

Women, Food and Land

*Risk and Vulnerability
Survey 2012/13*

Qualitative Analysis

Vientiane, June 2013.



Women, Food and Land

Understanding the impact of gender on nutrition, food security and community resilience in Lao PDR

Risk and Vulnerability Survey
Qualitative Analysis

In collaboration with and funded by FAO

Vientiane, June 2013

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Contents

FIGURES.....	v
PICTURES.....	v
MAPS.....	v
TABLES.....	v
FOREWORD	vi
ACKNOWLEDGEMENTS.....	vii
EXECUTIVE SUMMARY	viii
1. BACKGROUND AND INTRODUCTION	1
2. OBJECTIVES	2
3. METHODOLOGY	3
3.1 Approach.....	3
3.2 Key Questions	4
3.3 Identifying Fieldwork Locations	5
3.4 Field Methodology	8
3.5 Data Collection Tools	9
3.6 Data Analysis.....	12
3.7 Limitations.....	13
4. FINDINGS.....	14
4.1 Vulnerability Context	14
4.1.1 Livelihood Strategies and Assets.....	14
4.1.2 Community Assets	15
4.1.3 Social Networks.....	17
Strong intra-village social capital (bonding networks).....	17
Leadership and bridging networks.....	18
4.1.4 Gender Inequity	19
4.1.5 Education	22
4.2 Acute or Chronic Events.....	23
4.3 Food Availability.....	25
4.3.1 Agricultural Production	25
4.3.2 Wild Foods	26
4.3.3 Food Reserves/Food Storage	27
4.4 Access to resources.....	28
4.4.1 Access to Land.....	28
4.4.2 Access to Markets	28
4.4.3 Financial Access.....	29

4.5 Food Utilization	31
4.5.1 Food Diversity	31
4.5.2 Intra-Household Food Distribution	31
4.5.3 Food Taboos During Pregnancy and Post-partum	34
4.5.4 Summary of Food Utilization	35
4.6 Stability	35
4.7 Health.....	35
4.7.1 Mother and Child Health Care	35
4.7.2 Hygiene and Sanitation	38
4.7.3 Health Care Facilities and Services.....	38
4.8 Women’s Priorities Regarding Improved Food Security	39
5. RISK AND VULNERABILITY FEATURES.....	41
5.1 Key Features from the Northern Uplands.....	41
5.2 Key Features from the Mekong Corridor	42
5.3 Key Features from the Southern Highlands.....	42
6. CONCLUSIONS AND RECOMMENDATIONS.....	44
6.1 Develop Best Fit Solutions for Different Farming System Categories.....	44
6.2 Contribute to More Land Tenure Security in Rural Areas.....	45
6.3 Transform Gender-Blind Food Security Strategies to Food and Nutritional Security Interventions Targeted Explicitly at Women and Poor People’s Priorities	46
ANNEXES	48
Annex I: Indicative Schedule of Activities	49
Annex II: Integrated Phase Classification.....	50
Annex III: Definition of Major Terms Used in this Survey	51
Annex IV: Agro-ecological Zones of Lao PDR	51
Annex V: Research Team Members	52
Annex VI: Table of Food Sources and Food Groups.....	53
Annex VII: Acronyms and Abbreviations.....	54
Annex VIII: Village data	55
Annex IX: Qualitative Assessment Form	56

FIGURES

Figure 1: Women’s perceptions of intra-household food consumption	33
Figure 2: Men’s perceptions of intra-household food consumption.....	33
Figure 3: Solutions to improve food security and nutrition.....	39

PICTURES

Picture 1: Social mapping.....	9
Picture 2: Natural resource mapping.....	10
Picture 3: Food source ranking for six food groups	11
Picture 4: Cluster by thematic area: Village Infrastructure	13
Picture 5: Unused toilets in Natherd, Khammouane	15
Picture 6: Woman in Namloy showing her marketable produce: bamboo worms	29
Picture 7: Bamboo worms in bamboo containers	30
Picture 8: Smoking is widespread in all nine villages. In Sekong, women smoke as much as men, and do not stop smoking during pregnancy or breastfeeding.....	36
Picture 9: Woman in Nafaimai village, Khammouane, sits by a hot fire for one week after delivery.....	37
Picture 10: Unhygienic conditions in Phonesaed, Khammouane	38
Picture 11: Picture cards used in household interviews	40

MAPS

Map 1: Selected Districts	5
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TABLES

Table 1: Villages selected for this survey	6
Table 2: Underlying assumptions for food security-related factors	7
Table 3: Number of interviews and focus group discussions	9
Table 4: Example of daily activity profiles of men and women in Thamdeng, Kaleum District, Sekong....	11
Table 5: Example of food utilization scoring of men and women in Vakneua, Kaleum District, Sekong ...	12
Table 6: Village categories and main characteristics of livelihood assets	16
Table 7: Exposure to hazards and their effects, and coping strategies	23
Table 8: Food groups and food sources	26
Table 9: NTFPs and wildlife as income sources.....	30

FOREWORD

In the last decade, Lao PDR has achieved high economic growth along with a steady increase in agricultural productivity leading to considerable reductions in poverty. Despite economic achievements, food security and malnutrition remain a challenge, in particular in rural parts of Lao PDR. High prevalence of chronic malnutrition among children persists, with 40% of children under five years of age being underweight.

The Lao Government has developed a number of policies and strategies to improve food security and nutrition. The Strategy for Agricultural Development (2011-2020) and the Master Plan for Agricultural Development suggest four long-term goals, of which goal 1, the improvement of livelihoods (through agriculture and livestock activities), has food security as its first priority. Promoting agricultural diversification among smallholder farmers shall enable improvements in the nutritional well-being of Lao people, climate-resilient farming systems shall be developed, and the increasing demand for agricultural products from Laos for local and regional markets shall be met by increasing productivity, enhancing quality and market competitiveness.

The Strategy for Agricultural Development provides 8 Implementation Programs to achieve the long-term goals: 1. Food production; 2. Commodity production and farmer organizations; 3. Sustainable production patterns, land allocation and rural development; 4. Forestry development; 5. Irrigated agriculture; 6. Other agriculture and forestry infrastructure; 7. Agriculture and forestry research and extension; and 8. Human resource development.

In order to design new and in-depth research into challenges to food security in Lao PDR, a Risk and Vulnerability Survey Working Group was formed in 2012-2013 among government agencies, development partners and INGOs. Involved stakeholders were the Ministry of Agriculture and Forestry, the Ministry of Health, FAO, UNICEF, WFP, and CARE International in Lao PDR. This Working Group agreed on a quantitative survey, which was complemented, with qualitative case studies from selected Agro-Ecological Zones. The research aims at comprehensively analyzing the specific food and nutritional security situation in particular Agro-Ecological Zones. Overall, this Risk and Vulnerability Qualitative Survey helps to deepen our understanding of the causes and impacts of household food security and nutrition, and ultimately provides evidence to guide future strategies and programs to eradicate hunger and poverty in Lao PDR.

I hope that the report feeds the dialogue between government, development partners and civil society organizations and leads to fruitful and wise measures to increase household food security in rural households in Lao PDR.

Vientiane Capital, 1 August 2013

The Chairman of the Risk and Vulnerability Survey Committee, (Deputy Director General of Planning and Cooperation Department, Ministry of Agriculture and Forestry)



Mr. Savanh HANEPHOM

ACKNOWLEDGEMENTS

CARE International in Lao PDR wishes to thank everyone who spoke with us and supported this work. In particular, we acknowledge the women and men of Samphan, Nhommalath and Kaleum districts, who shared their concerns, interests and insights on food security in their households and communities. Beyond talking about problems and explaining the difficulties of rural living, joyful moments were also shared, especially when discussing gender relations and cooking and eating habits. Participants provided deep insights into their lives and CARE is grateful for their goodwill and kindness.

We recognize the efforts of the Ministry of Agriculture and Forestry and National University of Laos field teams, who complemented their technical skills with passion, diligence and intelligence. The researchers worked with great motivation to achieve the objectives of the research and showed an excellent team spirit – both made this study effective and meaningful.

Thanks are due to the CARE Provincial Program Managers, Kongchi Yiayang, Pounsy Phasavaeng and Chris Wardle, who enabled the research in Phongsaly and Sekong. We are also grateful to the personnel from provincial and district offices who supported our travel and fieldwork, notably: Mr. Sivern and Mr. Bunnihung from Kaleum District Health Office, Ms. Vongphet Phanpanya from Lao Women’s Union Samphan, Ms. Latsamee Srisaket from CARE, Mr. Somchai from PAFO Khammouane and Mr. Champa from DAFO Nhommalath.

Within the CARE country office, Dr. Silke Stoeber is the chief author of the qualitative report presented here, alongside co-authors Ms Chusana Han and Ms Engstone. Dr. Stoeber acted as the primary focal point for CARE throughout the risk and vulnerability survey (RVS) process, and has been a valuable contributor to the overall design, implementation and analysis of the RVS as a whole. Her supervision and management of the qualitative component is deeply appreciated.

Finally, our particular thanks to the Ministry of Agriculture and Forestry for supporting this work and to FAO for funding and facilitating CARE’s participation. Our gratitude goes in particular to Ms. Vivanh Souvannamethy from MAF, and to FAO consultants Ms. Phetsakhone Somphongbouthakanh and Mr. Jannie Armstrong.



Glenn Bond

Country Director

CARE International in Lao PDR



EXECUTIVE SUMMARY

Planning for the risk and vulnerability survey (RVS) recognized that food security and nutrition fundamentally affect individuals and households, and therefore a qualitative component would help to validate and add depth to analysis of quantitative data collected. Because of its mandate, experience and programmatic interests, CARE International volunteered to undertake the qualitative component of the survey, which involved fieldwork in nine villages across three provinces in November and December 2012, and interviews with some 214 people.

The findings and key sections of this report will be incorporated into the final RVS comprehensive report, which is expected to be completed in June 2013.

This report highlights important dimensions of food security in rural Lao PDR, including: the different gender roles in agriculture; reliance on community-level social cohesion as both a coping mechanism and means of livelihood; and the ongoing challenge of shifting rural livelihoods from a subsistence basis towards market-orientation. The findings of this report give a snapshot of rural livelihoods and practice.

The qualitative survey component included two specific outputs: providing context and insight into food security and nutrition at the household level; and providing a training and capacity building opportunity for interdisciplinary research team fieldwork.

From the outset, gender and the role of women in rural Lao PDR was identified as the primary lens through which key qualitative research questions should be addressed:

- What is the impact of economic and social developments in Lao PDR on the food and nutritional status of rural households?
- What are the socio-economic profiles of food and nutrition-insecure households?
- What are key challenges and priorities at the community level in rural areas?
- What are the gender-specific links between food insecurity and malnutrition?

Villages in three agro-ecological zones (AEZs) – the Northern Highlands and Uplands; the Mekong Corridor; the Central and Southern Highlands – were proposed for inclusion in the survey, based on CARE’s previous experience and ongoing programming. Because villages differ considerably even within a single district, three village categories were selected to enable a broader understanding of risk and vulnerability in the context of food security and nutrition, i.e. a remote traditional farming village, a resettled village, and a village with good market access.

Field teams were led by CARE International personnel and the National University of Laos, and supported by government counterparts. Appropriate research methodologies were applied, including participant observation, semi-structured interviews and focus group discussions. Data collection tools included social mapping, hazard timelines, natural resource mapping, food source ranking, gender activity profiles, and food utilization statements.

Key survey findings:

1. A good village infrastructure reduces vulnerability to malnutrition. In most surveyed villages, rural infrastructure including access roads and access to services is still very poor.
2. At all survey locations, intra-village cohesion and self-help capacities were highly developed, with villagers generally very satisfied with how they help each other with labour, sharing land and food, and helping poor families.
3. While external support (from the Government, development partners and other sources) is given to vulnerable villages, such support networks are exclusively requested and maintained by men. In CARE supported villages women are better included and able to speak out.
4. Income generation possibilities for women are limited: they do not have the time or networks to find paid work; they do not possess appropriate knowledge or skills; and do not have access to credit to develop business activities. A few exceptions are observed among better-educated women.
5. Established gender roles and gender stereotypes are prevalent in rural Lao PDR, and were emphasized at all locations in relation to workload, duties and power relations.
6. Cultural practices and existing power relations reduce the status of women and prevent both genders from developing new role models.
7. A lack of self-esteem and assertiveness among rural women prevents them from articulating their needs and concerns about food security, nutrition and maternal and child health.
8. Women from ethnic groups generally cannot speak Lao, and this is particularly true in remote locations and the more traditional villages. This reinforces communication difficulties and feelings of isolation, and further compromises income-generating opportunities.
9. The most important measures to improve food security, as ranked by women, included increased food production in homegardens and fields, and improved gender equity through a reduction in women's workload.

