have you involved?

| | Female | | Male | | Total | |
|--------------------------|------------|--------------|-----------|--------------|------------|--------------|
| | Count | % | Count | % | Count | % |
| Not involvement | 99 | 58.9 | 37 | 45.7 | 136 | 54.6 |
| Agricultural project | 35 | 20.8 | 29 | 35.8 | 64 | 25.7 |
| Education project | 7 | 4.2 | 3 | 3.7 | 10 | 4.0 |
| Health project | 14 | 8.3 | 2 | 2.5 | 16 | 6.4 |
| Village Development Fund | 8 | 4.8 | 4 | 4.9 | 12 | 4.8 |
| Dam and Mining Project | 2 | 1.2 | 3 | 3.7 | 5 | 2.0 |
| Forest project | 2 | 1.2 | 0 | 0.0 | 2 | 0.8 |
| Land project | 1 | 0.6 | 3 | 3.7 | 4 | 1.6 |
| Total | 168 | 100.0 | 81 | 100.0 | 249 | 100.0 |

Source: Individual interview in six villages

What are the main reasons for low participation of women and men in village development projects? Table 6.34 provides the responses. About 35.3 percent of both females and males said that they do not participate in project activities because of low knowledge, followed by 14% said that they are afraid to be in financial debt, 10 parents was not aware about the project. Many women (13.1%) did not participate because the project activities do not support their needs and interest.

Table 6.34: Reasons for low participation in village development projects

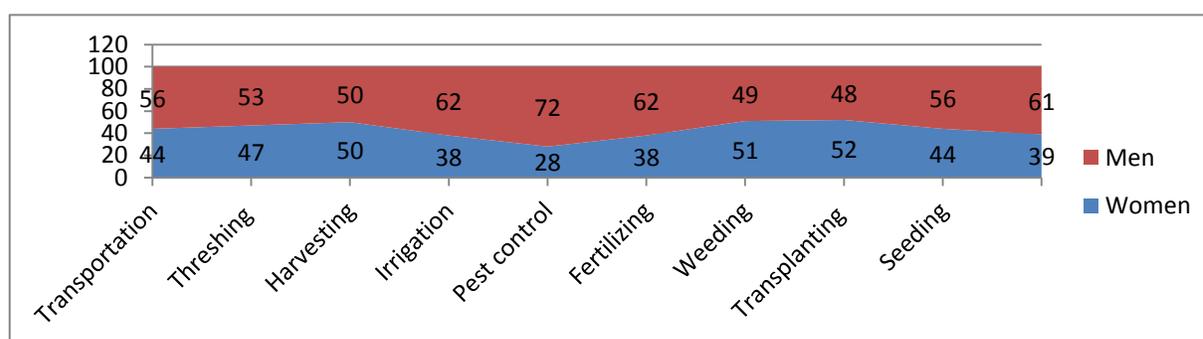
| | Female | | Male | | Total | |
|--|-----------|--------------|-----------|--------------|------------|--------------|
| | Count | % | Count | % | Count | % |
| Lack of knowledge | 39 | 39.4 | 9 | 24.3 | 48 | 35.3 |
| Afraid to be financial debt | 12 | 12.1 | 7 | 18.9 | 19 | 14.0 |
| No time | 8 | 8.1 | 5 | 13.5 | 13 | 9.6 |
| Do not have chance | 6 | 6.1 | 2 | 5.4 | 8 | 5.9 |
| Do not know the project | 9 | 9.1 | 5 | 13.5 | 14 | 10.3 |
| Do not see the project benefit | 7 | 7.1 | 1 | 2.7 | 8 | 5.9 |
| Participation by other family members | 5 | 5.1 | 2 | 5.4 | 7 | 5.1 |
| The activities were not suitable for women | 13 | 13.1 | 6 | 16.2 | 19 | 14.0 |
| Total | 99 | 100.0 | 37 | 100.0 | 136 | 100.0 |

Source: Individual interview in six villages

6.7. Gender Roles

The main crops cultivate by the villagers is rice. There are no major differences in labour allocation patterns across agricultural tasks. According to the LCA 2011, women participate almost equally with men in almost all rice cultivation activities, such as harvesting (50% Vs.50%), weeding (51% Vs.49%) and transplanting (52% Vs. 48%), and somewhat less in transportation (44% Vs.56%), threshing (47% Vs.53%), pest control (28% Vs.72%) and seeding (39% Vs.61%). The differences were more visible for tasks that require use of heavy equipment and specialized inputs (e.g. controlling pests, irrigating, fertilizing and preparing land).

Chart 6.1: Male-female ratio of farm household work by specific rice cultivation activity



Source: LCA, 2011

| Province | Land preparation | Preparing seedbed | Trans-planting | Weeding | Fertilizing | Pest control | Irrigation | Harvesting | Threshing | Trans-plantation |
|--------------------|------------------|-------------------|----------------|---------|-------------|--------------|------------|------------|-----------|------------------|
| Vientiane Province | 36.0 | 38.7 | 50.2 | 47.2 | 33.5 | 26.2 | 35.0 | 48.9 | 43.1 | 37.7 |
| Lao PDR | 38.3 | 44.2 | 52.1 | 50.9 | 37.8 | 27.8 | 38.0 | 50.2 | 47.4 | 43.5 |

Source: LCA, 2010/2011

They free animal in their grass land zones. Most of male dominant decision in animal raising, but the female take care on selling and money manage. In poultry raising, men are more involved in cage or house building and vaccination while women are more involved in food feeding and selling.

The pig and poultry is mainly for family consumption and traditional ceremony celebration. Some of them were sold in case of the family has problem with their economic. They feed their pig and poultry by traditional method (free in nature), that means they free them in the village to look for food themselves in nature and give some food for them in morning and evening. The poultry hut is built by family labor. Most of the women task is provide food. Management and sell in case of necessary. The main problem found in poultry raising are climate change, usually they sick and dead when the weather is cold and lack of water in dry season. The people report that the vaccination should be done before the cool season will come and store water for the in dry season.

| | Mostly done by | MHH | FHH | Total |
|---------------------|-----------------------|------|------|-------|
| Poultry | | | | |
| Cage/house building | Male family members | 94.7 | 80.0 | 92.2 |
| | Female family members | 5.3 | 20.0 | 7.8 |
| Poultry feeding | Male family members | 9.3 | 7.1 | 8.0 |
| | Female family members | 90.7 | 92.9 | 92.0 |
| Poultry selling | Male family members | 9.3 | 6.7 | 7.9 |
| | Female family members | 90.7 | 93.3 | 92.1 |
| Vaccination | Male family members | 92.1 | 85.7 | 91.1 |
| | Female family members | 7.9 | 14.3 | 8.9 |
| Cattle | | | | |
| Cattle feeding | Male family members | 62.1 | 50.0 | 59.5 |
| | Female family members | 37.9 | 50.0 | 40.5 |
| Cattle selling | Male family members | 54.5 | 42.9 | 51.7 |
| | Female family members | 45.5 | 57.1 | 48.3 |
| Vaccination | Male family members | 92.3 | 83.3 | 89.5 |
| | Female family members | 7.7 | 16.7 | 10.5 |

Source: Individual interview in six villages

The men is responsible for some tasks which they consider as the heavy work like land preparation (plough or digging the land) and women is responsible for many works but they classify as the light work such as seedling, transplantation, watering, fertilizer input, weed management, harvest and sell.

Generally, there appear to be no major differences among the different types of households in labour allocation patterns across agricultural tasks and other related tasks. Women participate extensively and almost equally with men in almost all rice cultivation activities, such as harvesting, weeding and transplanting, and somewhat less in transportation, threshing and seeding. The differences were more visible for tasks that require use of heavy equipment and specialized inputs (e.g. controlling pests, irrigating, fertilizing and preparing land).

The labor has been using to clean forest for rice cultivation, transplantation, weed management, and harvest. Both women and men cut tree, and weed management, in some case the men cut the big tree. However, in complete family (family has husband and wife), if husband has other job to earn income (money) for the family then the upland rice cultivation work will mainly belong to his wife. In widow /divorcee family, this work will belong mainly to women.

| Table 6.37: Gender division of labour in rice farming (% of respondents) | | | | |
|--|-----------------------|------|------|-------|
| | Mostly done by | MHH | FHH | TOTAL |
| Upland rice farming | | | | |
| Land clearing | Male family members | 81.3 | 41.2 | 69.7 |
| | Female family members | 18.8 | 64.7 | 30.3 |
| Fencing | Male family members | 61.8 | 33.3 | 54.8 |
| | Female family members | 38.2 | 66.7 | 45.2 |
| Rice seeding | Male family members | 8.2 | 11.8 | 9.1 |
| | Female family members | 91.8 | 88.2 | 90.9 |
| Weeding | Male family members | 3.8 | 6.3 | 4.4 |
| | Female family members | 96.2 | 93.8 | 95.6 |
| Harvesting | Male family members | 7.5 | 7.1 | 7.4 |
| | Female family members | 92.5 | 92.9 | 92.6 |
| Threshing | Male family members | 40.5 | 7.1 | 32.1 |
| | Female family members | 59.5 | 92.9 | 67.9 |
| Transporting | Male family members | 64.9 | 33.3 | 54.5 |
| | Female family members | 35.1 | 66.7 | 45.5 |
| Low land rice farming | | | | |
| Plowing | Male family members | 96.3 | 80.0 | 93.8 |
| | Female family members | 3.7 | 20.0 | 6.3 |
| Transplanting | Male family members | 26.1 | 20.0 | 25.0 |
| | Female family members | 73.9 | 80.0 | 75.0 |
| Fertilizing | Male family members | 55.6 | 25.0 | 51.6 |
| | Female family members | 44.4 | 75.0 | 48.4 |
| Weeding | Male family members | 27.8 | 25.0 | 27.3 |
| | Female family members | 72.2 | 75.0 | 72.7 |
| Pesticide application | Male family members | 81.8 | 80.0 | 81.5 |
| | Female family members | 18.2 | 20.0 | 18.5 |
| Harvesting | Male family members | 37.5 | 40.0 | 38.5 |
| | Female family members | 62.5 | 60.0 | 61.5 |
| Threshing | Male family members | 75.0 | 50.0 | 70.8 |
| | Female family members | 25.0 | 50.0 | 29.2 |
| Transporting | Male family members | 91.7 | 66.7 | 86.7 |
| | Female family members | 8.3 | 33.3 | 13.3 |
| Source: Individual interview in six villages | | | | |

Both men and women from all ethnic groups confirm that women work longer hours each day than men, as their work load includes both domestic and agricultural activities. Due to labor constraints, women work alongside men and take a lead role in many tasks including planting and weeding vegetable, rice and cash crop plots, harvesting, clearing land, fencing agricultural plots, feeding livestock and marketing products. Women take more responsibility for more tasks in producing crops such as cassava, maize, sweet potato and taro. Men do heavier work such as in land clearing felling and cutting trees, removing tree stumps, ploughing, burning swidden plots, slaughtering large animals. The project must therefore ensure that any activities directed at farmers account for female as well as male farmers.