Coping Strategies and Food Stability:

10. People regularly cope with 'acute' or 'chronic' events, such as flooding and livestock disease. The impact is felt most profoundly by vulnerable populations, and especially by children, the elderly, pregnant women and female-headed households.
11. Respondents noted that external assistance from the Government and development partners are key to their ability to cope with natural and man-made events.
12. Better-off families are able to store rice until the next harvest. However, there are long lean seasons, and middle income and poor families often run short of rice from July or April to October. Food processing and storage is limited to a few products and a few techniques, and the intake of fruit, vegetables and calcium-rich foods depends on the season.
13. Across all three AEZs, poor families have a poor and unchanging diet, while better-off families are able to supplement their meals with protein-rich foods, fruits and vegetables.

Land Use and Access to Land:

14. Despite the absence of legal title to land for individuals and communal land titling, conflicts over land between remote communities are rare, and customary land rights are maintained and respected by local people.
15. External interest in land is high, and farmers often raise concerns about land tenure security. Good access to roads and markets frequently results in conflict over land.
16. Non-timber forest products (NTFPs) are a very important food source, but access is declining in some areas. In villages with sufficient access to natural resources, NTFPs constitute a major additional income source in the increasingly important cash economy.

Health and Sanitation:

17. Maternal deaths are still considered part of village life, and regarded almost like other diseases. It is common to give birth at home, and women in all villages surveyed said they were expected to resume their normal duties three days after delivering, carrying their new babies with them.
18. Many villages were unclean. A lack of toilets, free roaming animals and insufficient water access were common, but some improvements were observed in market-oriented villages.
19. Each village has access to a health centre or traditional midwife, or there is one in a village nearby. However, access to district hospitals is difficult for many villagers, and may involve a journey of up to 3 hours.

The report reached key conclusions and recommendations that will feed debate among the Government, development partners and civil society organisations about how to tackle the challenges of food security and nutrition in rural of Lao PDR, including:

- Diverse rural communities and farming systems require tailor-made strategies that address their specific needs and priorities: a standard approach to village and rural development is not sufficient.
- Intelligent solutions for food production must be developed to address the decreasing availability of food from the forest and the difficulty of accessing local markets. Practical solutions may include: fruit, beans and vegetable planting in a home garden or in the fields; small scale backyard livestock raising; the provision of veterinary services; and ensuring access to good fodder bases to increase access to meat and to generate income from sales.
- Agricultural productivity is increased if farmers see the benefit, and market opportunities in particular stimulate an increase in productivity. The benefit of increased food production is not as obvious for male farmers. Women in charge of food security within the family are more interested in improved food production. Therefore, women should be explicitly included in agricultural development activities, decision-making and inter-village social networks.
- Market-oriented villages can be supported via measures including farmers' cooperatives, access to credits, organic farming and integrated pest management practices.
- Rice-based conservation upland farming systems can be supported by the domestication of NTFPs and transforming some swidden areas into permanent upland farming under agroforestry or mixed farming systems.
- Increased land tenure security for smallholder farmers will allow increased food security. Establishing village boundaries and a communal land titling process are regarded as the minimum interventions to secure land tenure.

The report concludes that women have not been allowed to take full advantage of improvements in infrastructure and income generating opportunities for a variety of reasons. Poor levels of education, a lack of linguistic skills, traditional work norms and male expectations have all entrenched the idea of a women's role as being closely tied to the household, the needs of her children and a livelihood based on self-employment.

During the survey, female respondents with higher assertiveness and higher status in the community stressed repeatedly that exclusion from development efforts is a major constraint to fulfilling their role of contributing to family food security. These women want access to credit, education, agricultural extension and maternal and neonatal child health care. Therefore, rural development efforts and awareness campaigns need to address the fair sharing of workloads and responsibilities between men and women, and special recognition needs to be given to the needs of pregnant and post-partum women.

1. BACKGROUND AND INTRODUCTION

In the course of the planning process for the risk and vulnerability survey (RVS), consensus emerged around the need for a qualitative component to be included in the overall fieldwork. As food security and nutrition are fundamentally experienced at the individual and household level, it was recognized that a qualitative component would help to ground quantitative data in direct human experience. Moreover, it would serve as a tool to capture data that do not lend themselves to quantitative collection: while quantitative data may explain *what* the situation is, supplementing it with qualitative data may better support an understanding of *why* the situation is the way it is. While the quantitative component would provide the widest possible coverage, the qualitative component would add depth to the analysis. Based on its mandate, experience and programmatic interests, CARE International volunteered to undertake the qualitative component of the survey, with fieldwork conducted in nine villages across three provinces in November and December 2012, involving interviews of some 214 people.¹

The present report serves as a summary of the findings of the qualitative component, and is submitted to FAO in accordance with the Letter of Agreement signed by CARE and FAO on 14 November 2012. The findings and key sections of this report will subsequently be incorporated into the final RVS comprehensive report; expected to be completed in June 2013. The report highlights important dimensions of food security in rural Lao PDR, including: the different gender roles in agriculture; reliance on community-level social cohesion as both a coping mechanism and livelihood; and the ongoing challenge of shifting livelihoods from a subsistence basis to a more market-oriented form of rural livelihood, which includes farm and off-farm employment, cash and non-cash cropping patterns.

There is increasing interest at the global and national level in qualitative approaches to food security assessment, and the methodology is presented in considerable detail, in the hope that it will be of use to field practitioners in designing future surveys. Additional information in this regard is available from participating staff at CARE International.

The findings of this report are presented as a snapshot – a rapidly assessed exploration of rural livelihoods and practice. Caution should be applied in extrapolating these findings to other areas in a country as diverse as Lao PDR; what is applicable in one location may not be valid in another, or even within a single province or district. That said, these findings are consistent with the data contained in the RVS secondary data review, and form the basis for actionable recommendations at the policy and programmatic level, for the attention of Government and development partners alike.

¹ Details are provided in Table 3. Many participants joined both the Focus Group Discussion and the Social Mapping. In order to avoid double counting, only the number of participants during household interviews (58) and Focus Group Discussions (156) were added up.

2. OBJECTIVES

CARE International partnered with MAF and FAO to undertake a qualitative research component in support of the 2012-13 Ministry of Agriculture and Forestry/Food and Agriculture Organization of the United Nations (MAF/FAO) National Risk and Vulnerability Survey for Food Security. The overall intention of this qualitative survey is to contextualize quantitative findings and also capture specific elements of food and nutritional security, specifically those elements that are not fully captured in quantitative data.

Based on the Letter of Agreement signed by FAO and CARE, the objectives of the qualitative survey were to:

- Assess the impact of economic and social developments in Lao PDR on the food and nutrition status of rural households
- Describe the socio-economic profiles of food and nutrition insecure households
- Identify key challenges and development priorities in rural communities
- Explore intra-household food consumption patterns as they relate to factors such as age and gender
- Explore cultural practices as they relate to food consumption
- Assess changes seen in sources of food and impact on food intake (nutrition activities induced by outsiders or the village itself based on nutrition education)
- Identify promising approaches to promoting improved household food security

Key activities to be undertaken in the service of these objectives were:²

- Sample geographical areas to undertake the survey based on the sample design prepared by CARE International
- Design instruments to be used for the assessment
- Recruit and train researchers, enumerators and field supervisors
- Undertake data collection, data processing and qualitative analysis
- Provide regular progress reports to FAO
- Prepare and disseminate the analytical report

The qualitative survey component included two specific outputs: providing context and insight into food security and nutrition at the household level; and providing a training and capacity building opportunity for interdisciplinary research team fieldwork.

² An indicative workplan is included in Annex I.

3. METHODOLOGY

3.1 Approach

From the earliest working meetings around the RVS process held at MAF, Vientiane, in June and September 2011, consensus emerged that the overall rigour of the survey would be improved by collecting qualitative data to complement the quantitative element already planned.

In keeping with the conceptual approach applied to the wider RVS process, an Integrated Phase Classification conceptual framework formed the basis for the qualitative component. The framework is attached as Annex II. This clarified how best to organize the fieldwork and report the findings. Because of the risk and vulnerability element of the RVS, planning for the qualitative component included consideration not only of the present status of household food security, but also of shock events (e.g. floods, droughts, disease outbreaks) that would compromise livelihoods and food security. The definitions and applied usage of terms such as ‘risk’, ‘hazard’, ‘coping strategy’ and ‘vulnerability’ were elaborated, in order to craft the best possible field instruments to address these issues. Definitions of these terms can be found in the glossary of terms attached as an Annex III.

During the RVS inception workshop held in Vientiane on 20 September 2012, CARE made a presentation on the advantages of qualitative approaches, data analysis, reporting and resources required to undertake the work. A multi-stakeholder working group on qualitative data relevant to the RVS (including government, UN and NGO participants) yielded the following recommendations:

- There must be separate women’s and men’s Focus Group Discussions (FGDs)
- Intra-household differences in food consumption are very important
- Explore feeding practices of infants aged 6-8 months
- Need to explore food taboos during pregnancy and during post-natal period
- Family planning practices and knowledge must be explored.

While only a first step in the process, the results of the collaborative sessions indicated that from the outset, there was strong interest in exploring issues of gender and women’s roles in rural Lao PDR. This was broadly consistent with findings from the RVS background review, which indicated elevated levels of food insecurity and vulnerability among female populations.³

Given the other possible topics for inclusion in the qualitative component (including social exclusion, land access and tenure, resettlement, and increased commercial exploitation of natural resources), it is possible that gender was a topic with the advantage of being widely accepted and non-controversial. However, it is also wholly possible that gender was indeed a first order priority for workshop participants and their supporting institutions. Survey design proceeded based on the second premise, but not to the exclusion of other subjects.

³ Although gender-disaggregated data on food insecurity among women at the national level is limited, the NIOPH 2010 Nutritional Assessment of 4,600 women aged 15-49 across nine provinces indicated that 14 percent were underweight. The CFSVA (2006) had found rates of 11.5 percent within a smaller sample of 3,500 rural women. The National Nutrition Survey (NNS 2006) that supplemented MICS 2006 weighed 927 non-pregnant women and found 14.5 percent underweight.

3.2 Key Questions

With gender thus established as the primary lens to be applied to the qualitative survey, and based on the data collected in the RVS background narrative and matrix, discussions within the qualitative research team headed by CARE and supported by FAO and MAF yielded the following research questions to be explored. Of necessity, there is an overlap between certain questions, as in the case of sources of food, which is relevant to both questions 2 and 4.

1. What is the impact of economic and social developments in Lao PDR on the food and nutritional status of rural households?

- a. How are traditional village agricultural systems (i.e. with rotational farming and subsistence-based agriculture) affected?
- b. How are the villages transitioning to market-oriented agriculture affected?
- c. How much is recent relocation (i.e. within the last three years) a factor for food security, risk and vulnerability?

2. What are the socio-economic profiles of food and nutrition-insecure households?

- a. What are their coping strategies for food security (incl. analysis of exposure to hazard)?
- b. What are the commonalities and differences between the three agro-ecological zones?
- c. How do the different factors mentioned in question 1 (traditional systems, market-oriented agriculture, and relocation/resettlement) pertain to food availability and access to assets (including food sources, income, public services), stability and utilisation?

3. What are key challenges and priorities at the community level in rural areas? (Includes exploring the indigenous knowledge, behaviour and attitude towards recorded and potential changes in the local context)

- a. What are the similarities of the challenges and priorities across agro-ecological zones?
- b. What are the similarities of the challenges and priorities across the three village profiles (traditional systems, market-oriented agriculture, relocated/resettled)?
- c. What improvements in food security have been noted over the past 10 years?

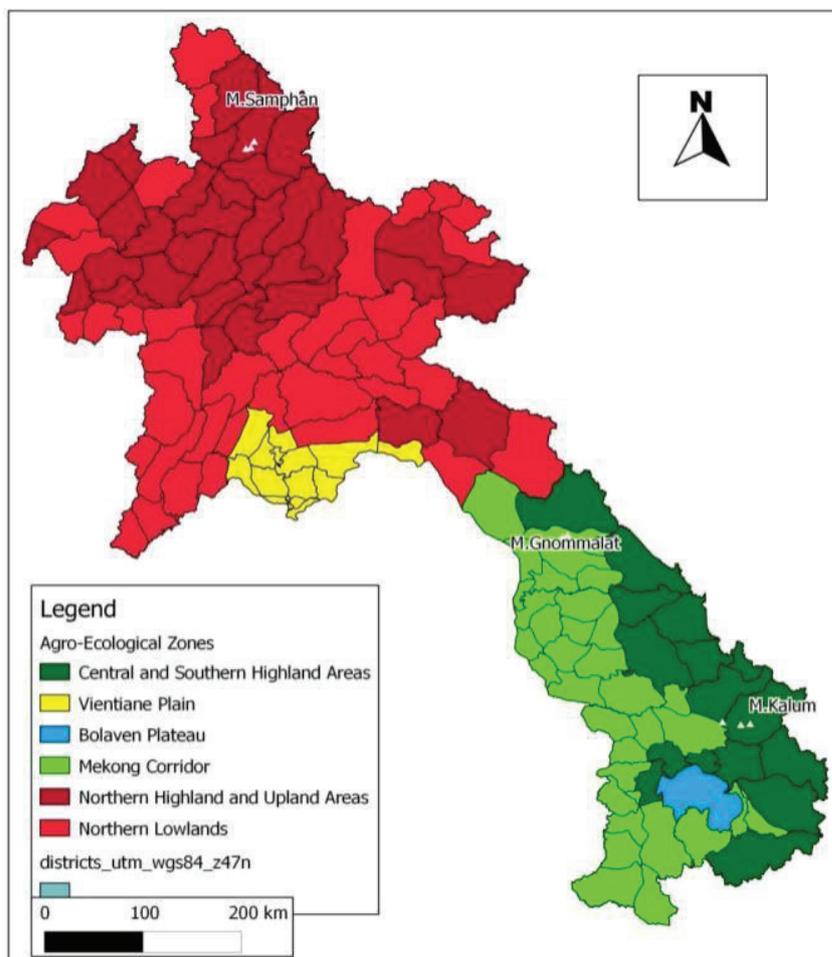
4. What are the gender-specific links between food insecurity and malnutrition?

- a. How is the food distributed within the home between women, girls, boys and men?
- b. What are key cultural practices pertaining to food consumption (food taboos, indigenous practices and ethnic group belief systems)?
- c. What changes have been noted in terms of sources of food and food intake over the past 10 years?
- d. How can household food security be promoted among vulnerable and non-vulnerable households?

3.3 Identifying Fieldwork Locations

The selection of districts and villages for the qualitative component proceeded on a similar basis as the overall RVS design, which applied sampling at the level of agro-ecological zone (AEZ).⁴ Because of budgetary and time constraints, a total of three AEZs were proposed for inclusion. Village selection was based on CARE’s previous experience and ongoing programming. Since CARE already had teams and projects in two of the AEZs (the Northern Highland and Uplands, and the Central and Southern Highlands) it was easy to identify sites in these areas. Although CARE does not have ongoing programs in the Mekong Corridor, it had previously operated in Nhommalath district, which was therefore selected for inclusion. This allowed more directed, efficient purposive sampling, which expedited the overall process. The villages selected are detailed in Map 1 and Table 1.

Map 1: Selected Districts for the qualitative component of the Risk and Vulnerability Survey



⁴ For a full explanation of the six AEZs of Lao PDR, see the section on AEZs in the RVS final report. Basic information is included here as Annex IV.

Table 1: Villages selected for this survey

Agro-ecological zone	Northern Highland and Uplands	Mekong Corridor	Central and Southern Highlands
Province	Phongsaly	Khammouane	Sekong
District	Samphan	Nyommalath	Kaleum
Remote traditional farming village	Laoleo (Akha)	Phonesaed (Kaleung)	Thamdeng (Katu)
Village with good market access	Namloy (Khmu)	Nafaimai (Makong)	Vakneua (Griang)
Relocated village	Houaythong (Khmu)	Natherd (Makong)	Jing (Griang)

(Ethnic groups named in parenthesis)

As villages differ considerably from each other even within a single district, it was agreed that three different village types would be selected to enable a broader understanding of risk and vulnerability in the context of food security and nutrition.

This selection indicates an important distinction between the qualitative and quantitative components of the survey: while the broader quantitative survey sample frame included villages with high, medium and low potential levels of vulnerability, the qualitative component focused specifically on more vulnerable locations. With this in mind, it was proposed that the focus should be on villages that exhibit a series of characteristics that mark a high potential for vulnerability. For each village category, the underlying assumptions about food security-related factors were elaborated, based on the background review and common sense. It should be stressed that these are assumptions only, and as such are intended solely for indicative purposes.

Table 2: Underlying assumptions for food security-related factors

Village category	Basic Assumptions					Food security assumptions		
	Infrastructure (roads, electricity)	Market access (food/inputs)	Access to labour markets	Access to land	Non-timber forest products (NTFPs)		Health services	Exposure to hazards
Village relocated within the past three years	Good- relocation has tended to be in more accessible areas, allowing for provision of basic services	Good- improved roads and infrastructure make access markets (for both buying and selling) strong	Average- relation of village proximity to sources of employment, not necessarily influenced by relocation	Poor- relocation tends to consolidate settlements, with resulting land pressures on proximate areas, necessitating resettled villages to commute to their previous lands	Poor- increased population pressures on commonly held resources, and general tendency for resettlement to be at lower altitudes may reduce access to wild foods	Average- In principle should be improved by relocation, but services available may be of mixed quality	Uncertain- no correlation between relocation and reduced exposure to natural hazards	As access to productive land is often limited at new village sites, resettlement has a potential negative influence on food security. However, improved access to services, markets and potentially labour may increase diversity of livelihood and resilience
Remote traditional farming village	Poor- limited, seasonally variable access, incomplete or no electricity	Poor- long distances and limited transport. Very limited cash income	Poor- potentially further compounded by lack of Lao language among other ethnic groups	Good - land access is good, but productivity may vary depending on local conditions and inputs used	Good - NTFPs (wildlife, fish, vegetables) an important source of both income and nutrition	Poor – only immunization programs	Limited - complicated by high vulnerability, shocks may be enough to cause food insecurity	Reliant on own production and NTFPs, represent a 'traditional' form of vulnerability, whereby food security is dependent on free access to land and wild foods
Village with good market access	Very Good- all weather roads and electricity	Very Good- cash income and market purchases may form basis for livelihoods	Very Good- both local and regional employment possibilities	Poor- proximity to more populated areas and increased pressures on land result in limited land access, reduced dependency on own production	Poor- available only seasonally via market purchases	Good- referral services may be available	Uncertain- no correlation between market-orientation and exposure to natural hazards	Strong links to domestic and regional markets, increased cash income, greater labour opportunities, less access to NTFPs, subject to market forces

3.4 Field Methodology

Field teams were led by CARE International personnel and supported by CARE field staff and government counterparts. One Research Coordinator and two Research Advisors (CARE staff members) were recruited, under the overall supervision of the CARE Rural Development coordinator. Research team members included students, graduates and lecturers from the national University of Laos (NUoL) and Pakpassak Technical School working on a voluntary basis, as well as MAF staff seconded to the survey. A complete list of team members is included as Annex V.

Field research took the following form:

- Pre-field training
- District counterparts from Health, Agriculture and Lao Women's Union (LWU)
- Three villages per district
- Each village: minimum six household Interviews, three FGDs
- Total: 58 in-depth interviews, 27 FGDs

During the four-day pre-field training, the research team reviewed a variety of qualitative research methods to be used in the course of the survey. Documenting data (field notes, audio files) and regular debriefing techniques were also discussed. Methodologies to be used in the qualitative inquiries as described in social research handbooks⁵ were discussed and practiced, including:

- Participant observation
- Semi-structured interviews
- FGDs including mapping / ranking tools from the Participatory Rural Appraisal PRA toolbox
- Non-directive interviewing as developed by Rogers⁶, consisting of empathic skills (to enter another individual's world without judgment), congruence and unconditional positive regard (acceptance of other people's feelings, opinions and values)

During this training, the team discussed FGD methodologies, in-depth interviewing, and semi-structured interviewing and the supporting attitudes and behaviors that generate strong findings. Interview techniques were practiced, including methods of probing, and interview guidelines were reviewed in full. Throughout the process, teams were encouraged to look for positive strategies and findings, and not to concentrate exclusively on problematic issues.

Noting the limits of time and budget, it was determined that AEZ-level sub teams would target nine villages, or three per AEZ. At the village level, FGDs and household interviews would be conducted. In order to compensate for the relatively small sample size, the research teams were encouraged to crosscheck and triangulate data, in order to generate as deep an understanding of the local food security context as possible. While some of the information was quantifiable, i.e. by ranking and scoring, most data was subjective and individual, and not easily collated. Over the course of the survey, the team systematically followed a qualitative data collection approach, applying three basic principles:

⁵ Punch, Keith F. (2005): Introduction to Social Research – Quantitative and Qualitative Methods, 2nd Edition, Sage Publications, London.

⁶ Rogers, C. (1951): Client-centred therapy: its current practice, implications, and theory, Boston, MA, Houghton Mifflin.

Triangulation

As qualitative researchers, team members were made familiar during pre-field training with the skills of observing, interviewing, listening and documenting findings. In practice, triangulation included:

- Team composition: each team included members from a variety of disciplines and with a variety of experiences, and was gender balanced
- Instrument design: mapping, ranking and scoring, FGDs, household interviews and observation techniques were designed to reinforce findings across different tools
- Data collection: applied by asking the same questions of people in different wealth and gender groups

Self-critical awareness

A key asset of qualitative researchers is the ability to conduct interviews in households and villages while displaying non-dominant and non-superior attitudes and behaviour. Research team members were encouraged to use comfortable and non-hierarchical seating arrangements, to conduct interviews in private when possible, and to cook or help cook in the villagers' kitchens as appropriate. Teams followed the general suggestion of rural development researcher Robert Chambers: *"Sit, listen, learn, respect, don't hurry, be nice to people"*. Taken together, these steps contributed to trust and confidence building, increasing the probability of authentic and honest discussion.

Step by step analysis

Throughout the fieldwork, visual aids were used and notes were taken in public. This encouraged villagers to get actively involved in the discussion. Using this approach, villagers were able to clarify, criticize and verify the findings as they were presented.

3.5 Data Collection Tools

Based on the approaches outlined above, specific data collection tools included interviews, several mapping and ranking exercises with FGD and women. The complete overview of tools and key questions is provided in Annex IX. The tools are explained in detail as below:

a). Social Mapping

Picture 1: Social mapping



Village representatives and/or village committees conducted the social mapping. Drawn by hand using graphics and text on large whiteboard sheets, the social maps gave an overview of the different dimensions of the village, including wealth ranking of households, village infrastructure, wealth indicators, and the number and location of very vulnerable households (including female-headed households and persons with disabilities).

Additional questions regarding maternal and children's health, hygiene and livestock vaccination coverage were also raised during this exercise.

Table 3: Number of interviews and focus group discussions

Province	Village Category	Village name	FGD Women *	FGD Men**	Mixed Group, Social Map	Household Interview with women		
						poor	medium	better-off
Khammouane	Remote traditional Farming Village	Phonesaed	16	6	10 men, 15 women	2	3	3
	Village with good market access	Nafaimai	7	6	4 men	1	2	2
	Resettled Village	Natherd	6	5	12 men	3	3	3
Phongsaly	Remote traditional Farming Village	Laoleo	10	10	15 men, 2 women	2	2	2
	Village with good market access	Namloy	12	10	11 men, 4 women	2	2	2
	Resettled Village	Houaythong	10	10	18 men, 14 women	2	2	2
Sekong	Remote traditional Farming Village	Tamdeng	7	9	10 men, 15 women	3	3	0
	Village with good market access	Vakneua	5	9	10 men	3	3	0
	Resettled Village	Jing	7	11	15 men, 3 women	3	3	0
			80	76		21	23	14
			156			58		

* Food Source Ranking, Gender Activity Profile, Food Utilization Statement

** Natural Resource Map, Hazard Timeline, Gender Activity Profile, Food Utilization Statement

b). Natural Resource Mapping

Village resource mapping offered an overview of the forest zones (community forest, spirit or sacred forest, conservation forest and protection forest), agricultural land use, upland fields, paddy, gardens, fishponds, streams and livestock grazing areas. In addition, a hazard timeline was developed by the FGD with men.