The roles and responsibilities of men and women have changed little over the past 15 years, especially in the rural life where these are well defined by culture and beliefs. Women have been transformed into the household breadwinners through their engagement in petty trading. This was possible because they were able to cross clan territories during the prolonged conflict period, while men were restricted to their clan areas. Many people criticize this change. They argue that women earning food for the family are no longer loyal to their husbands, which results in the breakdown of many families. Childcare was said to have declined because mothers go out to work or business resulting in more indiscipline among children.

Important changes have occurred that are primarily a consequence of women's newly acquired capacity to earn income on a sustained basis. The key process underlying the changes in gender relations has to do thus with the structural transformation in the labor market. Women have been increasingly incorporated in labor markets as a result of their better access to education and because the sectors that typically employ men – construction industry and manufacturing – are in decline whereas the service industry is expanding apace.

| Crop farming | Mostly done by | MHH | FHH | TOTAL |
|----------------------------------|---------------------|-------|-------|-------|
| Cropping preparation | Male family members | 66.2 | 43.8 | 62.2 |
| | Female family | 33.8 | 56.3 | 37.8 |
| Cropping | Male family members | 6.8 | 7.1 | 6.8 |
| | Female family | 93.2 | 92.9 | 93.2 |
| Crop watering | Male family members | 13.6 | 6.3 | 12.2 |
| | Female family | 86.4 | 93.8 | 87.8 |
| Crop fertilizing | Male family members | 8.2 | 5.9 | 7.7 |
| | Female family | 91.8 | 94.1 | 92.3 |
| Crop harvesting | Male family members | 5.7 | 7.1 | 6.0 |
| | Female family | 94.3 | 92.9 | 94.0 |
| Fire wood collecting | Male family members | 69.6 | 34.8 | 64.6 |
| | Female family | 30.4 | 65.2 | 35.4 |
| Water for using | Male family members | 5.7 | 0.0 | 4.9 |
| | Female family | 94.3 | 100.0 | 95.1 |
| Food cooking | Male family members | 2.7 | 3.4 | 2.8 |
| | Female family | 97.3 | 96.6 | 97.2 |
| Buying foods | Male family members | 4.3 | 4.0 | 4.3 |
| | Female family | 95.7 | 96.0 | 96.3 |
| Other household | | | | |
| Caring children and elders | Male family members | 1.6 | 0.0 | 1.4 |
| | Female family | 98.4 | 100.0 | 98.6 |
| House, cleaning/washing | Male family members | 2.0 | 0.0 | 1.8 |
| | Female family | 98.0 | 100.0 | 98.2 |
| Finding medicine from the forest | Male family members | 82.8 | 22.2 | 74.6 |
| | Female family | 17.2 | 77.8 | 25.4 |
| Finding NTFP products | Male family members | 69.5 | 27.3 | 62.9 |
| | Female family | 30.5 | 72.7 | 37.1 |
| Waving handicraft | Male family members | 8.3 | 16.7 | 10.0 |
| | Female family | 91.7 | 83.3 | 90.0 |
| Fishing | Male family members | 97.7 | 100.0 | 98.0 |
| | Female family | 2.3 | 0.0 | 2.0 |
| Hunting | Male family members | 100.0 | 88.9 | 97.9 |
| | Female family | 0.0 | 11.1 | 2.1 |

Source: Individual interview in six villages

Table 6.39 indicates the decision making persons in the household. Both women and men make a decision jointly on their children education, on what type of agricultural practices and on who will attend the village meeting. However, this has not been translated into any major changes in the traditional household power relations.

Women are still largely excluded from community decision-making, which has traditionally been the “men’s right and responsibility”. They said that they attend as silent observers or servers of tea, snacks, food, and sometime alcohol drinks.

| Table 6.39: Decision making in the households (% of the respondents) | | |
|--|------|------|
| | MHH | FHH |
| Decision on school attending of the children | | |
| Male members make decisions | 31.4 | 7.7 |
| Female members make decisions | 3.2 | 69.2 |
| Female and male make decisions jointly | 65.4 | 23.1 |
| Decision on what type of agriculture practice | | |
| Male members make decisions | 22.0 | 8.3 |
| Female members make decisions | 14.0 | 66.7 |
| Female and male members make decisions jointly | 64.0 | 25.0 |
| Decision on village meeting attending | | |
| Male members make decisions | 40.0 | 21.7 |
| Female members make decisions | 12.5 | 52.2 |
| Female and male make decisions jointly | 47.5 | 26.1 |
| <i>Sources: Individual interviews in six villages</i> | | |

During the group discussions, women are considered themselves better off now than 15 years ago. Women say they now have more voices in decisions within households and girls have more opportunities now to go to school like their brothers. However, this has not translated into any major changes in the traditional household power relations. Men still make decisions in the crucial areas of marriage and inheritance; political and major economic decisions; and relationships with other communities and government.

According to female focus group discussion, some women said that if women have more earning will lead to gain more power for their decision-making capacity within both the household and the community. Men still make decisions in the crucial areas of marriage and divorce, inheritance, political and major economic concerns and relationships with other communities and government. Man, the ‘breadwinner and provider’ is still the real decision-maker at home. Men now consult women before most major financial decisions are made. However, it is still not rare for a man to buy/sell property without his wife’s knowledge.

Women’s role in the community changed when they became more mobile, which is a requirement of business. This has produced some resentment among men, though they claim it has not increased violence against women. In the opinion of women groups their increased earning power improved their decision-making capacity within both the household and the community. Now they are consulted or make final decisions about how family assets are used, what to buy for their children, where to send them to school. Their increased mobility has given them more freedom of movement and exposure to useful social experiences.

6.8. Gender and Climate Change

The incidence of natural disasters, including floods, droughts, high temperature, high speed wind and landslides, as well as the occurrence of pests, as reported by the villagers, is presented in Table 6.40. About half of the villagers reported that they were prone to natural disasters, with droughts and pests being the most common of these, followed by floods and landslides. According to the interview, FHH seems finding more problems and difficulty to deal with the problem of climate change. The climate change is one of the problems for the farmer to work in agricultural sector. However, they use multi-method to cope with this issue such as crops cultivation in dry season, non-timber forest production collection.

| Type of problem faced | | MHH | | FHH | | Total | |
|-----------------------|-----|------------|--------------|-----------|--------------|------------|--------------|
| | | Count | % | Count | % | Count | % |
| Flood | Yes | 102 | 48.8 | 25 | 62.5 | 127 | 51.0 |
| | No | 107 | 51.2 | 15 | 37.5 | 112 | 45.0 |
| Drought | Yes | 45 | 21.5 | 16 | 40.0 | 61 | 24.5 |
| | No | 164 | 78.5 | 24 | 60.0 | 187 | 75.1 |
| High temperature | Yes | 36 | 17.2 | 16 | 40.0 | 52 | 20.9 |
| | No | 173 | 82.8 | 24 | 60.0 | 197 | 79.1 |
| High speed wind | Yes | 73 | 34.9 | 18 | 45.0 | 91 | 36.5 |
| | No | 136 | 65.1 | 22 | 55.0 | 158 | 63.5 |
| Total | | 209 | 100.0 | 40 | 100.0 | 249 | 100.0 |

As shown in Table 6.41, about 41.9 percent of the respondents have no any ideas on climate change impact on their agricultures while 24.9 percent said that their crop was damaged. About 17 percent of FHH and 21.1 percent of MHH said that their agriculture has low production due to the impacts of climate changes.

| | MHH | | FHH | | Total | |
|-------------------|------------|--------------|-----------|--------------|------------|--------------|
| | Count | % | Count | % | Count | % |
| No comments | 90 | 43.1 | 14 | 35.0 | 104 | 41.9 |
| Crop/rice damage | 55 | 26.3 | 7 | 17.5 | 62 | 24.9 |
| Pest | 1 | 0.5 | 4 | 10.0 | 5 | 2.0 |
| Land/soil erosion | 16 | 7.7 | 8 | 20.0 | 24 | 9.6 |
| Low production | 44 | 21.1 | 7 | 17.5 | 51 | 20.5 |
| Cannot plant | 3 | 1.4 | 0 | 0.0 | 3 | 1.2 |
| Total | 209 | 100.0 | 40 | 100.0 | 249 | 100.0 |

According to the focus group discussion, both female and male groups said that they have more climate changes compared to the past 30 years. For example, rain does not come on time, more floods and droughts now compared to long time ago. The villagers' capacity to deal with climate change is low. Some citations from the focus groups discussion are followings:

"You will never know and cannot estimate when the rain will come down because it changes very much" Unlike in the past, we can estimate that what month and week rain usually come, a man said.