Picture 2: Natural resource mapping

c). Food Source Ranking

This tool was conducted through FGDs with women. Women were asked to reflect on the different sources and amounts of food from various food sources, now and compared to 10 years ago.



Six categories of food (staples, vegetables, fruits, calcium, meat and meat alternatives, and fat and oil) were proportionally ranked to estimate the share of the three food sources. Ten stones or seeds represented 100 percent. The ranking included 6 rounds, one for each food group.

Picture 3: Food source ranking

d). Gender Activity Profiles

Gender activity profiles (Table 4) were conducted with both men and women’s FGDs. This led to discussion and elaboration of the division of labour between men and women, the specific domains of men and women, and proposals for how to better share workloads in the future.

Table 4: Example of daily activity profiles of men and women in Thamdeng (Kaleum District, Sekong Province)

Time	Women’s Activities, Market Days (2-3 times a week)	Women’s activities, non-market days	Men’s Activities
03:00-06:00	3:00: Travel on foot to market to sell vegetables	4:00: Livestock feeding, house cleaning, preparing breakfast	5:30: Get up, sometimes help women to feed chicken and pigs
06:00	Sell vegetables at the market	Eat Breakfast	Eat breakfast
07:00-12:00	Travel back home	7:00 Go to swidden fields 11:00: Collect food and go home Prepare lunch	7:00: Go to swidden fields 11:00: Collect food and go home
12:00-14:00	Lunch		
14:00	Go to swidden fields		
17:00	Go home, feed livestock, fetch water, prepare dinner		Go home with wife, carry gun and children, cut firewood
19:00	Dinner		
20:00	Go to bed		Smoking, chatting with men, talking about village issues, if very tired going to bed before wife does

e). Food Utilization Statements

At the end of the FGDs, the research team challenged the villagers to give their individual opinion to four particular food utilization statements (Table 5) related to intra-household food consumption, workload and responsibilities and decision making on food. There were then aggregated by total number of responses per gender.

Table 5: Example of food utilization scoring of men and women in Vakneua (Kaleum District, Sekong Province)

		Women	Men	Together	Children
Intra-Household Food Consumption: If there is not enough food available, who would eat less in the family?	Men's Group (9)	7	2	-	-
	Women's Group (5)	2	-	3	-
Food preparation Work Load: If the women work long hours in the field, who in the family would prepare the dinner?	Men's Group	-	7	-	
	Women's Group	2	3	-	
Household Work Load: If the women come home late, who is in charge doing the household chores?	Men's Group	7	-	-	
	Women's Group	2	1	2	
Decision Making on Food: Who decides on what is on the dinner table?	Men's Group	7	-	-	
	Women's Group	5	-	-	

Male FGD: 9 respondents, Women's FGD: 5 respondents

f). Household Interviews

Based on the social mapping exercise described above, six households were selected for interview in each village: two high income, two middle income and two poor. Because this instrument was focused on intra-household consumption, interviews were conducted with women. Interviews included such topics as household status within the community, informal support networks, assets, education, ethnicity, poverty situation and demographic information. In Sekong only women in the poor and medium wealth ranges were interviewed, and in Khammouane the number also varied from village to village. Overall 58 women were interviewed.

3.6 Data Analysis

At the end of each working day, research teams collated the findings from each location, based on data collects across all tools (including social mapping, gender activity profiles, food utilization statements, and household interviews). Findings were then coded on coloured index cards, as:

- Strengths (white cards)
- Weaknesses (yellow cards)
- Wishes (green cards)
- Ideas/Visions (pink cards)

Wishes reflected villagers' general aspirations, whereas ideas/visions represented initiatives already underway at the village level, or concrete activities respondents would like to undertake in the future.

Once fieldwork was completed, all research team members gathered for three days in Vientiane, and began to cluster the cards, first by village and AEZ, identifying common themes at the district level.

Picture 4: Clustered Village Infrastructure



A second round of analysis was then undertaken, whereby the cards were clustered by thematic area, regardless of their coding (as strengths, weaknesses, etc.). Nine key topics emerged from this process:

1. Village Infrastructure
2. Gender Inequity
3. Education
4. Health and Hygiene
5. Access to food markets
6. Access to labour markets/employment
7. Food availability, access to land and forest
8. Hazards
9. Food utilization practices

This analytical process reinforced the triangulation approach, ensuring that data could be presented at both the AEZ and thematic level.

3.7 Limitations

The richness and depth of data collected from the field depended on the research teams taking careful notes. Every effort was made to retain the locally specific detail noted in each village visited. However, some detailed information, in particular quantitative information related to demography, land and livestock was not collected systematically in all villages, and village statistics were not always readily available.

Although the fieldwork was primarily gender-related, Lao culture meant that women respondents in all settings felt more comfortable responding positively and refraining from answers that might be construed as complaints. This was offset somewhat by holding all-women focus groups, even though in some cases men remained in earshot or as active participants for some or all of the discussion. The teams tried many approaches, and were able to overcome male over-participation when it arose.

Overall, all teams were well trained, and conducted the fieldwork in a patient, encouraging and participatory manner, which encouraged open dialogue with participants. Team counterparts from the district level health offices and the Lao Women's Union were especially helpful in this regard in Sekong and Phongsaly. However in Khammouane, participation from MAF national, provincial and district level staff gave the fieldwork a more formal tone, with research team members providing too much guidance and direction to village participants, which was not the intention of the fieldwork. This was discussed and clarified within the week spent in the field, and was resolved harmoniously.

4. FINDINGS

In Nafaimai village, Yommalath district, Khammouane Province, 10 women aged between 21 and 50 have gathered for the focus group discussion. Almost all of them chew betel nut, in the Lao language called ‘keo mak’. All of them have small children with them; their own or relatives. Half have babies strapped to their backs. One woman with a 9 month-old baby on her back is pregnant again. A 42 year-old woman looked around the group and while the other nodded their assent, she sighed:

“Too many children and not enough land leads to hunger and shortages.”

4.1 Vulnerability Context

4.1.1 Livelihood Strategies and Assets

Agriculture is the prevalent livelihood strategy in all of the villages visited, and this was manifested in a wide diversity of ways.⁷

The findings related to the underlying assumptions for food security-related factors (see Table 2) prompted an alteration of the description of villages. As reflected in Table 6, the categories were renamed as:

- Rice-based conservation upland farming system (formerly called ‘remote farming village’)
- Market-oriented farming systems
- Part-time farming systems combined with rural labour (formerly called ‘resettled village’)

The **rice-based conservation upland farming system** has much better livelihood assets than assumed in the design phase. Typical to the four villages in this category is a rice-based upland farming system with a rather stable rice production. If sufficient additional income is generated by cash crops, animal raising or non-timber forest products (NTFPs), the area under shifting cultivation has sometimes decreased. Livelihoods are characterized by an abundance of forest resources around the villages. In the four villages, there is increased potential from upland farming practices, through sustainable harvest and domestication of NTFPs or the sale of abundant wildlife (for example, wild pigs), together with a high market demand for this produce. Four villages whose main sources of income are NTFPs are located in the Northern Uplands and Southern Highlands AEZ.

The **market-oriented farming system** (two villages) can only be found in the Southern Highlands and Mekong Corridor AEZ. The characteristics of their livelihood context include: i) irrigated paddy-based farming systems; ii) extensive support from district authorities to develop market-based systems; and iii) off-farm labour opportunities during the dry season. The two villages surveyed in this category also had decent hygiene and sanitation systems, including sufficient water supplies and toilets. Interestingly, there are abundant NTFP food sources available around the villages, but forest foods are only collected for domestic consumption rather than for sale.

⁷ In this context, agriculture includes all activities pertaining to the cultivation of natural resources to produce crops for human consumption, animal consumption, commercial and/or industrial uses. At the household and community level, it refers to cash crops, subsistence and smallholder production, livestock raising, and fishing.

The third category is the **part-time farming system** (three villages) with much better proximity to markets, in terms of both food and rural labour. This can be due to a lack of land after resettlement, or agricultural land of low productivity and a factory with employment opportunities close by. Typical to this village category is a lack of natural resources around the village. Given the closeness to the district capital, health facilities and integration to markets and the possibility to access hygiene and sanitation products and information, the standard of hygiene and sanitation is still relatively low.

4.1.2 Community Assets

A good village infrastructure reduces vulnerability to malnutrition. Villagers interviewed noted the following as important risk management/mitigation factors:

- Good communication, (including access to mobile phones)
- All-year road access
- Access to markets
- Village health volunteers or traditional midwives
- Functioning village health centre close by
- Electricity
- Toilets/latrines and sufficient water supply

When taken in combination, livelihoods become more secure when all of these factors are present in a community.

Picture 5: Un-used toilets in Natherd, Khammouane



Most of the visited villages have access to a basic road, although only some (the resettled village in Phongsaly and the three villages in Khammouane) are accessible all year round. Primary schools were found at all locations, but only half of the villages have school buildings made of concrete. All farmers' houses are traditionally built wooden or bamboo structures, with metal or traditional roofs depending on income level.

Electricity is often installed by the villagers themselves, although this self-help initiative is only done by better-off families, who often have small hydro-power generators for their own houses for light, television and a refrigerator. All villages in the Mekong Corridor were connected to the power grid.

Televisions, radios and mobile phones are also increasingly common. All villages visited have a water system, but most are basic. Only three of the nine villages visited had toilet facilities. In Natherd village, Khammouane Province, toilet facilities were constructed but not used (see Picture 5).

Table 6: Village categories and main characteristics of livelihood assets

Village category	Livelihood Assets						
	Infrastructure (roads, electricity)	Market access (food/inputs)	Access to labour markets	Access to land	NTFPs	Health services	Exposure to hazards
Part-time farming system combined with rural labour (3 villages) Houaythong, Nafeime, Natherd	Good - road access all year round; electricity, availability of vehicles, TV, radio, phones depending on poverty level of households	Good – processed food and handicrafts can be sold at markets nearby, food/inputs are bought at local markets Risk: unbalanced support, indebtedness, change in gender relation family	Good - temporary employment opportunities for men on construction sites, or seasonal opportunities in sawmill Risk: temporary and seasonal labour market	Poor - land pressures on proximate areas, walk long distance to old upland areas Risk: no formal land certificates	Poor - increased population pressure on community forests; forests mainly used for vegetables (e.g. ferns, bamboo shoots)	Limited - Water supply systems, proximity to district health centre facilities, no toilets	High - Exposure to natural hazards (flood and drought) and livestock disease outbreaks
Rice-based conservation upland farming system (4 villages) Jing, Laoleo, Thamheng, Namloy	Limited - road access limited during rainy season; electricity, TV, radio, phones of growing importance, transport means still very scarce	Growing - Cash income of growing importance, market access difficult, but market networks developing fast for vegetables, livestock, NTFPs, plantation crops	Poor - not many factories, and fewer opportunities due to lack of Lao language,	Good - land access is working per customary rules. Risk: district or investors claim for land, trees and forest, no land certificates	Very Good - NTFPs an important source of both income and nutrition.	Limited - sufficient water supply, use of district and health centre facilities in emergencies, no toilets	Medium - recurring livestock disease outbreaks, pests (wild pigs, rats, birds) occurrence of minor floods and droughts
Market-oriented farming system (2) Phonsaed, Vakneua	Good - road access all year to district; electricity, availability of vehicles, TV, radio, phones depending on poverty level of households	Good - cash income from farm products and livestock form basis of livelihoods, food is increasingly bought at markets	Good - temporary and seasonal employment opportunities	Good - land access is good and based on customary rules, and irrigation land organized by water user groups. Risk: no formal land certificates	Good - as source of food and to a minor extent as income	Good – sufficient water supply, toilets, use of health centres	High - exposure to natural hazards (flood) and livestock disease outbreaks

The villages in the Mekong Corridor have decent access to food markets and use them to buy food. The markets in Samphan and Kaleum districts (Phongsaly and Sekong Provinces) are small and, according to men interviewed, are regarded as a source of income generation, rather than places to buy food (see also

4.1.4 Gender Inequity).

In the FGD with the men in Houaythong, Phongsaly Province, participants revealed that the higher income from paid jobs of 50,000 Kip per day is more than they have ever received. Now they have more opportunities to spend on their favourite things, such as cigarettes and liquor.

“We still find enough food in the forest nearby, we know how to grow vegetables, and know how to make whisky by ourselves. We often go to the district market for selling our fresh vegetables to get some money; not to buy food, but other things we want, for example motorcycles”.

Statement made by 67-year-old man in Phongsaly

4.1.3 Social Networks

Strong intra-village social capital (bonding networks)

Intra-village cohesion and self-help capacities were found to be highly developed at all locations. Villagers were generally very satisfied with how they help each other in terms of labour, how grandparents help to look after the children, the support given to each other in sharing land and food resources, and the help given to poor families by sharing. This aspect was stressed in various discussions, in the FGD with women on food utilization, during hazard and natural resource mapping and in household interviews, when poor families especially explained how they cope with the lack of food.

Within the villages, reciprocal sharing, (in Lao *laek bpian*) of food for other food or work is a much more common mode of exchange than cash transactions. During the FGD in Phonsaed village, Khammouane Province, women noted that one family might borrow some salt or seasoning powder from another household. A few days later, the second family may gather surplus vegetables or fish, and give part of this harvest to the first household.

A family considered by the community as lazy is not well respected and mostly excluded from this self-help system. However, poor families, even if they are not able to reciprocate, can benefit if the causes of their poverty are well known and understood, as in the case of households with disabilities, households with many children or single parent households.

“We don’t eat meat so often, only when other families of the village share it with us. We ourselves don’t keep livestock and we don’t have time for hunting wild life.”

Statement made by 47-year-old woman with 12 children in Sekong

Barter trade happens also with merchants. Wildlife, chicken, bamboo shoots and forest vegetables are exchanged for MSG, condiments and cigarettes.

Leadership and bridging networks

In all villages visited, external support (that is, all forms of assistance provided by Government, development partners and other sources) was higher than expected, but these networks are exclusively requested and maintained by men.

In villages with good leadership there are many ways to ask for support. The importance of good local leadership and how to reach better outcomes by good negotiation is highlighted in the example of Jing village resettlement (see Box).

In Phonsaed village, Khammouane, villagers requested local authorities to help them with a central house in which to stay during flooding in 2011. Since they have better access to education and agricultural extension services, they see the benefit of support and emphasized the fact that *“authorities should pay more attention to remote areas”*.

Another village brought up the issue of trespassing on village resources by outsiders and urged mutual respect for village resource rights: *“We don’t want others to come and cut and carry our good quality trees from our village. We need the district authorities to work together and support us*

Strong headman facilitates smooth resettlement process

Jing is a Grieng village in Sekong province located 1.5 hours or 21 km from the District capital and road access is only possible by 4-wheel drive vehicles. By foot, this journey takes villagers about 2.5 hours. They have been asked to relocate from their old place, as the Province is planning a mining project. Local authorities started to ask the village move in 2009. At first, the villagers did not agree to being resettled. The headman, a retired soldier, insisted on the precondition of finding a better place than the present one. After two years of negotiations, local authorities and villagers agreed upon a suitable place. The new location has water access, a river and a waterfall nearby, more farming land, all upland but close by the village, and suitable garden land at the river to be developed.

Source: Male FGD

closely.” (Male FGD, Khammouane).

4.1.4 Gender Inequity

“It is easier to feed our families now compared to the past, although we are working even harder on it.”

Statement made by FDG women

Women’s income generation is limited

There are limited income generation possibilities for women, irrespective of AEZ or village category. While men take up temporary or seasonal jobs at construction sites at hydropower dams or sawmills, women have neither the time nor network to find paid work; neither do they possess the requisite knowledge, skills and agricultural inputs to develop on-farm business activities. Women sell only the vegetables they do not need for their own household (both vegetables grown on the farm and wild vegetables), and in some areas fish, bamboo worms and other NTFPs. In Natherd village, Khammouane, the main source of women’s income is selling chilies. In exchange for this income, they purchase other food, mainly rice.

Many women in Thamden and Laoleo (Sekong and Phongsaly Provinces, respectively) generate income by getting up between 3:30 and 4:00 AM and walking three hours to the district market centre to sell bundles of forest vegetables, local varieties of pumpkin and cucumbers planted in their upland fields. Women in Houaythong village, Samphan district, Phongsaly, who live close to the district centre, earn a small amount by selling vegetables and wild animals.

“Our earnings are very limited, maybe adding up to 20,000 Kip per day. This would be used to buy medicine, salt, noodles, food condiments or MSG.”

Statement made by Women’s FGD, Phongsaly

Women are largely excluded from access to Credit

Six of ten men interviewed in Houaythong, Phongsaly reported that their households were indebted to the Nanyabai Bank to the amount of 5-10 million Kip at an interest rate at 8 percent per year. Loans had been taken to buy pigs and other animals (such as cows and goats), and to buy assets such as televisions and CD players. The decision to take on the debt and what to then purchase was made by men, who are regarded as the household heads and the ones who could access higher income. From the men’s group discussion it becomes clear that the men are taking decisions on money. “The husband is considered as the bank owner. The wife is the client and is able to deposit or to withdraw at the husband”. Accordingly, in the women’s group discussion some women requested vocational skills training on financial literacy to increase their capacity to raise their income.

Source: Men and women’s FGD, Phongsaly

Overall, the survey shows that if collected or grown food can be sold by women, they buy other food to feed their families. Income generating opportunities for women have not kept pace with the overall burden of women to meet daily household food requirements.

Strong gender stereotypes

Established gender roles and gender stereotypes are prevalent in rural Lao PDR, and were emphasized at all locations in relation to workload and work duties. While in all villages both men and women undertake many agricultural activities together (in upland or paddy rice fields and gardens, tending to livestock, and collecting or hunting food), some tasks are strictly separated by gender, for example, weeding and transplanting is done by women and fencing and ploughing are done by men.

The household chores such as cleaning, washing, collecting firewood and raising children are mainly done by women, even as women are not at home, but work long hours in the fields. An exception is observed in relation to meal preparation, if their wives are absent: between 48 and 52 percent of the participants of the FGD said they would prepare the dinner if their wives work long hours in the field. The proportion was, at 77 percent, high in Sekong, and, at 20 percent, much lower in Khammouane. But even then, washing the dishes, taking care of children and cleaning the house is left for the women as after work activities.

“My sons do not help with household work. I get up at 3:30 in the morning, fetch water and mill the rice. After breakfast I go to the swidden field, collect firewood and vegetables, cut the firewood, and also prepare all the meals and wash the dishes. The hardest work is firewood cutting and rice milling.”

Statement by a Widow, aged 51 with three sons, the youngest being 6 years old, Sekong

“When I am hungry, I would order a meal and my wife would prepare it. But I am in charge to bring, collect and hunt the food. Taking care of the children I leave to my wives as children make me very nervous.”

Statement by a 59-year-old man with 2 wives and 18 children, of which two have died, Sekong

“The household task we don’t touch, because the women do it. It is their profession (in the Lao language: bpen asip).”

Statement by a male FGD participant, Sekong

“If I am sick, I would also need to steam the rice, as my children get hungry. My husband sometimes has hangover and is not able to do it.”

Statement by a female FGD participant, Sekong

Interviews in Houaythong, Phongsaly Province, indicated that to some extent women’s traditional duties (including rice milling, fetching water, firewood collection, clothes washing and overall household upkeep) have been reduced by improvements to infrastructure; notably better access to rice mills, tractors (to carry firewood) and village-level water systems.

However, this was a matter of frustration for men in FGDs, as they felt that these improvements should make women more available to help them with other, more traditionally male work-roles, such as cutting trees in the forest, carrying trees back home and house construction. In the women's FGDs this was countered by suggestions that women's overall responsibilities still keep them fully occupied, as certain food gathering activities, including fishing for small fish, crabs, shrimps and snails is seen as exclusively women's work. Furthermore, it was noted that men are more able to socialize with friends in the village, whereas women were expected to socialize only within their own household, or in the course of their chores.

Women at all locations expressed a wish to get more help from their husbands on a daily basis in order to have more time to generate some income independently.

Lack of assertiveness and self esteem

Women and men maintain their traditional roles when working in the field and household, and for women in particular, obeying and serving the family is seen as a major virtue. Cultural practices and existing power relations give women a lower status and prevent the development of new role models. A few statements may illustrate why traditional roles are not challenged more assertively:

*"If my husband has guests or neighbors visiting our home,
I sit and wait until the guests go home."*

Statement by a Female FGD participant, Sekong

"My husband would like to help more, but he is too shy to carry the baby at home or in the village. The other men would laugh and gossip that he is afraid of his wife. Only in the fields when nobody can see it, he would do it"

Household Interview of 33-year-old woman with five children

"We would like to ask our husbands to help transplanting the rice after they have finished the soil preparation. When we see them walking by, looking around the field, or taking a nap, we are tempted to ask, but we don't do it, as we are afraid that they get angry"

Statement by a women's FGD Khammouane

There is not much information sharing with people from outside the village, except in meetings at the village or sub-village level, which are an important formal forum of information sharing and decision making in rural Lao PDR. Occasional visits from district personnel were noted, and generally ranked as both trustworthy and helpful. However, the attendance of meetings is generally restricted to men, and women are often not told what was discussed or learned by their husbands. Some women also reported that attendance is no guarantee of comprehension: sometimes their husbands also do not understand the discussion. In Khammouane Province, only one female participant had ever been to any kind of villager's training, such as agricultural extension, or health and hygiene training. Women's travel is restricted to neighboring villages for festivals, and female respondents stated they had little information about the world outside their village. Women also do not listen to radios, and if so, they listen only to songs.

Decision making power and control over resources in the household, including money, is given to men. Even if women sell the harvest from their gardens to middle men or at the local market, they give the money to their husbands, as men are seen as being in charge of income generation (see box 'Women are largely excluded from access to credits').

4.1.5 Education

Communication difficulties and feelings of isolation are increased by linguistic differences. Ethnic groups represented at the fieldwork locations included Akha, Grieng, Katu, Khmu, Makong and Kaleung. In general, women from ethnic groups cannot speak the Lao language. In the Grieng and Katu communities in Sekong Province, and in the Akha village in Phongsaly, only 30, 16 and fewer than 10 percent of women, respectively, could speak Lao. This further compromises income-generating opportunities, as it limits market-based interaction with potential buyers, and makes bargaining difficult. They walk three hours to reach the market, and sell forest vegetables for an estimated 25,000 Kip or less. If they sell them they are satisfied, but they are unable to negotiate prices.

However, patterns of literacy and access to Lao learning are highly variable, even in within the limited areas under study. The majority of women in Namloy village, Phongsaly Province, and Nafaimai, Natherd and Phonesaed villages in Khammouane were found to understand and speak Lao well.

Education of women as an entry point for improved food and nutritional security

The case of "Mao", a woman in Namloy village, Phongsaly province, indicates the strong links between household food and nutrition security and women's education level and decision-making power within the household.

"Mao", is 35 years old, and was the only girl in the village who attended secondary school and thereafter to teacher training college in Luang Namtha. She is now a teacher at the Namloy primary school and the mother of three children who are studying in Vientiane and Sampan district, Phongsaly province.

Because of recurring medical problems, Mao travelled to the hospital in Oudomxai provincial capital. While there, she bought several products imported from China that she later sold in the village, including garlic, onion, fruit, snacks and hygiene-related articles such as soap and shampoo. She opened the first floor of her house as village shop.

Her entrepreneurship skills have led Mao to be the main income earner and she is jointly responsible with her husband for household income management. This equality is in keeping with her family's Khmu culture, in which women do not traditionally earn more than their husbands. The couple consults each other on major purchases, including the refrigerator they bought recently and the vehicles they own.

When weaning her children, she prepared rice mixed with forest vegetables, giving them a more balanced diet than traditional weaning foods would provide. She has also decided to build a toilet for her household; one of only two in the entire village.