"We do not know how to deal with our farming solution if climate changes damage our crop", a woman said

Chapter 7: Conclusions and Recommendations

7.1. Conclusions

Generally the Lao PDR has performed well in national economic development over the last two decades. Poverty has been substantially decreased over time, but there are large variations in poverty rates between urban and rural areas. Also, descriptive poverty statistics clearly show that poverty is concentrated among ethnic groups. All ethnic groups have higher poverty headcount rates than the majority population group, the Lao-Tai, with the highest rural poverty rates found among the Mon-Khmer.

Major causes of poverty identified in this study's survey of the poor ranged from unemployment to lack of social services and infrastructure, to issues of weak social capital. Lack of water, unemployment, and limited access to education, health facilities and productive inputs and markets were the major problems of both urban and rural poor. The death of a breadwinner is a major cause of poverty, especially among the female headed households. For most people food insecurity was identified as a major problem.

This research found that a significant incidence of poverty exists and women suffer from poverty more often than men. This is even more pronounced in female headed households. The high poverty rates among women can be linked to their unequal situation in the labor market, their lack of voice and participation in decision-making in the household and other institutions and because gender disparities persist in access and control of human, economic and social assets. Women normally receive a lower average wage than men because they hold low paying jobs, or work in the informal sector and agriculture, and also because they are sometimes paid less than men for equal work. Women's labor force participation rates are also low in the formal sector but in the informal sector they are often found either as employees or self-employed.

In the discussions, villagers concluded that lack of agricultural land is the most important cause of poverty, followed by lack of knowledge, and lack of job or unemployment. Unequal income distribution, lack of investments in public health and natural resource degrading were also cited as important causes of poverty by both groups of men and women. Concerning the conditions which would enable the poor to move out of poverty, the groups virtually reached a consensus on two factors: access to education and employment. Education was considered to be the most important factor for reducing poverty.

Intra-household inequalities were found to exacerbate the vulnerability of women and girls. Women's greater vulnerability to poverty is associated with the existence of gender inequalities in household resource allocations and decision-making in public policies. Households headed by women are at a higher risk of poverty than those headed by men. Women are more likely to be part-time workers which more often receive low-paid. Even in full-time employment, women are more likely to earn less money than their male counterparts. Women are more vulnerable to poverty due to lack of property rights in land or access to employment, illiteracy, early marriage, and lower wages.

All the villages in this study are in the more remote areas and lack access to basic services such as schools, health centers, with poor or bad road access to the village. They lack other important infrastructure such as reliable water supplies and irrigation. For many groups, particularly for women, education for their children is seen as mechanism to escape poverty. All the ethnic groups surveyed confirmed that their priorities center on land access and tenure security, both of residential and cultivable land.

Survey participants identified a range of solutions necessary to alleviate the problems caused by economic poverty. Education and vocational training emerged as the highest priority, followed by increased financial support for income generation activities, and better health care. Other solutions included: improvement of the Government services; improved support for women; expanded availability of counselling and mental health care services; help to alleviate the cost of living; provision of poverty reduction funds.

The poverty incidence in Num Ngum River Basin, especially in Vientiane Province which is a lower part of the basin, is lower than many other provinces. There are more village development projects at the provincial level. However, the poverty situation in the villages targeted by this research is still high. Villagers, especially female villagers and the poor are still lacking opportunities for development. Not enough land for agricultural purpose, lack of livelihood skills, and the lack of jobs were major concerns of the poor in target villages.

7.2. Recommendations for Policy Changes

Based on analysis and key findings, we would make the following recommendations:

- 1) Improvement of agricultural land access for the poor has to be the top priority for the poor villages. Land allocation strategy must be made gender aware.
- 2) Formulate and implement ethnic and gender responsive strategies and programs in the areas of rural development and food security, through a participatory process that targets both rural women and men in planned activities. Policies should acknowledge that family sustenance, nutrition and household food security are primarily a women's responsibility, whilst acknowledging the specificities of each context.
- 3) All development stakeholders should focus on qualitative services for the poor to provide economic opportunity and quality of growth in the 8th NSEDP 2016-2020. All stakeholders should focus on policies directed toward inclusive growth and fair resource allocation and good governance.
- 4) Ensure that gender, disability and ethnic sensitivity are integrated at all institutional levels, particularly pertaining to food security and nutrition in rural areas for people involved with rural development and agriculture.
- 5) Create a climate more conducive to the empowerment of rural women, including: awareness raising for more balanced task distribution between women and men; investing in human capital by prioritizing the education of girls; the implementation of equitable land rights; and, improving access to land and social services for rural women.
- 6) Need to diversify the national economy in order to provide additional opportunities and alternative sources for employment and income.
- 7) Improve data collection, specifically disaggregated information by sex and age including indicators assessing impacts on women in measurement and evaluation. Study the changing roles of women in light of socioeconomic development in Lao PDR. Promote research on the distribution of resources among household members and the measurement of individual expenditure.
- 8) Enhance national mechanisms of coordination with line ministries in order to ensure that poverty statistics with a gender and ethnicity perspectives are used in the formulation of public policies.
- 9) To ensure that women and disable groups are included in social dialogue with representatives of the corporate sector, workers and government agencies, in order to improve the working conditions of female and male workers.
- 10) There is a need to strengthen the social welfare mechanisms with an effective long-term anti-poverty strategy should address itself to the enhancement of women's entitlements and capabilities, whether in male-headed or female-headed households.

- 11) Targeting the social spending and assistance for the vulnerable groups, especially disable people and extending coverage beyond vocational education and health services to enhance resilience to macroeconomic shocks.
- 12) To include specific questions on time use in integrated household surveys and other regular surveys, such as those on employment and, in particular, on household budget and expenditure, in order to attribute value to unpaid domestic work, time use and domestic violence.

7.3. Recommendations for Local Village Development

- 1) Food security should be the main priority for the target villages. The provincial and district authorities and agriculture and forestry department should promote more agricultural extension.
- 2) The provincial strategic plan should increase poor people's access to productive resources such as credit, as well as ensuring that employment schemes be made gender aware. The effects of all such policies must be monitored from a gender perspective as well as from a poverty perspective.
- 3) More progress urgently needed for disadvantaged groups and it is critically important to provide them with increased access to secondary schools and health services.
- 4) Provide employment opportunities to generate income-earning capacities for farmers, including training, equipping, and educating them, in order to raise crop yields and conserve natural resources and preserve the environment. Generate more employment opportunities in the rural areas in both agricultural employment and non -agricultural employment,
- 5) Support productivity growth, particularly in rural areas, through improvements in literacy and education, access to markets, health services and sanitation, and the investment climate.
- 6) Target resources toward the rural poor and ethnic groups in order to help address inequality of opportunities that would protect households from falling back into poverty.

Annex 1: Village Profiles

| Annex 1.1: Demographic Information | | | | | | |
|------------------------------------|------------|--------------|--------------|--------------|--------------|-----------------|
| No. | Village | Population | Female | Male | Households | Poor households |
| 1 | Thamtherb | 882 | 430 | 452 | 149 | 18 |
| 2 | Houynamyen | 284 | 133 | 151 | 45 | 4 |
| 3 | Houydokmai | 284 | 144 | 140 | 56 | 3 |
| 4 | Seansai | 1,555 | 657 | 898 | 282 | 4 |
| 5 | Nam Mo | 2,389 | 1,175 | 1,214 | 406 | 16 |
| 6 | Namyone | 2,079 | 1,230 | 849 | 337 | 6 |
| Total | | 7,473 | 3,769 | 3,704 | 1,275 | 51 |

| Annex 1.2: Main income sources of the villagers | | | | |
|---|---------------------|-------------------|---------------------|---------------------------------------|
| No. | Name of the village | First main income | Second main income | Third main income |
| 1 | Thamtherb | Forest | Industry/Handicraft | Livestock |
| 2 | Houynamyen | Crop production | Livestock | Trade |
| 3 | Houydokmai | Crop production | Livestock | Trade |
| 4 | Seansai | Crop production | Livestock | NTFP |
| 5 | Nam Mo | Crop production | Livestock | Construction work |
| 6 | Namyone | Crop production | Trade | Working with LaneXang Mineral Company |

| Annex 1.3: Land Area Managed by the Villages | | | | | | |
|--|---------------------|---------------------|-----------------------|-----------------|------------------|---------|
| No. | Name of the village | Total land area(ha) | Agriculture land (ha) | Grass land (ha) | Forest land (ha) | Other |
| 1 | Thamtherb | 4,081 | 300 | 0 | 108 | 1500 |
| 2 | Houynamyen | 1,364 | 54 | 0 | 1310 | - |
| 3 | Houydokmai | 555.87 | 301.72 | 0 | 14.15 | 240 |
| 4 | Seansai | 1,211 | 463 | 0 | 748 | - |
| 5 | Nam Mo | 9,828.82 | 1754.47 | 1162 | 0 | 6912.82 |
| 6 | Namyone | - | - | - | - | - |