Source: Household Interview, Namloy, Phongsaly

4.2 Acute or Chronic Events

As indicated in Table 7, natural disasters are a frequent occurrence across rural Lao PDR. The Mekong Corridor is affected by floods, and to a lesser extent, by drought. Storms, insect and rodent infestation and drought are most frequently reported in the north. The southern highlands, meanwhile, are affected by flood, drought and insect and rodent infestation. The impact of such events is felt most profoundly among vulnerable populations at the community level, such as children, the elderly, pregnant women and female-headed households. Regular livestock disease outbreaks are prevalent in almost all visited villages. Resettlement and in-migration also have an impact as ‘man-made hazards’, and bring their own effects and difficulties.

The rainy season runs from June to October, but there is wide variation, with rains occurring as early as March or April and lasting through November. Flooding is a regular occurrence in Phonesaed village, Khammouane Province, with floods recorded every year since 1981 with the exception of 2012. In 2011, flood waters rose to a height of 4.3 metres, cutting the village off for 19 days. In 2009, serious flooding was also noted in Sekong, totally submerging the village of Tamdeng for two hours. During the dry season, drought and forest fires are major risks, compromising both crop production and the availability of and access to NTFPs. Infestation and crop destruction caused by insects, crop diseases and wild animals (in Sekong mainly wild pigs, but also rats, monkeys and birds) were noted as factors in Sekong and Phongsaly.

Table 7: Exposure to hazards and their effects, and coping strategies

Event	Village	Year and Effect	Coping strategies
Flood	Tamdeng	2009: village under water for more than 2 hours Loss of a lot of livestock (chickens, pigs, buffalo, cattle), loss of 5 tons of rice already harvested	WFP, Lao Red Cross, Oxfam, Nam Theun II and Social Welfare helped: 150 kg rice/person
	Jing	2011: loss of tables and chairs from the school	Village self-help
	Phonesaed	1981 – present: water in the village 2 to 3 days, poultry died, loss of more than half of rice in the field, 2011: Big flood water level 4.3 m, village under water for 19 days, loss of a lot of livestock, most of rice in storage under water, loss of wood for building house, fire wood, bad smell, water very dirty (red colour), women and children many diseases, 10 people died	Villagers built house elevated 4 m from the ground Government help with two bottles of water, two cans of fish, and two instant noodle packets/ per family Nam Theun II helped with two boats, Prepare to build center on the mountain, request funds from district
	Nafaimai	2011: village under water around 2 hours; loss of a lot of livestock (chickens, ducks), 4 houses destroyed	Government help some rice
	Natherd	2011: Flood water passes village very quickly (around 1 hour), hill broke up, loss of most of rice (not harvest), 60 chickens and 10 pigs died	Not able to cope

Event	Village	Year and Effect	Coping strategies
Drought and fire	Tamdeng	2011: Upland rice and vegetables did not germinate	Government helped with rice, ate cassava
	Jing	2010: Rice did not germinate	Ate cassava as rice substitute, government helped with rice
	Nafaimai	2012: Rice did not germinate, cannot plan A few years ago: fire destroyed forest	Nam Theun II helped and trained how to raise fish in the pond
	Natherd	2012: Crops and rice did not germinate	District helped with seeds (1 kg maize per family, cucumber seed), project helped with rice
	Vakneua	1998: Loss of all rice in the field, rice did not germinate	Help from government 10 kg rice per person, ate tubers from forest
	Huaythong	2012: Rice did not germinate 2006: fire, loss of 10 ha of upland fields (loss of income around 1,000,000 to 2,000,000 LAK)	Bought rice or exchanged with other products at market, found food (cassava from forest) and ate instead of rice, Made rules to prevent forest fires
Disease outbreaks	Nafaimai	Each year: crops and animals died	No coping strategy
	Natherd	2009: disease, 10 buffalo, 15 cattle died, twice a year: animal diseases during (the first month of rain and dry season) livestock died, a few years ago, many children died after birth	Due to unhygienic and flood-prone location, government plans to move village with new houses, electricity, water system
	Huaythong	A few years ago: many pigs, chickens died	No coping strategy
	Laoleo	2003-2009: pigs, chickens, cattle died	Protected by medicine and vaccination
	Namloy	2003 to 2012: 10 families lost most of their cattle, buffaloes, pigs, chickens and ducks	Borrowed money from Nanyobai Bank
	Vakneua	2010: all pigs died, 2011: 10 cattle died	Vaccination did not help. Now they have stopped vaccinating livestock. After training, they still do not know how to use medicine and vaccines
	Tamdeng	Each year: pigs and chickens died	They do not know, and do not vaccinate, tried herbal medicines, which didn't help
	Jing	2011, 2012: Chickens died	Vaccination showed no effect, stopped vaccination
Storm	Laoleo	2003 – 2008: loss of many animals and crops, 20 families lost most of the rice in the fields	Labour (transplanting of rice, gardening, land clearance)
	Namloy	2011: storm, heavy rain, big tree and 6 houses gone, school fell down	Village self-help
Infestation	Vakneua	2002 - 2012: wild pigs, rats, little birds (<i>Nok Pid</i>), insects, pests destroyed young rice and vegetable gardens	Fencing, trap to catch pigs, made noise with sticks to chase away birds
	Tamdeng	Every year: monkeys, wild pigs, rats eat in rice and maize fields	Hunt the animals, trap, made noise with sticks to chase away birds
	Huaythong	Every year: rats destroy rice fields	No coping strategy
Others	Huaythong	2008: Move village, limited land to cultivate and land far away, shortage of food 2011: Soil cracked, loss of a lot of gardens	CARE helped during move
	Vakneua	2012: Construction of new district capital nearby	Planting area has decreased, new marketing opportunities

Coping mechanisms

When discussing coping mechanisms, respondents noted that external assistance from both government and development partners was a key factor. At all locations, respondents noted that some form of assistance from the Government, NGOs, UN or the private sector was forthcoming after recent crisis events, primarily in terms of food rations or seed. Respondents also noted the importance of infrastructure in recovering from floods; notably electricity, water supply, tractors and markets.

In terms of chronic vulnerability, July to October is the traditional lean season for rice, with both food and employment opportunities in short supply. Within the lean season, two periods of different forms of shortage can be noted. Firstly, access to NTFP diminishes during the later months of the dry season, when foraging becomes most difficult, and water most scarce. Secondly, in the early months of the rainy season, heavy field work leaves little time to forage, and heavy rains or flooding make access to natural resources difficult, and limit road access to markets.

Land tenure, access to productive land, irrigation and soil quality concerns were identified as contributing to vulnerability and elevated risk in the medium to long term. Deforestation was highlighted as a particular concern, as it results in degradation of a key food and fuel source, increased soil degradation and water loss.

Surprisingly, there are almost no viable coping strategies to deal with the livestock disease outbreaks that are prevalent in all visited villages. The only exception is the Akha village Laoleo in Phongsaly, where there is a strong tradition of livestock raising, veterinary campaigns promoted by CARE and district livestock office, and where villagers feel able to cope with livestock diseases by providing medicine and vaccination.

Communities reported that they strive to mitigate the impact of chronic or acute events by working together to build up community reserves (mentioned in Phonsaed village, Khammouane), growing and preserving more vegetables, and developing fish ponds.

4.3 Food Availability

4.3.1 Agricultural Production

The diversity of agricultural practices in Lao PDR is extensive and widespread. Among populations living in highland areas of Phongsaly and Sekong, survey participants primarily cultivated in upland fields (in Lao language: *hai*), practicing a rice-based conservation upland farming, including both rice and horticulture. The main crops include rice and maize, companion planted with pumpkin and cucumber. After the main rice harvest (October to December depending on variety), each farming family would continue growing (depending on soil quality and the availability of water) at least three other crops, including egg-plant, chilies, beans, sesame and pumpkin.

For lowland and Mekong corridor populations, paddy rice is central to all agricultural livelihoods, with additional gardens kept around the paddy fields or at home. Some locations in the survey areas were notable for the variety of crops grown, while only rice is cultivated in others. In Phonsaed, Khammouane Province, two seasons of rice are cultivated on 100 ha of irrigated paddy. In the past, more than 10 varieties of rice were cultivated in Phonsaed, but slow-maturing varieties are less frequently planted now, due to their higher water requirements.

Additional crops grown on these irrigated lands include maize, beans, tomatoes, chilies, aubergines, galangal, ginger, papaya and cabbage. In home gardens, crops include garlic, beans, aubergines, tomatoes, galangal, ginger, okra, lettuce, coriander leaves, spring onions and celery. Home gardens were less common in survey areas in Sekong province and found to an even lesser extent in Phongsaly Province. At the other end of the scale, in Natherd village in Khammouane Province, respondents said, *“The only thing we grow is rice. We don't plant anything else because there is not enough water.”*

Various types of livestock are also raised, including buffalos, cattle, pigs, goats, chickens and ducks. These are largely raised for household consumption, with larger animals such as buffalos and cattle raised for trade or as a form of household savings. Support services for livestock, including veterinary services and feedstock, are limited, and as a result livestock productivity tends not to meet its potential.

Table 8: Food groups and food sources⁸

Food Group/Food Source	Produced on Farm	Collected in Forest	Purchased at market	Trend
Staples	80%	9%	11%	Production decrease in NU, increase in MK, and stable to increase in SH
Vegetables	59%	33%	8%	Various production trends, little purchased, forest decreasing
Fruit	58%	29%	13%	Production and purchase slightly increasing
Protein	46%	41%	13%	More purchase/Lack in NU, abundant wildlife in SH, more purchase MK
Calcium	23%	70%	7%	More produced (sesame, tamarind, mustard), but generally from forest
Fat	42%	16%	29%	Lack in SH, increased purchase in MK and NU

NU: Northern Uplands, MK: Mekong Corridor, SH: Southern Highlands

4.3.2 Wild Foods

Food collected from the forest is of great importance in all visited 9 villages; however, 5 villages noted a decreasing importance. Namloy village in Phongsaly, and the three villages in Kaleum, Sekong Province have abundant wild foods and villagers noted that this has not changed much over time. There are many kinds of forest food, and 70 percent of the calcium food group is collected from the forest, in the form of crabs, shrimps, snails, small fish bones and various insects. Surprisingly, (an estimated 41 percent) of the protein consumed in the households derives from the forest; from sources including wild pig, bamboo rats, fish, monkeys, birds, deer and mushrooms. Many vegetables can be collected from the forest, including ferns, bamboo shoots, Job's Tears, lasia (*phak nam*) and young banana leaves.

⁸ Food Groups are following the structure of Linking Agriculture, Natural Resources and Nutrition (LANN) – a nutrition education and nutrition extension training module used by CARE International and several other INGOs and international organisations in Lao PDR.

Faced with a shortage of a staple food such as rice, one coping strategy is to mix rice with roots and tubers collected from the forest (yam, taro, cassava). Even if roots and tubers are of decreasing importance in the Lao cooking, they are still considered good substitutes during emergencies or for the poorer households, and are used to make sticky rice go further.

“In our village we have poor families with not enough rice to eat. Those who can afford to, buy more rice at the market, others borrow from villagers, and the poorer families mix rice with yam or cassava”

Statement by a women’s FGD, Sekong

As well as the quite high amount of vegetables collected from the forest, people can harvest fruit such as bananas, longans, mangoes, coconuts, star fruit, guavas, papayas, pomegranates, jackfruit and lemons. Overall, approximately 30 percent of the fruits consumed by the villagers are collected in the forest, but it seems that homegrown and market-bought fruit is of increasing importance, in particular in Khammouane and Phongsaly Provinces.

Apart from in two villages in Khammouane, and the relocated village in Phongsaly, most surveyed villagers rely on wild foods, and don’t see the necessity to plant more food. This is particularly true for the traditional farming villages:

“We have enough food in particular wild pigs, vegetables and aquatic animals from the forest, so we don’t have to worry about”

Statement by a women’s FGD, Khammouane

4.3.3 Food Reserves/Food Storage

Better-off households would store the rice until the next harvest. Many families (the so-called ‘middle-income’ families) lack land or labour and run short of rice from July to October. The social mapping exercise shows that 45% of the families belong to the ‘very poor’ and ‘poor’ households, indicating that they suffer a deficit of more than 6 months (see Annex VIII: Village data).