(
(-) No data available

| Annex 1.4: Village Access to Markets, Electricity and Clean Water | | | | | |
|---|---------------------|--------------|------------------|-----------------------|----------------|
| No. | Name of the village | Have market | | Access to electricity | Cleaning water |
| | | Daily market | Part time market | | |
| 1 | Thamtherb | No | No | Yes | Yes |
| 2 | Houynamyen | No | Yes | Yes | Yes |
| 3 | Houydokmai | No | No | Yes | Yes |
| 4 | Seansai | No | No | Yes | No |
| 5 | Nam Mo | No | Yes | Yes | Yes |
| 6 | Namyone | Yes | No | Yes | Yes |

| Annex 1.5: Schools in the Villages | | | | | | |
|------------------------------------|-----------|------------|------------|---------|-------|---------|
| School type | Thamtherb | Houynamyen | Houydokmai | Seansai | Nammo | Namyone |
| Primary school | Yes | Yes | Yes | Yes | Yes | Yes |
| Lower secondary school | No | No | No | No | Yes | No |
| Upper secondary school | No | No | No | No | No | No |

| Annex 1.6: Primary School Services in the Villages | | | | | | | |
|--|---------------------|----------------|-----------------|------------------|------------------|-------------------|---|
| No. | Name of the village | Have text book | Regular teacher | Regular teaching | Combine teaching | Half day teaching | Informal/Adult education project (in the last five years) |
| 1 | Thamtherb | Yes | Yes | Yes | No | No | No |
| 2 | Houynamyen | Yes | Yes | Yes | Yes | No | No |
| 3 | Houydokmai | Yes | Yes | Yes | Yes | No | No |
| 4 | Seansai | Yes | Yes | Yes | No | No | Yes |
| 5 | Nam Mo | Yes | Yes | Yes | No | No | Yes |
| 6 | Namyone | Yes | Yes | Yes | No | No | Yes |

| Annex 1.7: Number of Primary School Teachers by Sex and Village | | | | |
|---|---------------------|-------|--------|------|
| No. | Name of the village | Total | Female | Male |
| 1 | Thamtherb | 5 | 0 | 5 |
| 2 | Houynamyen | 1 | 0 | 1 |
| 3 | Houydokmai | 3 | 0 | 3 |
| 4 | Seansai | 9 | 1 | 8 |
| 5 | Nam Mo | 28 | 8 | 20 |
| 6 | Namyone | 10 | 4 | 6 |

| Annex 1.8: Nearest Primary School and Lower Secondary School to the Village | | | |
|---|---------------------|----------------------------|------------------------------------|
| No. | Name of the village | The nearest primary school | The nearest lower secondary school |
| | | (km) | (km) |
| 1 | Thamtherb | 0.2 | 1 |
| 2 | Houynamyen | 2 | 2 |
| 3 | Houydokmai | 0 | 12 |
| 4 | Seansai | 0.2 | 14 |
| 5 | Nam Mo | 0.2 | 0.2 |
| 6 | Namyone | 0.3 | 0.3 |

| Annex 1.9: Health Care Services in the Village | | | | | | |
|--|---------------------|--------------|---------|--------------------|-------------------|--------|
| No. | Name of the village | Medicine bag | Midwife | Traditional doctor | Medical Volunteer | Doctor |
| 1 | Thamtherb | No | Yes | No | Yes | No |
| 2 | Houynamyen | Yes | Yes | Yes | Yes | No |
| 3 | Houydokmai | No | No | No | No | No |
| 4 | Seansai | Yes | Yes | No | Yes | No |
| 5 | Nam Mo | No | No | No | Yes | Yes |
| 6 | Namyone | No | No | Yes | No | No |

| Annex 1.10: Health Care Services in the Village | | | | | | |
|---|---------------------|--|---------------|--------------------------------|----------------|-----------------------|
| No. | Name of the village | <i>The nearest location of the hospital (Km)</i> | Health center | Distance to health center (km) | Has a Pharmacy | Pharmacy is permitted |
| 1 | Thamtherb | 49 | Yes | 1 | No | No |
| 2 | Houynamyen | 51 | No | 4 | No | No |
| 3 | Houydokmai | 14 | No | 4 | No | No |
| 4 | Seansai | 37 | No | 14 | No | No |
| 5 | Nam Mo | 23 | Yes | 0.2 | Yes | Yes |
| 6 | Namyone | 28 | Yes | 0.3 | Yes | Yes |

| Annex 1.11: Health Problems Found During the Last 12 Months | | | | | | | |
|---|---------------------------------|-----------|------------|------------|---------|-------|---------|
| No. | The health problem | Thamtherb | Houynamyen | Houydokmai | Seansai | Nammo | Namyone |
| 1 | Malaria | No | No | Yes | Yes | No | Yes |
| 2 | Diarrhea | Yes | Yes | No | Yes | Yes | Yes |
| 3 | Lung disease (epidemic disease) | Yes | No | Yes | Yes | No | Yes |
| 4 | Red spot disease | Yes | Yes | No | No | Yes | Yes |
| 5 | Stomach ache | yes | Yes | yes | No | yes | Yes |
| 6 | Mouth related disease | No | No | No | No | No | Yes |
| 7 | Skin disease | Yes | No | No | No | No | Yes |
| 8 | Eye disease | Yes | Yes | Yes | Yes | No | Yes |
| 9 | Sense disease | Yes | Yes | Yes | Yes | No | No |
| 10 | Rheumatism | Yes | Yes | Yes | Yes | No | No |
| 11 | Goiter | Yes | No | No | Yes | No | No |
| 12 | Cold fever/Flu | Yes | Yes | Yes | No | Yes | Yes |

| No. | Name of the village | Children vaccination project | Malaria prevention project | Majority place of giving birth delivery |
|-----|---------------------|------------------------------|----------------------------|---|
| 1 | Thamtherb | Yes | Yes | Health center |
| 2 | Houynamyen | Yes | Yes | In hospital |
| 3 | Houydokmai | Yes | No | In hospital |
| 4 | Seansai | Yes | No | Health center |
| 5 | Nam Mo | Yes | Yes | In house |
| 6 | Namyone | Yes | No | In hospital |

| No. | Name of the village | First crop | Second crop | Third crop | Forth crop | Fifth crop |
|-----|---------------------|------------|-------------|------------|------------|------------|
| 1 | Thamtherb | Rice | Corn | Banana | Vegetable | Chili |
| 2 | Houynamyen | Fruit | Rice | Root crop | Vegetable | Sugar cane |
| 3 | Houydokmai | Rice | Rubber | Banana | Sugarcane | Fruit |
| 4 | Seansai | Rice | Chili | Casava | Banana | Corn |
| 5 | Nam Mo | Rice | Vegetable | Casava | Corn | Banana |
| 6 | Namyone | Rice | Vegetable | Casava | Banana | Bean |

| No. | Name of the village | First Market | Second Market | Third Market |
|-----|---------------------|---------------------------|-----------------|-----------------|
| 1 | Thamtherb | Give friends | In village | District market |
| 2 | Houynamyen | In village | - | - |
| 3 | Houydokmai | In village | District market | Give friends |
| 4 | Seansai | In village | District market | Give friends |
| 5 | Nam Mo | Lane Xang Mineral company | In village | Give friends |
| 6 | Namyone | Lane Xang Mineral company | In village | Give friends |

Annex 1.15: Main Method for Agriculture Production

| No. | Name of the village | Rotation | Shifting | Rice mill in village |
|-----|---------------------|----------|----------|----------------------|
| 1 | Thamtherb | No | Yes | Yes |
| 2 | Houynamyen | Yes | No | Yes |
| 3 | Houydokmai | Yes | No | Yes |
| 4 | Seansai | Yes | No | Yes |
| 5 | Nam Mo | Yes | No | Yes |
| 6 | Namyone | Yes | No | Yes |

Annex 1.16: Wage in Agriculture Sector

| No. | Name of the village | Rice transplantation wage per day (Kip) | Harvest wage per day (Kip) |
|-----|---------------------|---|----------------------------|
| 1 | Thamtherb | 30,000 | 30,000 |
| 2 | Houynamyen | 40,000 | 40,000 |
| 3 | Houydokmai | 50,000 | 50,000 |
| 4 | Seansai | 40,000 | 40,000 |
| 5 | Nam Mo | 40,000 | 40,000 |
| 6 | Namyone | 45,000 | 45,000 |

Annex 1.17: Hard Rice Price per Kilogram

| No. | Name of the village | Sticky hard rice per kilogram (Kip) | Ordinary hard rice per kilogram (Kip) |
|-----|---------------------|-------------------------------------|---------------------------------------|
| 1 | Thamtherb | 3,500 | 3,500 |
| 2 | Houynamyen | 2,500 | - |
| 3 | Houydokmai | 2,300 | 4,000 |
| 4 | Seansai | 2,100 | 1,800 |
| 5 | Nam Mo | 3,300 | 2,500 |
| 6 | Namyone | 3,300 | 3,300 |

Annex 2: Poverty indicators

| Annex 2.1: Poverty Indicators | | | | | | | | | | | | |
|-------------------------------|------------------------|-------------|-------------|-------------|--------------------------|--------------|--------------|------------|----------------------------|--------------|--------------|------------|
| | Poverty Headcount Rate | | | | Distribution of the Poor | | | | Distribution of Population | | | |
| | 2003 | 2008 | 2013 | Change | 2003 | 2008 | 2013 | Change | 2003 | 2008 | 2013 | Change |
| Laos PDR | 33.5 | 27.6 | 23.2 | -4.3 | 100.0 | 100.0 | 100.0 | 0.0 | 100.0 | 100.0 | 100.0 | 0.0 |
| Urban | 19.7 | 17.4 | 10.0 | -7.3 | 13.5 | 18.1 | 12.4 | -5.7 | 23.0 | 28.8 | 28.8 | 0.0 |
| Rural | 37.6 | 31.7 | 28.6 | -3.1 | 86.5 | 81.9 | 87.6 | 5.7 | 77.0 | 71.2 | 71.2 | 0.0 |
| Province | | | | | | | | | | | | |
| Vientiane Municipality | 16.7 | 15.2 | 5.9 | -9.3 | 5.7 | 6.3 | 3.1 | -3.3 | 11.5 | 11.5 | 12.0 | 0.5 |
| Phongsaly | 50.8 | 46.0 | 12.3 | -33.7 | 5.1 | 5.1 | 1.6 | -3.6 | 3.3 | 3.1 | 2.9 | -0.1 |
| Luangnamtha | 22.8 | 30.5 | 16.1 | -14.4 | 1.7 | 3.3 | 2.0 | -1.2 | 2.5 | 3.0 | 3.0 | 0.0 |
| Oudumxay | 45.1 | 33.7 | 30.1 | -3.6 | 6.2 | 6.1 | 5.7 | -0.4 | 4.6 | 5.0 | 4.4 | -0.6 |
| Bokeo | 21.1 | 32.6 | 44.4 | 11.8 | 1.5 | 2.9 | 5.2 | 2.4 | 2.4 | 2.4 | 2.7 | 0.3 |
| Luangprabang | 39.5 | 27.2 | 25.5 | -1.7 | 9.4 | 7.2 | 7.8 | 0.7 | 8.0 | 7.3 | 7.1 | -0.1 |
| Huaphanh | 51.5 | 50.5 | 39.2 | -11.3 | 8.2 | 10.1 | 7.8 | -2.3 | 5.4 | 5.5 | 4.6 | -0.9 |
| Xayabury | 25.0 | 15.7 | 15.4 | -0.2 | 4.8 | 3.4 | 3.9 | 0.5 | 6.4 | 6.0 | 5.9 | -0.1 |
| Xiengkhuang | 41.6 | 42.0 | 31.9 | -10.1 | 5.5 | 6.7 | 6.0 | -0.7 | 4.4 | 4.4 | 4.4 | 0.0 |
| Vientiane province | 19.0 | 27.8 | 12.0 | -15.8 | 3.5 | 7.6 | 4.2 | -3.4 | 6.3 | 7.5 | 8.2 | 0.7 |
| Borikhamxay | 28.7 | 21.5 | 16.4 | -5.1 | 3.1 | 2.8 | 2.7 | -0.1 | 3.6 | 3.6 | 3.8 | 0.2 |
| Khammuane | 33.7 | 31.4 | 26.4 | -5.0 | 6.0 | 6.8 | 5.7 | -1.1 | 6.0 | 6.0 | 5.0 | -0.9 |
| Savannakhet | 43.1 | 28.5 | 27.9 | -0.6 | 18.9 | 14.4 | 17.1 | 2.7 | 14.7 | 14.0 | 14.3 | 0.3 |
| Saravane | 54.3 | 36.3 | 49.8 | 13.5 | 9.1 | 8.3 | 12.6 | 4.3 | 5.6 | 6.3 | 5.9 | -0.4 |
| Sekong | 41.8 | 51.8 | 42.7 | -9.1 | 1.8 | 3.1 | 4.2 | 1.1 | 1.4 | 1.7 | 2.3 | 0.7 |
| Champasack | 18.4 | 10.0 | 19.9 | 9.9 | 6.0 | 3.9 | 9.4 | 5.6 | 11.0 | 10.7 | 11.0 | 0.4 |
| Attapeu | 44.0 | 24.6 | 8.9 | -15.7 | 2.5 | 1.8 | 0.9 | -0.9 | 1.9 | 2.0 | 2.4 | 0.4 |
| XaysombounSR | 30.6 | 46.1 | | | 1.1 | 0.3 | | | 1.2 | 0.2 | | |

Source: LECS5, 2013

| Annex 2.2: Number of Poor | | | | |
|---------------------------|-----------|-----------|-----------|-----------|
| | 1992/3 | 1997/8 | 2002/3 | 2007/8 |
| Lao PDR | 2,054,020 | 1,987,060 | 1,848,444 | 1,546,743 |
| Urban | 279,096 | 187,808 | 249,948 | 280,558 |
| Rural | 1,768,213 | 1,799,263 | 1,599,452 | 1,266,187 |
| Rural with road | 728,993 | 580,507 | 758,841 | 1,030,712 |
| Rural w/o road | 1,033,001 | 1,223,070 | 844,044 | 233,878 |

Source: LECS5, 2013

| Annex 2.3: Poverty related indicators | | | | | |
|--|-------|-------|-------|-------|-------|
| Indicator Name | 1992 | 1997 | 2002 | 2007 | 2012 |
| Income share held by second 20 | 12.81 | 11.9 | 12.34 | 11.65 | 11.46 |
| Income share held by third 20 | 16.43 | 15.69 | 16.17 | 15.53 | 15.49 |
| Income share held by fourth 20 | 21.43 | 21.11 | 21.46 | 20.99 | 21.13 |
| Income share held by highest 20 | 40.06 | 43.28 | 41.44 | 43.87 | 44.3 |
| Income share held by highest 10 | 25.81 | 28.96 | 26.97 | 29.44 | 29.67 |
| Income share held by lowest 10 | 4.16 | 3.39 | 3.79 | 3.5 | 3.31 |
| Income share held by lowest 20 | 9.27 | 8.02 | 8.59 | 7.96 | 7.62 |
| Poverty headcount ratio at \$2 a day (PPP) (of population) | 84.82 | 78.75 | 74.89 | 68.25 | 62.01 |
| Poverty headcount ratio at \$1.25 a day (PPP) (of population) | 55.68 | 47.53 | 41.22 | 35.1 | 30.26 |
| Poverty gap at \$2 a day (PPP) (%) | 37.6 | 33.32 | 29.42 | 25.68 | 22.42 |
| Poverty gap at \$1.25 a day (PPP) (%) | 16.24 | 14.03 | 10.93 | 9.15 | 7.66 |
| Poverty gap at national poverty lines (%) | 11.2 | 10.3 | 8 | 6.5 | 5.5 |
| Poverty headcount ratio at national poverty lines (of population) | 46 | 39.1 | 33.5 | 27.6 | 23.2 |
| Rural poverty gap at national poverty lines (%) | 12.9 | 11.4 | 9.2 | 7.7 | 6.8 |
| Rural poverty headcount ratio at national poverty lines (of rural population) | 51.8 | 42.5 | 37.6 | 31.7 | 28.6 |
| Urban poverty gap at national poverty lines (%) | 5.5 | 4.9 | 4.1 | 3.4 | 2.3 |
| Urban poverty headcount ratio at national poverty lines (of urban population) | 26.5 | 22.1 | 19.7 | 17.4 | 10 |

Source: LECS5, 2013

| Annex 2.4: Perceptions of individual well-being | | | | | | | |
|---|-------------------|---------------------|--------------------|-------------|-----------------|-------------------|--|
| | Education quality | Health care quality | Standard of living | Job | Safety | Freedom of choice | Overall life satisfaction index |
| | (satisfied) | (satisfied) | (satisfied) | (satisfied) | (answering yes) | (satisfied) | (0, least satisfied, 10, most satisfied) |
| Country | 2012 | 2008-2012 | 2007-2013 | 2007-2012 | 2007-2012 | 2007-2012 | 2007-2012 |
| Lao PDR | 73 | 66 | 73 | 85 | 75 | 87 | 4.9 |
| Human Development Groups | | | | | | | |
| Very high human development | 63 | 72 | — | 84 | 72 | 77 | 6.6 |
| High human development | 60 | 58 | — | 74 | 68 | 73 | 5.5 |
| Medium human development | 71 | 54 | — | 71 | 65 | 62 | 4.8 |
| Low human development | .. | 42 | — | 64 | 55 | 56 | 4.6 |

Source: Human Development Report: UNDP, 2014

| Annex 2.5: Multidimensional Poverty Index in 2010-2011 | | | | | | |
|--|--|------------------------------|--------|--|------------------|------|
| Multidimensional Poverty Index | | Head count | | Intensity of deprivation | | |
| Value | | (%) | ('000) | (%) | | |
| 0.186 | | 36.8 | 2447 | 50.5 | | |
| Population near multidimensional poverty | | Population in severe poverty | | Contribution of deprivation to overall poverty (%) | | |
| | | Education | | Health | Living standards | |
| (%) | | (%) | | | | |
| 18.5 | | 18.8 | | 37.7 | 25.4 | 36.9 |

Source: Human Development Report: UNDP, 2014

| Annex 2.6: Percent of households with access to land and productive assets | | | | | | | | | |
|--|----------------|-------------|--------------------------|---------------------------|---------------------|--------------------|------|------|-------------|
| Region | Access to land | Owning land | Owning business building | Access to agric. Building | Two-wheeled tractor | Four-wheel tractor | Boat | Cart | Fishing net |
| Lao PDR | 97.5 | 95.8 | 5.9 | 14.1 | 32.7 | 4.6 | 11.8 | 1.8 | 75 |
| Urban | 95.8 | 94 | 12.2 | 8 | 17.8 | 2.8 | 7.5 | 1.1 | 93.1 |
| Rural with road | 98.2 | 96.5 | 3.2 | 17.3 | 40.5 | 5.4 | 12.7 | 2.3 | 68.8 |
| Rural without road | 98.5 | 98.5 | 1.9 | 9.3 | 18.9 | 4.4 | 29.1 | 0.7 | 42.7 |