Seasonal shortages for other food groups fall into two periods. The first is during the late dry season, when foraging becomes most difficult due to water scarcity. The second period is the early months of the rainy season; when heavy fieldwork leaves little time to forage, and heavy rains or flooding make it difficult. More serious and chronic shortages are due primarily to a lack of land, and/or poor or decreasing soil quality, and in some areas a lack of labour.

Food preservation techniques are mostly very traditional: wrapping vegetables in banana leaves, drying meat and fish over the fireplace, conserving meat with salt in a jar, fermenting fish, and fire-crushing bones kept as bone powder in air-tight bamboo containers. Several years ago, an INGO (Oxfam) introduced a new food preservation technique in Thamdeng, Sekong Province, to make sour and non-sour bamboo shoots, and villagers still conserve bamboo shoots in plastic bags.

In an interview, poorer women said that they do not store any food at all, except:

“We wrap forest vegetables in banana leaves, so we can store it for two days. If we have meat, we dry it over the fireplace. But normally we only eat what we have collected on the day”

Household interview with a woman aged 47 with 12 children, Sekong Province

Poor women also said that they produce a variety of foods in the swidden fields. However, such food may not last long. For example, peanuts harvested in August would already be eaten by September. The rest of the year, they do not have any peanuts to eat. Women in other villages noted that they are growing more vegetables than in the past, and also preserving them for later consumption. In Khammouane Province, fishponds are considered to be an all-year-round source for food.

4.4 Access to resources

4.4.1 Access to Land

Despite the absence of legal title to land for individuals or communal land titling, and a lack of comprehensive land or forest allocation, respondents noted that there are generally few conflicts over land within their villages or with neighbouring villages.

Access to land, both individually held and under common property, is clearly a crucial factor in a family's ability to feed itself. With regard to land titling, customary rules of tenure sit alongside formal government administered titling systems. In all villages, land tenure is based on standing claims based on ancestry. In relocated villages, allocation of land is based on the total household size at the time of relocation, rather than on any additional dependents the household may accrue in the future. This was found to be the case in Phonsaed village, Khammouane. In Houaythong, Phongsaly Province, the relocation was made without giving any land for agricultural production. Here, villagers travel for 4 hours to work in their swidden fields at the old location. Distances from the village to the allocated plot may be substantial, making it difficult for households to protect their land, specifically ripening crops in the ground. In all villages, the planting of major cash crops was reported to be limited, and rice harvests were generally found to cover between 3 to 6 months of households' annual requirement.

4.4.2 Access to Markets

Selling wild foods and other NTFPs is still a very good income source in many villages, in particular in the subsistence-based upland farmers, whose main source of income is selling vegetables, wildlife and NTFPs. However, as roads are only accessible in the dry season, it is difficult to get to market. Market access is highly variable in the different survey areas, from Khammouane Province, where markets are readily accessible to all, to Tamdeng village in Sekong and Laoleo in Phongsaly, where the district market is three hours away by foot.

Merchants also come to buy agricultural produce and forest products from villagers, which villagers prefer, as they do not have to pay for transportation. The market-oriented villages have gained market knowledge and confidence, and the ability to sell crops is a major incentive to increase agricultural productivity and realise economic development.

As the Deputy Headman in Vakneua noted:

“Before we just grow the easy way but since we have a good market for vegetables and rice we work much harder as we are eager to sell the products. So the yields have increased.”

From this statement we can see that changing to commercial production increases productivity. When a cash economy starts, small business activities emerge, such as village shops, commercial vegetable gardening, rubber plantations, knitting and weaving, and even longer-term investments such as teak plantations.

Improved market access also influences the traditional ways of sharing food, as shown by the example of farm-raised meat. In the past, if a buffalo or pig were slaughtered, the villagers would share the meat. Nowadays, families sell the parts of the animal that they don't consume themselves:

“Before, we shared and borrowed food from each other. Now it is all about money.”

Statement by a male FGD, Nafaimai.

Interestingly, this changing marketing behaviour does not apply to wild meat. For example, villagers in Natherd, Khammouane and Jing, Sekong, said that slaughtered wild meat is still shared among families. Poorer households and female-headed households also divide wild meat among themselves (see also 4.1.3).

Increased market access tends to benefit the better-off part of the population. For example, the men in the market-oriented Sekong village, Vakneua noted: *“The poor don't have knowledge about selling products.”*

4.4.3 Financial Access

The cash economy is becoming increasingly important. Villagers need cash for their children's education and medical care, and food condiments and rice are major expenses. Although it may seem contradictory that villagers struggle to sustainably and securely feed themselves while at the same time they sell what they gather or produce, they are in fact only selling very small amounts of produce. The only crop mentioned often as a significant source of income that is sold in larger quantities is rice, followed by other crops such as dry chilies, sesame, beans, eggplants and NTFPs. Major income sources from NTFPs and wildlife are listed in Table 9.



Picture 6: Woman in Namloy showing her marketable product (bamboo worms)



Picture 7: Bamboo worms in bamboo containers

Livestock is the other category often listed as a source of income. All villages reported that raising large livestock is difficult and has decreased in some villages because of yearly livestock disease outbreaks. For some villages closer to markets, selling labour is another source of income, and poor women want to work as labourers in the area during the rice season. Some women in the Mekong Corridor in Khammouane reported that they work for others during the harvest in return for money, rice or other food. They call this **“work for food”**. Moreover – in Khammouane only – young people migrate to Vientiane and other towns to find work.

Table 9: NTFPs and wildlife as income sources

Lao Name	English Name	Latin Name	Use (market)	Important income source in
Dok khem	Broom grass	<i>Thysanolaena maxima</i>	Grass to make brooms (Thailand, China)	Namloy, Laoleo, Thamheng
Mak naeng	Cardamom	<i>Amomum spp</i>	Seeds (China)	Namloy
Nyaan	Benzoin	<i>Styrax Tonkinensis</i>	Resin for incense sticks, perfume (Lao PDR for export)	Namloy, Laoleo
Mak jong	Malva nut	<i>Scaphium macropodum</i> , <i>Sterculia lychnophor</i>	Juice, medicinal plant (Thailand)	Jing, Thamheng
Kisi		Parashorea dussaudi (tree from which resin is produced)	Resin for incense, varnish and lacquer (Vietnam)	Jing, Thamheng
Douang mae	Bamboo worm		Insect for food (Lao PDR, Thailand)	Laoleo, Namloy
Pueak mueak		<i>Boehmeria malabarica</i>	Vines, bark, resin for incense (China)	Namloy, Laoleo
Sad pa	Wildlife (wild pig, deer, monkey, squirrel)		Meat (Lao PDR, Vietnam, China)	Namloy, Laoleo, Jing, Thamheng

4.5 Food Utilization

4.5.1 Food Diversity

In relation to dietary diversity, the survey covered three different ecological zones, three different types of villages in each, and three types of household within each village (poor, middle income and better off families). In all areas, the basic meal structure was unchanged: sticky rice with or without vegetables and chili sauce is common to all income levels in all areas. The most significant variations were seen in the frequency of protein and fat consumption, with better off families consuming meat, fish and/or aquatic animals at least once a day. Poor families consume these foods far less frequently, and only on the basis of what can be found or shared by better-off families or relatives.

Seasonality is also a key factor. Vegetable and fruit consumption can be high but this varies, depending on what is in season, for example, peanuts (August), guava (October to November) and pineapple (December to February).

In relation to food preservation, drying, smoking and salting of meat and fish were noted, as well as the fermenting of fish. Bamboo shoots were also preserved in both sour and non-sour forms.

4.5.2 Intra-Household Food Distribution

In times of food shortage, nearly all men and women interviewed said that their children always eat first and that parents reduce their intake for the sake of the children. Asked, “In case of food shortages, who would mostly reduce the food intake in the family?” women mostly said that they would eat less (Figure 1). In the Southern Highlands women said that women and men would reduce their food intake equally. However, respondents to the same question in the male FGDs clearly said that in the Southern Highlands, it is the women who eat less food than the men.

“My husband and my children eat first. I prepare the table, and then I feed the livestock. When they have finished I eat the rest. Sometimes there is nothing left of the good food for me”

Statement by a women’s FGD, Vakneua

In comparing men’s and women’s perceptions, the results for the Northern Uplands are ambiguous (appearing similar to the results presented in Strong gender stereotypes). While both men and women in the Northern Upland Akha villages provided consistent answers, those in the two Khamu villages answered inconsistently. For example, in Houaythong village, Phongsaly, a large majority of men (90 percent) said that men would reduce their food consumption, compared to the 40 percent of the women who said that men would reduce their food intake for the sake of the family (Figure 2). Women openly shared their opinion of the possible reasoning behind this – men have more opportunities to eat better food since they generate more income, and more often participate in social events, such as wedding ceremonies, or drinking with their friends

Therefore, men can reduce their food intake at home when food is short. As a woman in the FGD argued:

“My husband has more opportunities than me to eat meat. He knows more kinds of food when gathering with his friends or joining the important ceremonies outside the village”

Wealth Cohort determines food diversity, and poor households eat less diverse food

“We have rice to eat for around 3 or 4 months. When we run out of rice, we collect vegetables and hunt wildlife for sale and buy rice at the market. Sometimes our relatives help out with some rice. Today, we had rice and egg for breakfast, and some vegetables with chili sauce. Usually we eat only rice and vegetables and chili sauce, so today was an exceptional day. Instead of eggs we sometimes eat fish from the stream nearby. For lunch we ate shell soup with vegetables and chili sauce. Each meal I have to prepare chili sauce, because if I share our food with others and do not have any chili sauce, the others would say that I am a lazy woman. For dinner, my husband will go hunting, and if he is lucky, we will have wildlife to eat. If not, we will eat vegetables and chili sauce again.

Poor woman aged 37 with 12 children, of which 6 have died, Khammouane Province

We visited a woman aged 48, and she invited us to share dinner with her family. On the dinner table were fried fish, vegetable soup, chili sauce, raw vegetables and sticky rice. The food was very tasty. After the meal, fruit was offered, such as bananas, coconuts and sugar cane. They also gave us fruit to take away. Her husband said that all of the food they have eaten they have grown, except the fish, which they find in the stream. Around the house is a large diversity of food, among of it sugar cane, bananas, pumpkin and cassava.

Source: Participant observation, better-off household, Khammouane Province

Even if men eat less at home, they have more rich food to eat due to their social networks.