Source: LECS 5, 2014

Annex 3. Health Indicators

| Annex 3.1: Health indicators | | | | | | |
|--|--------|--------|--------|--------|--------|--------|
| Indicator Name | 1990 | 2000 | 2010 | 2011 | 2012 | 2013 |
| Mortality rate, under-5 (per 1,000 live births) | 162 | 117.4 | 79.6 | 76.7 | 74 | 71.4 |
| Mortality rate, under-5, female (per 1,000) | 151.7 | 108.7 | 73 | - | - | 65 |
| Mortality rate, under-5, male (per 1,000) | 171.9 | 125.7 | 86 | - | - | 77.4 |
| Improved water source, rural (of rural population with access) | - | 37.9 | 60.4 | 62.6 | 64.9 | - |
| Improved water source, urban (of urban population with access) | - | 72.2 | 81.8 | 82.8 | 83.7 | - |
| Improved water source (of population with access) | - | 45.5 | 67.5 | 69.5 | 71.5 | - |
| Improved sanitation facilities (of population with access) | - | 28 | 58.7 | 61.7 | 64.6 | - |
| Improved sanitation facilities, rural (of rural population with access) | - | 17.2 | 44.9 | 47.7 | 50.5 | - |
| Improved sanitation facilities, urban (of urban population with access) | - | 66.1 | 86.4 | 88.4 | 90.4 | - |
| Malnutrition prevalence, weight for age, female (of children under 5) | - | 34.5 | - | 26.2 | - | - |
| Malnutrition prevalence, weight for age, male (of children under 5) | - | 38.4 | - | 26.8 | - | - |
| Malnutrition prevalence, weight for age (of children under 5) | - | 36.4 | - | 26.5 | - | - |
| Malnutrition prevalence, height for age, female (% of children under 5) | - | 46.7 | - | 42.1 | - | - |
| Malnutrition prevalence, height for age, male (% of children under 5) | - | 49.8 | - | 45.5 | - | - |
| Malnutrition prevalence, height for age (% of children under 5) | - | 48.2 | - | 43.8 | - | - |
| Maternal mortality ratio (modeled estimate, per 100,000 live births) | 1100 | 600 | 270 | - | - | 220 |
| Maternal mortality ratio (national estimate, per 100,000 live births) | - | - | - | - | 360 | - |
| Mortality rate, adult, female (per 1,000 female adults) | 299.84 | 223.77 | 168.43 | 163.33 | 158.23 | 153.31 |
| Mortality rate, adult, male (per 1,000 male adults) | 348.48 | 266.30 | 207.34 | 202.16 | 196.98 | 191.96 |
| Birth rate, crude (per 1,000 people) | 42.87 | 30.92 | 28.23 | 27.78 | 27.27 | 26.76 |
| Death rate, crude (per 1,000 people) | 13.34 | 8.44 | 6.41 | 6.25 | 6.09 | - |
| Contraceptive prevalence (of women ages 15-49) | - | 32.20 | - | - | 49.80 | - |
| Mortality rate, infant, female (per 1,000 live births) | 100.20 | 74.30 | 52.60 | | | 47.8 |
| Mortality rate, infant (per 1,000 live births) | 110.90 | 83.00 | 59.00 | 57.10 | 55.40 | 53.8 |
| Mortality rate, infant, male (per 1,000 live births) | 121.10 | 91.30 | 65.20 | | | 59.5 |
| Life expectancy at birth, female (years) | 55.36 | 62.93 | 68.25 | 68.72 | 69.20 | 69.66 |
| Life expectancy at birth, total (years) | 54.12 | 61.64 | 66.90 | 67.35 | 67.81 | 68.25 |
| Life expectancy at birth, male (years) | 52.94 | 60.42 | 65.62 | 66.05 | 66.48 | 66.91 |
| Fertility rate, total (births per woman) | 6.15 | 4.19 | 3.29 | 3.20 | 3.11 | 3.02 |

Source: World Bank, 2014

Annex 3.2: Temporary health problems in the past 4 weeks by regions in 2012-2013

| Area | Percent of population with temporary health problems | | | Percent of people with temporary health problems disrupting work | | |
|--------------------|--|------|-------|--|------|-------------|
| | Female | Male | Total | Female | Male | Total |
| Lao PDR | 10.9 | 9.9 | 10.4 | 48.1 | 48.5 | 48.2 |
| Urban | 11 | 9.8 | 10.4 | 41.3 | 44 | 42.5 |
| Rural with road | 10.6 | 9.7 | 10.2 | 50 | 49.8 | 49.9 |
| Rural without road | 14.7 | 12.4 | 13.6 | 59.8 | 55.5 | 57.9 |
| Region | | | | | | |
| North | 11.7 | 10.9 | 11.3 | 49.3 | 52.4 | 50.8 |
| Center | 9.5 | 8.5 | 9 | 42 | 43.5 | 42.7 |
| South | 12.5 | 10.9 | 11.8 | 59.3 | 56.3 | 57.9 |

Source: LSB, LECS 5, 2014

Annex 3.3: Percent of people with long term illness or disability

| | Female | Male | Total |
|--------------------|------------|------------|------------|
| Lao PDR | 2.3 | 1.9 | 2.1 |
| Urban | 2.7 | 2.2 | 2.5 |
| Rural with road | 2.1 | 1.8 | 1.9 |
| Rural without road | 2.8 | 1.8 | 2.3 |
| Region | | | |
| North | 1.6 | 1.7 | 1.7 |
| Center | 1.7 | 1.6 | 1.6 |
| South | 3.5 | 2.3 | 2.9 |

Source: LSB, LECS 5, 2014

Annex 4. Education indicators

| Annex 4.1: Education Indicators | | | | | | |
|--|--------|--------|--------|--------|--------|--------|
| Indicator Name | 1990 | 2000 | 2010 | 2011 | 2012 | 2013 |
| Ratio of female to male primary enrollment (%) | 79.48 | 85.24 | 92.60 | 93.75 | 94.52 | 95.09 |
| Ratio of girls to boys in primary and secondary education (%) | 77.21 | 81.25 | 89.35 | 90.45 | 91.62 | 92.59 |
| Ratio of female to male secondary enrollment (%) | 68.59 | 70.16 | 83.22 | 85.09 | 87.25 | 89.10 |
| Ratio of female to male tertiary enrollment (%) | 49.23 | 52.47 | 76.73 | 73.34 | 82.47 | 88.20 |
| School enrollment, preprimary (%gross) | 7.13 | 7.40 | 20.42 | 21.54 | 24.05 | 26.06 |
| School enrollment, preprimary, female (%gross) | 7.22 | 7.78 | 20.83 | 22.17 | 24.60 | 26.56 |
| School enrollment, preprimary, male (%gross) | 7.05 | 7.04 | 20.03 | 20.92 | 23.53 | 25.58 |
| Primary completion rate, female (%of relevant age group) | - | 61.32 | 80.04 | 87.40 | 93.27 | 99.51 |
| Primary completion rate, male (% of relevant age group) | - | 72.80 | 85.71 | 92.80 | 96.90 | 102.45 |
| Primary completion rate, total (% of relevant age group) | 43.48 | 67.15 | 82.92 | 90.14 | 95.12 | 101.01 |
| Primary education, pupils (%female) | 43.46 | 45.18 | 47.18 | 47.44 | 47.61 | 47.73 |
| School enrollment, primary (%gross) | 98.54 | 105.61 | 123.19 | 123.41 | 122.74 | 121.25 |
| School enrollment, primary, female (% gross) | 87.11 | 97.06 | 118.38 | 119.36 | 119.22 | 118.14 |
| School enrollment, primary, male (%gross) | 109.59 | 113.88 | 127.83 | 127.31 | 126.13 | 124.24 |
| School enrollment, primary (% net) | 64.93 | 74.90 | 94.35 | 95.35 | 95.88 | 97.29 |
| School enrollment, primary, female (% net) | - | 71.62 | 92.92 | 94.38 | 94.93 | 96.47 |
| School enrollment, primary, male (% net) | - | 78.07 | 95.73 | 96.27 | 96.79 | 98.07 |
| School enrollment, primary, private (% of total primary) | 0.00 | 2.03 | 3.46 | 3.80 | 4.13 | 4.40 |
| Primary education, teachers (% female) | 36.73 | 43.40 | 51.13 | 51.84 | 50.84 | 50.59 |
| Lower secondary completion rate, female (%of relevant age group) | - | 23.09 | 41.09 | 41.63 | 42.12 | 44.08 |
| Lower secondary completion rate, male (%of relevant age group) | - | 31.46 | 49.60 | 48.73 | 47.78 | 49.94 |
| Lower secondary completion rate, total (%of relevant age group) | 16.52 | 27.36 | 45.44 | 45.25 | 45.01 | 47.06 |
| Secondary education, pupils (%female) | 39.90 | 40.54 | 44.68 | 45.21 | 45.81 | 46.30 |
| Secondary education, general pupils (%female) | 39.80 | 40.62 | 44.68 | 45.20 | 45.74 | 46.22 |
| Secondary education, vocational pupils (%female) | 40.92 | 35.55 | 42.95 | 46.48 | 53.99 | 52.71 |
| School enrollment, secondary (%gross) | 23.27 | 34.14 | 44.84 | 43.60 | 46.54 | 47.54 |
| School enrollment, secondary, female (%gross) | 18.88 | 28.09 | 40.68 | 40.04 | 43.32 | 53.35 |
| School enrollment, secondary, male (%gross) | 27.52 | 40.03 | 48.88 | 47.06 | 49.66 | 44.67 |
| School enrollment, secondary (%net) | - | 27.42 | 38.16 | 38.73 | 41.37 | 44.67 |
| School enrollment, secondary, female (%net) | - | 24.06 | 36.25 | 36.82 | 39.71 | 43.44 |
| School enrollment, secondary, male (%net) | - | 30.68 | 40.02 | 40.58 | 42.98 | 45.86 |
| School enrollment, secondary, private (% of total secondary) | - | 0.87 | 2.69 | 2.89 | 3.14 | 3.31 |
| School enrollment, tertiary (%gross) | 1.13 | 2.68 | 16.09 | 17.09 | 16.73 | 17.70 |
| School enrollment, tertiary, female (%gross) | 0.74 | 1.84 | 13.95 | 14.44 | 15.10 | 16.57 |
| School enrollment, tertiary, male (%gross) | 1.51 | 3.51 | 18.18 | 19.68 | 18.31 | 18.79 |

Sources: World Bank, 2014

| Annex 4.2: Literacy rate of household head (%) | | | |
|--|---------|---------|---------|
| | 2002/03 | 2007/08 | 2012/13 |
| Lao PDR | 85 | 87 | 87.5 |
| Poor | 78 | 78 | 74.3 |
| Non-poor | 88 | 90 | 91.2 |
| Urban | 94 | 94 | 97.1 |
| Rural | 82 | 84 | 83.6 |
| Lao-Tai | 91 | 93 | 94.7 |
| Mon-Khmer | 78 | 80 | 75.6 |
| Chine-Tibet | 38 | 36 | 46.5 |
| Hmong-Mien | 69 | 71 | 72.6 |
| Other | 71 | 91 | 76.5 |
| Male | - | 88 | 89.1 |
| Female | - | 70 | 87.2 |

Sources: LECS 3 (2003), LECS 4 (2008), LECS5 (2013)

| Annex 4.3: Net school enrolment (%) among children 6-15 years old by sex in 2012/13 | | | | | | |
|---|----------|------|-------|-----------|------|-------|
| | Age 6-10 | | | Age 11-15 | | |
| | Girls | Boy | Total | Girls | Boy | Total |
| Lao PDR | 84 | 85.8 | 84.9 | 50.3 | 48.4 | 49.4 |
| Urban | 85.2 | 85.2 | 85.2 | 44.7 | 46.8 | 45.8 |
| Rural with road | 84.6 | 87 | 85.8 | 55.8 | 49.1 | 52.3 |
| Rural without road | 78.5 | 81.9 | 80.4 | 38.7 | 38 | 38.3 |

Source: LECS5, 2013

| Annex 4.4: Number of Years of Schooling in Urban and Rural Areas | | | | |
|--|-------|------|-------|-------|
| | Girls | Boys | Girl | Boy |
| | | | 15-19 | 15-19 |
| Urban | 8 | 8.7 | 9.1 | 8.8 |
| Rural with road | 5.2 | 5.8 | 6.2 | 6.6 |
| Rural without road | 3.9 | 4.6 | 4.2 | 5.4 |

Source: LECS5, 2013

| Annex 4.5: Main Economic Activities for Population 10+, in Urban and Rural Areas | | | | | | | |
|--|-----------------------------------|--------------|--------------|--|-------------------|-------------------|-------|
| Region | Percent of population 10+ working | | | Main activity last 7 days, Percent of total hours worked | | | |
| | Male | Female | Total | Paid employee | Self-employed | | |
| | | | | | Non-farm activity | Own operated farm | Total |
| Lao PDR | 77.6 | 73.9 | 75.7 | 17.8 | 19.7 | 62.5 | 100 |
| Urban | 72.88 | 76.59 | 74.68 | 34.9 | 37.5 | 27.6 | 100 |
| Rural with road | 74.68 | 78.67 | 76.65 | 10.8 | 12.3 | 77 | 100 |
| Rural without road | 80.29 | 82.64 | 81.44 | 7 | 9.4 | 83.6 | 100 |

Source: LECS5, 2013

| Annex 4.6: Total Hours Worked in Different Sectors as Percent of Total Hours | | | |
|--|------------------|--------|-------------|
| Production in/of | Percent of total | | |
| | Male | Female | Total |
| Agriculture, forestry, fishing | 71.7 | 72.9 | 72.3 |
| Mining | 0.5 | 0.2 | 0.4 |
| Food processing, beverages, tobacco | 0.9 | 1.2 | 1 |
| Textile, leather, production | 0.3 | 2.8 | 1.5 |
| Wood, paper, chemicals, plastics | 3.3 | 2.2 | 2.8 |
| Production of equipment, motor vehicles | 0.5 | 0.1 | 0.3 |
| Electricity, water | 0.3 | 0.1 | 0.2 |
| Construction | 5.1 | 0.6 | 2.9 |
| Wholesale, retail, hotel and restaurants | 5.4 | 12.3 | 8.8 |
| Transport | 1.8 | 0.2 | 1 |
| Other services | 10.3 | 7.3 | 8.8 |
| Total | 100 | 100 | 100 |

Source: LECS5, 2013

| Annex 4.7: House Hold Businesses, in Charge of Operation (%) | | | |
|--|-------|-------|------------|
| | Men | Women | Total |
| Total | 49.49 | 50.51 | 100 |
| Urban | 48.54 | 51.46 | 100 |
| Rural | 49.88 | 50.12 | 100 |

Source: LECS 5, 2013

| Annex 4.8: Time use by sex, hours per day | | | |
|---|------|--------|-------|
| Activity | Male | Female | Total |
| Sleeping | 8.8 | 8.6 | 8.7 |
| Eating, drinking, personal care | 2.7 | 2.6 | 2.7 |
| School | 1.1 | 0.9 | 1.0 |
| Work as employed | 1.1 | 0.6 | 0.9 |
| Own business work | 0.6 | 0.9 | 0.7 |
| Tending rice | 1.1 | 0.9 | 1.0 |
| Tending other crops | 0.6 | 0.6 | 0.6 |
| Tending animals | 0.5 | 0.3 | 0.4 |
| Collecting firewood | 0.1 | 0.1 | 0.1 |
| Fetching water | 0.1 | 0.1 | 0.1 |
| Hunting | 0.2 | 0.0 | 0.1 |
| Fishing | 0.4 | 0.1 | 0.2 |
| Buying/shopping | 0.1 | 0.1 | 0.1 |
| Construction | 0.1 | 0.0 | 0.1 |
| Weaving, sewing, textile care | 0.0 | 0.2 | 0.1 |
| Handicraft | 0.1 | 0.1 | 0.1 |
| Cooking | 0.1 | 1.0 | 0.6 |
| Washing | 0.2 | 0.6 | 0.4 |
| Care for children/elderly | 0.2 | 0.8 | 0.5 |
| Travel | 0.8 | 0.6 | 0.7 |
| Leisure time | 4.7 | 4.2 | 4.5 |
| Others | 0.7 | 0.6 | 0.7 |

Source: LECS 5, 2014

| Annex 4.9: Time use for Main Activities by Sex, Hours per Day | | | |
|---|------|--------|-------|
| Activity | Male | Female | Total |
| Income generating activities | 4.7 | 3.9 | 4.3 |
| Work as employed | 1.1 | 0.6 | 0.9 |
| Own business work | 0.6 | 0.9 | 0.7 |
| Agriculture work | 2.1 | 1.8 | 2.0 |
| Collecting firewood/ fetching water | 0.1 | 0.2 | 0.2 |
| Hunting/fishing | 0.6 | 0.1 | 0.3 |
| Construction | 0.1 | 0.0 | 0.1 |
| Handicraft | 0.1 | 0.3 | 0.2 |
| Household work | 0.3 | 1.8 | 1.1 |
| School | 1.1 | 0.9 | 1.0 |
| Sleeping, eating, leisure time | 16.2 | 15.4 | 15.8 |
| Travel, others | 1.5 | 1.2 | 1.4 |

Source: LECS 5, 2014

| Ethnic Origin | Annex 4.10. Agriculture Household Head Based on LECS 4 and 5 | | | | | | | | | | | |
|----------------|--|------------|---------------|------------|---------------|------------|--------------|------------|---------------|------------|---------------|------------|
| | All Agricultural Households | | | | Female-Headed | | | | Male-Headed | | | |
| | 2007-08 | | 2012-13 | | 2007-08 | | 2012-13 | | 2007-08 | | 2012-13 | |
| | Number | % | Number | % | Number | % | Number | % | Number | % | Number | % |
| Lao PDR | 825892 | 100 | 979093 | 100 | 39940 | 100 | 50758 | 100 | 785952 | 100 | 928335 | 100 |
| Lao | 444504 | 53.8 | 513363 | 52.4 | 29421 | 73.7 | 34714 | 68.4 | 415084 | 52.8 | 478649 | 51.6 |
| Thai | 34515 | 4.2 | 57534 | 5.9 | 1347 | 3.4 | 2095 | 4.1 | 33168 | 4.2 | 55438 | 6 |
| Phuthai | 19287 | 2.3 | 17696 | 1.8 | 238 | 0.6 | 384 | 0.7 | 19049 | 2.4 | 17312 | 1.9 |
| Leu | 33362 | 4 | 30502 | 3.1 | 690 | 1.7 | 1208 | 2.4 | 32671 | 4.2 | 29294 | 3.2 |
| Nguan | 4719 | 0.6 | 4495 | 0.5 | 31 | 0.1 | 221 | 0.4 | 4689 | 0.6 | 4274 | 0.5 |
| Yung | 276 | 0 | - | - | - | - | - | - | 276 | 0 | - | - |
| Thaineau | 1876 | 0.2 | 2578 | 0.3 | - | - | 0 | 0 | 1876 | 0.2 | 2578 | 0.3 |
| Khmou | 101778 | 12.3 | 136687 | 14 | 3302 | 8.3 | 6186 | 12.2 | 98476 | 12.5 | 130501 | 14.1 |
| Prai | 1631 | 0.2 | 2895 | 0.3 | - | - | 96 | 0.2 | 1631 | 0.2 | 2799 | 0.3 |
| Singmoon | 578 | 0.1 | 907 | 0.1 | - | - | 64 | 0.1 | 578 | 0.1 | 843 | 0.1 |
| Phong | 2512 | 0.3 | 6497 | 0.7 | - | - | 0 | 0 | 2512 | 0.3 | 6497 | 0.7 |
| Thein | 111 | 0 | 218 | 0 | - | - | 218 | 0.4 | 111 | 0 | 0 | |
| Adoo | 192 | 0 | - | - | - | - | - | - | 192 | 0 | - | |
| Lamed | 1263 | 0.2 | 1278 | 0.1 | - | - | 50 | 0 | 1263 | 0.2 | 1228 | 0.1 |
| Samtao | 540 | 0.1 | 840 | 0 | 77 | 0.2 | 0 | 0 | 462 | 0.1 | 840 | 0.1 |
| Katang | 16512 | 2 | 20137 | 2.1 | 1412 | 3.5 | 879 | 1.7 | 15100 | 1.9 | 19257 | 2.1 |
| Makong | 8371 | 1 | 15356 | 1.6 | 523 | 1.3 | 1578 | 3.1 | 7848 | 1 | 13778 | 1.5 |
| Tri | 5680 | 0.7 | 6029 | 0.6 | 123 | 0.3 | 184 | 0.4 | 5557 | 0.7 | 5845 | 0.6 |
| Yuroo | 11416 | 1.4 | 10861 | 1.1 | 322 | 0.8 | 484 | 1 | 11094 | 1.4 | 10377 | 1.1 |
| Treang | 4583 | 0.6 | 8774 | 0.9 | 343 | 0.9 | 645 | 1.3 | 4240 | 0.5 | 8128 | 0.9 |
| Taoy | 10215 | 1.2 | 19748 | 2 | 81 | 0.2 | 111 | 0.2 | 10134 | 1.3 | 19637 | 2.1 |
| Yerh | 909 | 0.1 | 822 | 0.1 | - | - | 0 | 0 | 909 | 0.1 | 822 | 0.1 |
| Brao | 1716 | 0.2 | 1103 | 0.1 | 96 | 0.2 | 221 | 0.4 | 1620 | 0.2 | 882 | 0.1 |
| Katu | 2131 | 0.3 | 2273 | 0.2 | - | - | 72 | 0.1 | 2131 | 0.3 | 2201 | 0.2 |
| Hahak | 3786 | 0.5 | 6302 | 0.6 | 235 | 0.6 | 36 | 0.1 | 3551 | 0.5 | 6266 | 0.7 |
| Oy | 2777 | 0.3 | 4724 | 0.5 | - | - | 0 | 0 | 2777 | 0.4 | 4724 | 0.5 |
| Grieng | 4294 | 0.5 | 2932 | 0.3 | - | - | 0 | 0 | 4294 | 0.5 | 2932 | 0.3 |
| Cheng | 727 | 0.1 | 1115 | 0.1 | - | - | 0 | 0 | 727 | 0.1 | 1115 | 0.1 |
| Sdang | 163 | 0 | - | - | - | - | - | - | 163 | 0 | - | - |
| Shuay | 2490 | 0.3 | 2492 | 0.3 | - | - | 48 | 0.1 | 2490 | 0.3 | 2444 | 0.3 |
| Lavy | 75 | 0 | - | - | - | - | - | - | 75 | 0 | - | - |
| Pako | 1839 | 0.2 | 2722 | 0.3 | - | - | 0 | 0 | 1839 | 0.2 | 2722 | 0.3 |
| Toum | 900 | 0.1 | - | - | - | - | - | - | 900 | 0.1 | - | - |
| Akha | 14847 | 1.8 | 2696 | 0.3 | 436 | 1.1 | 40 | 0.1 | 14411 | 1.8 | 2655 | 0.3 |
| Singsiri | 9494 | 1.1 | - | - | 368 | 0.9 | - | - | 9127 | 1.2 | - | - |
| Lahoo | 3070 | 0.4 | - | - | 81 | 0.2 | - | - | 2989 | 0.4 | - | - |
| Lolo | 899 | 0.1 | 61081 | 6.2 | - | - | 595 | 1.2 | 899 | 0.1 | 60486 | 6.5 |
| Hor | 1219 | 0.1 | 664 | 0.1 | 192 | 0.5 | 0 | 0 | 1027 | 0.1 | 664 | 0 |
| Hmong | 65552 | 7.9 | 12442 | 1.3 | 623 | 1.6 | 228 | 0.4 | 64929 | 8.3 | 12214 | 1.3 |
| Ilmearn | 31 | 0 | 6236 | 0.6 | - | - | 336 | 0.7 | 31 | 0 | 5899 | 0.6 |
| Guan | - | - | 181 | 0 | - | - | 0 | 0 | - | - | 181 | 0 |
| Moy | - | - | 62 | 0 | - | - | 0 | 0 | - | - | 62 | 0 |
| Pounoy | - | - | 158 | 0 | - | - | 0 | 0 | - | - | 158 | 0 |
| Syla | - | - | 1121 | 0.1 | - | - | 0 | 0 | - | - | 1121 | 0.1 |
| Hayi | - | - | 655 | 0 | - | - | 0 | 0 | - | - | 655 | 0 |
| Other Ethnic | 5054 | 0.6 | 12919 | 1.3 | - | - | 65 | 0.1 | 5054 | 0.6 | 12854 | 1.4 |

Sources: LECS 4 and 5

Annex 4.11: Agriculture Household Heads Based on LCA 2011

| Ethnic group | Language family | Number of female-headed farm households | Proportion within the ethnic group (%) |
|--------------|-----------------|---|--|
| Lao | Lao-Tai | 41 899 | 11 |
| Tai | Lao-Tai | 3 429 | 13.1 |
| Makong | Mon-Khmer | 1 835 | 9.1 |
| Yru | Mon-Khmer | 718 | 10.1 |
| Xuay | Mon-Khmer | 698 | 10.5 |
| Brao | Mon-Khmer | 458 | 10.3 |
| Nhahem | Mon-Khmer | 145 | 12.2 |
| Xaek | Lao-Tai | 66 | 12.4 |
| Lolo | Chine-Tibet | 58 | 15.1 |
| Hmong | Hmong-Mien | 1 881 | 2.8 |
| Phoutai | Lao-Tai | 1 048 | 3.4 |
| Leu | Lao-Tai | 1 003 | 4.5 |
| Akha | Chine-Tibet | 317 | 1.9 |
| Tri | Mon-Khmer | 169 | 3.6 |
| Phong | Mon-Khmer | 153 | 4 |
| Katu | Mon-Khmer | 132 | 4.2 |

Source: LCA 2010/11

| Annex 4.12. Employment and Labour Force from Modeled ILO Estimate | | | | | | |
|---|---------|---------|---------|---------|---------|---------|
| Indicators | 1990 | 2000 | 2010 | 2011 | 2012 | 2013 |
| Employment to population ratio, ages 15-24, female (%) | - | 74.60 | 67.40 | 67.00 | 66.80 | 66.40 |
| Employment to population ratio, ages 15-24, male (%) | - | 60.10 | 56.40 | 56.30 | 56.30 | 56.20 |
| Employment to population ratio, ages 15-24, total (%) | - | 67.20 | 61.80 | 61.60 | 61.50 | 61.30 |
| Employment to population ratio, 15+, female (%) | - | 77.60 | 75.50 | 75.50 | 75.50 | 75.40 |
| Employment to population ratio, 15+, male (%) | - | 79.30 | 77.50 | 77.50 | 77.70 | 77.80 |
| Employment to population ratio, 15+, total (%) | - | 78.40 | 76.50 | 76.50 | 76.60 | 76.60 |
| Labor force participation rate for ages 15-24, female (%) | 83.00 | 77.10 | 69.10 | 68.80 | 68.50 | 68.20 |
| Labor force participation rate for ages 15-24, male (%) | 68.80 | 63.60 | 58.80 | 58.70 | 58.70 | 58.80 |
| Labor force participation rate for ages 15-24, total (%) | 75.80 | 70.30 | 63.90 | 63.70 | 63.60 | 63.40 |
| Labor force participation rate, female (of female population ages 15-64) | 84.70 | 83.20 | 80.10 | 80.10 | 80.00 | 80.00 |
| Labor force participation rate, male (of male population ages 15-64) | 85.00 | 83.20 | 80.70 | 80.80 | 80.90 | 81.10 |
| Labor force participation rate, total (of total population ages 15-64) | 84.90 | 83.20 | 80.40 | 80.40 | 80.50 | 80.60 |
| Labor force participation rate, female (of female population ages 15+) | 80.00 | 78.80 | 76.40 | 76.40 | 76.30 | 76.30 |
| Ratio of female to male labor force participation rate (%) | 96.50 | 97.16 | 97.08 | 96.95 | 96.70 | 96.46 |
| Labor force participation rate, male (of male population ages 15+) | 82.90 | 81.10 | 78.70 | 78.80 | 78.90 | 79.10 |
| Labor force participation rate, total (of total population ages 15+) | 81.40 | 79.90 | 77.50 | 77.60 | 77.60 | 77.70 |
| Labor force, female | 49.75 | 50.21 | 50.35 | 50.22 | 50.10 | 50.04 |
| Labor force, total | 1927670 | 2432298 | 3134095 | 3230458 | 3320949 | 3409503 |
| Unemployment, youth female (of female labor force ages 15-24) | - | 3.40 | 2.50 | 2.50 | 2.50 | 2.60 |
| Unemployment, youth male (of male labor force ages 15-24) | - | 5.50 | 4.10 | 4.10 | 4.10 | 4.30 |
| Unemployment, youth total (of total labor force ages 15-24) | - | 4.30 | 3.20 | 3.20 | 3.30 | 3.40 |
| Unemployment, female (of female labor force) | - | 1.60 | 1.10 | 1.10 | 1.10 | 1.20 |
| Unemployment, male (of male labor force) | - | 2.20 | 1.60 | 1.60 | 1.60 | 1.70 |
| Unemployment, total (of total labor force) | - | 1.90 | 1.40 | 1.40 | 1.40 | 1.40 |

Source: World Bank, 2014

Annex 4.13. Gender Inequality Index

| | Gender Inequality Index | | Maternal mortality ratio (deaths per 100,000 live births) | Adolescent birth rate (births per 1,000 women aged 15-19) | Share of seats in parliament (%women) | Population with at least some secondary education (aged 25 and above) | | Labour Force Participation rate (aged 15 and above) | |
|-----------------------------|-------------------------|------|--|--|--|---|-----------|---|------|
| | Value | Rank | | | | Female | Male | Female | Male |
| Country/country groups | 2013 | 2013 | 2010 | 2010/2015 | 2013 | 2005-2012 | 2005-2012 | 2012 | 2012 |
| Lao PDR | 0.534 | 118 | 470 | 65.0 | 25.0 | 22.9 | 36.8 | 76.3 | 78.9 |
| Human Development Groups | | | | | | | | | |
| Very high human development | 0.197 | — | 16 | 19.2 | 26.7 | 86.1 | 87.7 | 52.3 | 69.0 |
| High human development | 0.315 | — | 42 | 28.8 | 18.8 | 60.2 | 69.1 | 57.1 | 77.1 |
| Medium human development | 0.513 | — | 186 | 43.4 | 17.5 | 34.2 | 51.4 | 38.7 | 80.0 |
| Low human development | 0.587 | — | 427 | 92.3 | 20.0 | 14.3 | 28.9 | 55.7 | 78.4 |

Source: Human Development Report: UNDP, 2014

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