Figure 1: Women’s perceptions of intra-household food consumption

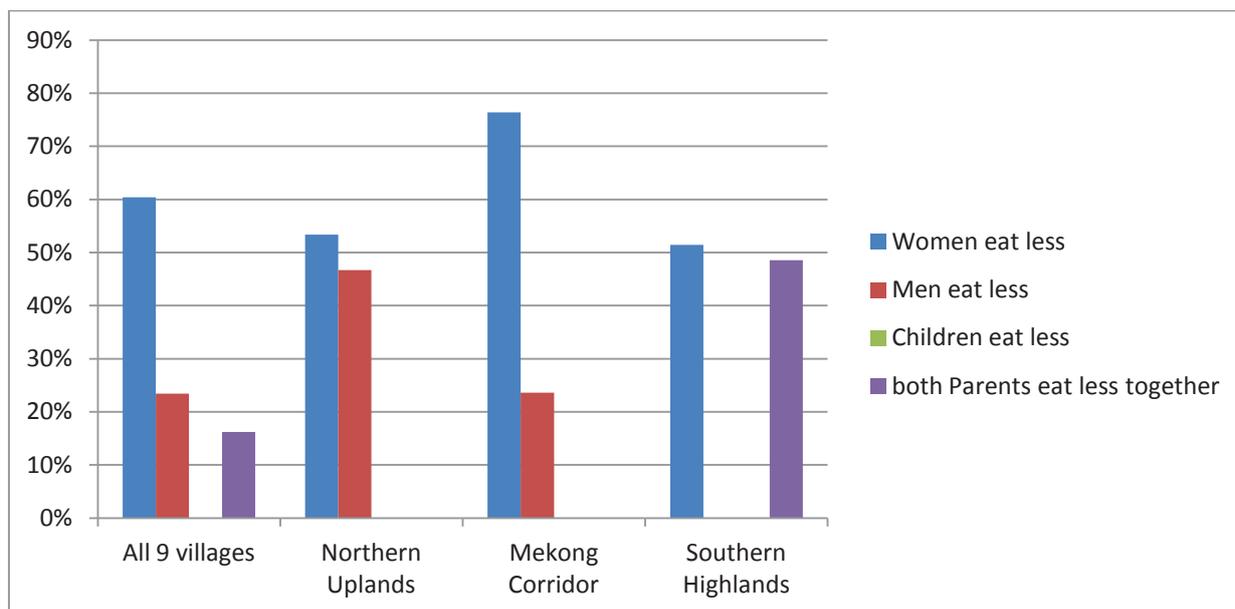
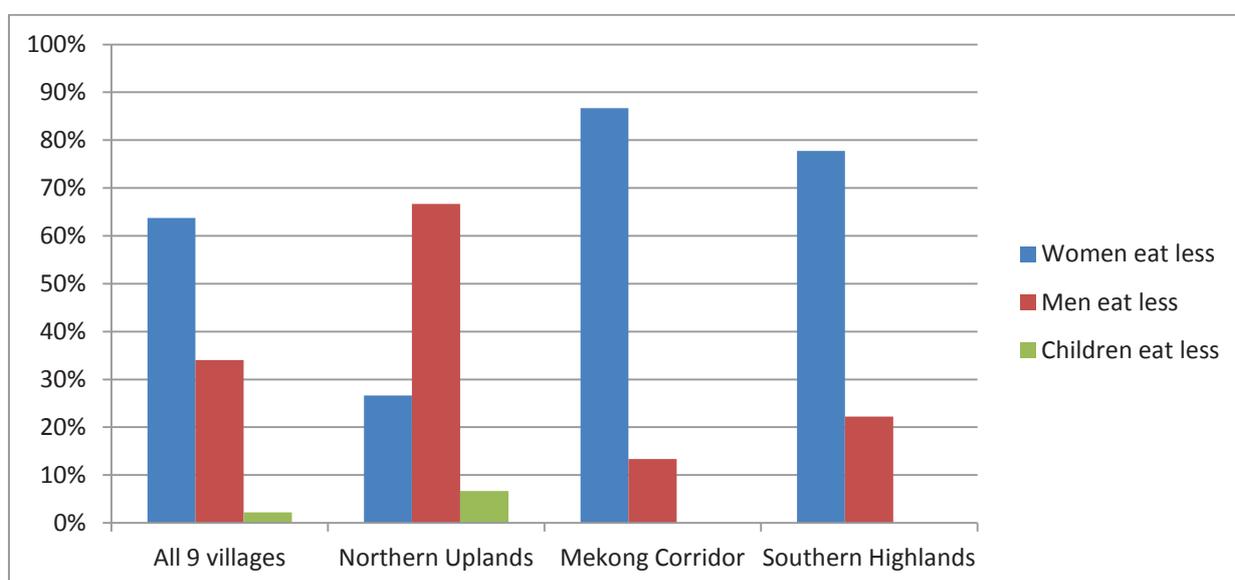


Figure 2: Men’s perceptions of intra-household food consumption



Children’s food and weaning practices

Little variation was seen between adults’ and school-aged children’s meal composition: the basic rice, vegetable and chili components were the same. However, children from middle and higher income households in the Mekong Corridor AEZ are also sent to school with money to purchase a snack during break time, indicating higher consumption of processed food and candy among better off populations.

Weaning practice, by contrast, is heavily influenced by local tradition. As in Natherd village in Khammouane, it is common for babies to be fed mashed or pre-masticated sticky rice from birth. This was also noted in several household interviews in all nine villages, and therefore can be seen as a widespread practice.

Appropriate weaning food practices, including special young infant and child feeding are rare. Young infants aged 6 months or more are usually still breastfed up to one year or longer, and eat with their families from the moment they are able to do so. Weaning is a process managed exclusively by women, and men are only involved if the mother is sick and unable to do it herself. The nonexistence of special young infant feeding practices is largely due to mothers lacking time to prepare the special food and lacking the knowledge and awareness of the necessity to do so. Weaning foods mentioned by respondents include rice soup with meat, salt and MSG, as well as steamed mashed bananas. In many villages, vegetables are not seen as suitable for weaning babies. A woman in Houaythong, Phongsaly explains:

“I have just started to prepare meals for my 6-month-old son by mixing boiled rice with salt. I have learnt this from my mother, who told me that this would avoid sickness and food poisoning, which possibly would come up from other kinds of food such as yellow-coloured vegetables such as pumpkin”

4.5.3 Food Taboos During Pregnancy and Post-partum

Food taboos are observed little during maternity, and only in Khammouane Province did women say that they would avoid various kinds of meat and even eggs during pregnancy. Some of the food taboos could be classified rather as intelligent food restrictions, which women have discovered by themselves as they are aware of their negative impact. These include avoiding food that is too sour, too spicy or too bitter, as this would lead to stomach problems in the late stage of pregnancy or post partum.

Other food taboos are related to cultural traditions and norms, and do not harm the health of mothers and babies. Among these taboos are avoiding forms wildlife, such as monkeys, bats, cave animals, snakes and eggs. Women gave their socio-cultural reasons and beliefs for avoiding this kind of food. For example:

“If a woman eats monkeys during pregnancy, her child will be naughty.”

Women’s FGD, Vakneua, Sekong

“If a woman eats bats, her child will have an ugly bat face.”

Women’s FGD Tamdaeng, Sekong

“If a woman eats cave animals (animals living in a hole), delivery will be very difficult for the mother.”

Women’s FGD, Nafaimai, Khammouane

Many more taboos are prevalent post partum, and there are similar taboos across the Mekong Corridor and the Northern Uplands, but they are less widespread in the Southern Highlands. Meat and yellow or red vegetables, particularly, are seen as taboo. In Phongsaly and Khammouane, various forms of meat are avoided, such as white buffalo, meat from chicken with white feathers, cattle, and all kinds of wildlife.

In only villagers in Vaknuea, Sekong, reported that male wildlife, such as muntjac and boar, is taboo. Pumpkin, pumpkin leaves, papaya, chili, and bamboo shoots are also often mentioned as post partum food taboo. Most of foods mentioned cannot be eaten for a year, but fish and traditional pigs may be eaten after six months. In villages in Phongsaly and Khammouane, women said that their only diet for the first 15 to 30 days after delivery was sticky rice with salt and galangal, although there appears to be an economic dimension to this practice, with this diet continuing for up to three months in poor families. Meat is slowly reintroduced into the diet, but only if the household can afford it, as wildlife often stays a taboo up to one year. This practice was not found in Sekong, where postpartum women are not dissuaded from eating any foods. Neither in the traditional Akha village in Phongsaly was the consumption of meat considered taboo. Here it was explicitly mentioned that the consumption of duck and chicken soup is very important for breastfeeding mothers, and if the mother has not enough milk, the husband prepares chicken soup for his wife.

4.5.4 Summary of Food Utilization

During food shortages, women tend to be the first to reduce their food intake. In some rare cases – at times of crisis – it was noted that men give more food to their wives. It was notable that on this point, women did not blame their husbands for eating more than them – it was rather men who acknowledged that women would eat less. Almost all men and women interviewed agreed that children would never be given less in periods of food shortage. Children, however, are expected to eat from a very early age with the family, and it is not common to give infants special food. Therefore, they receive additional food only until they are able to eat by themselves; before that, they are breastfed and their diet is complemented by pre-chewed rice and, in rare cases, mashed banana.

Women are uniformly responsible for all daily household chores, with the exception of special occasions, when men help to prepare special food such as special Lao minced meat (*laap*), barbecued meat or meat steamed in bamboo poles (*kuluk kuluk*). All daily decisions about what to put on the table are made by women, who also carry the main responsibility of feeding their families.

Across all three AEZs, poor families eat rice for breakfast with salt and sauce, mostly with vegetables, and the diversity of their diet is poor. The better off families always add fish, eggs, some meat or a variety of vegetables to breakfast.

4.6 Stability

Although there is generally less hunger than in the past, finding food is most difficult during the late dry season. Some families have a much harder time feeding themselves than others, with the primary reasons given being lack of livestock, poverty, too many children, not enough work, and bad farming skills.

4.7 Health

4.7.1 Mother and Child Health Care

Across all villages there was one common complaint from most of the women: they have a lot of children, but they do not have enough time to take care of them, which includes time for preparing food, time for breastfeeding, and time for personal hygiene. Maternal deaths are reported and are still occurring, and considered part of village life, almost like other diseases.

In three villages – two in the Mekong Corridor, and the market-oriented village in Sekong – only 20 to 30 percent of women have delivered at least one child in hospitals or health centres during the past 5 years. It is much more common to give birth at home, with the exception of two villages in Sekong, where special delivery huts are constructed near the village. However, one village is gradually losing this tradition:

“In our tradition we need to settle in our houses at least for one year, and then we are also allowed to deliver in our houses. Before that period, our tradition says we should deliver in a small hut in the forest nearby. But overall, we don’t have very strict traditions and beliefs and handle our traditions more flexibly and change them as needed.”

Statement by a women’s FGD, Ban Jing

Expectations of women’s roles in the household are heightened during pregnancy and in the first 3 to 6 months after birth, and mothers are expected to carry out their existing responsibilities as well as caring for themselves and their new child. In all villages women reported that they were expected to resume their duties three days after delivering, carrying their new babies with them.⁹

Picture 8: Smoking is widespread in all nine villages. In Sekong, women smoke as much as men, and do not stop smoking during pregnancy or breastfeeding.



⁹ The one exception was middle-income women in the market-oriented village Vakneua, Sekong, who reported that they would rest for approximately 1 month after delivery.

Picture 9: Woman in Nafaimai village, Khammouane, sits by a hot fire for one week after delivery.



“Two days after delivery I have to cook food for myself and my children, and do domestic work such as washing my and the baby’s clothes. After 5 days I have to do all the household chores as usual. I am tired, but nobody helps. My husband has to find food and goes to the field. When we don’t have enough food, my children and my husband eat more, otherwise he would complain that if he eats less, he will be tired and unable to work.”

Statement by a women’s FGD, Khammouane

When delivering at home, husbands are involved in cutting the cord, and taking decision in case of emergencies during delivery; but it is mainly the female relatives involved in birth assistance. This is also caused by very strict cultural rules, trying to exclude men from issues around birth and delivery.

“If I help my wife during delivery or after birth I cannot be successful in hunting for food in the forest. But I can solve this problem by giving merit to the spirits and ask the spirits: “Please forgive me, that I helped my wife.”

Statement by a male FGD, traditional farming village, Sekong

4.7.2 Hygiene and Sanitation

Women reported that they learn about hygiene and sanitation mainly from the television, and in some cases, training has been offered. In Khammouane, students from the medical university stayed with villagers for a short period, which village women found quite useful. Women also admitted that after training or listening to television or radio, they forget the content of the hygiene and health messages. Many visited villages were unclean. A lack of toilets, free roaming animals and insufficient water access are common, and only in the market-oriented villages was an upward trend observed.

Picture 10: Unhygienic conditions in Phonsaed, Khammouane



4.7.3 Health Care Facilities and Services

Each village surveyed has a traditional midwife and health center, or there is one in a village nearby. Access to the district hospital is difficult for many villages, and takes between 1 and 3 hours by motorcycle, tractor or on foot.

None of the families in the three rural villages in Phongsaly make much use of health centres or the district hospital, even those that are near the hospital. They primarily work with village health workers. In Sekong, there seemed to be a closer connection to local health facilities, and both men and women reported visiting health centres or the district hospital if they were sick. People in the three villages in Sekong also explained that health services would include vaccination, awareness of disease prevention and malaria prophylaxis including mosquito nets. In Khammouane, the district hospital is the preferred option, and health outreach work has included children diseases, maternal healthcare and eye clinics. Women in Nafaimai, Khammouane, even expressed their increased confidence in healthcare facilities that is changing their perception of tradition: ***“In the past we worshipped to spirit, but now there is no need, because there is a hospital.”***

Women in Khammouane also reported that the work of the medical health centres was good and that they have learned a lot from them and about pregnancy, childbirth and general health issues. However, they are not regular enough and often too far to travel to.

The need for family planning was not discussed in detail, and most families do not practice birth control. Women in Khammouane brought up a very specific concern, which again highlights the danger of their high workload.

“We do not want many children, but we do not know how to do birth control. In the past a gynecologist from the District trained us how to do it, but the methods offered do not suit us. Women who use the IUD and work hard would suffer from increased bleeding; the three-month injections make our skin dark and we feel very tired from the medication.”

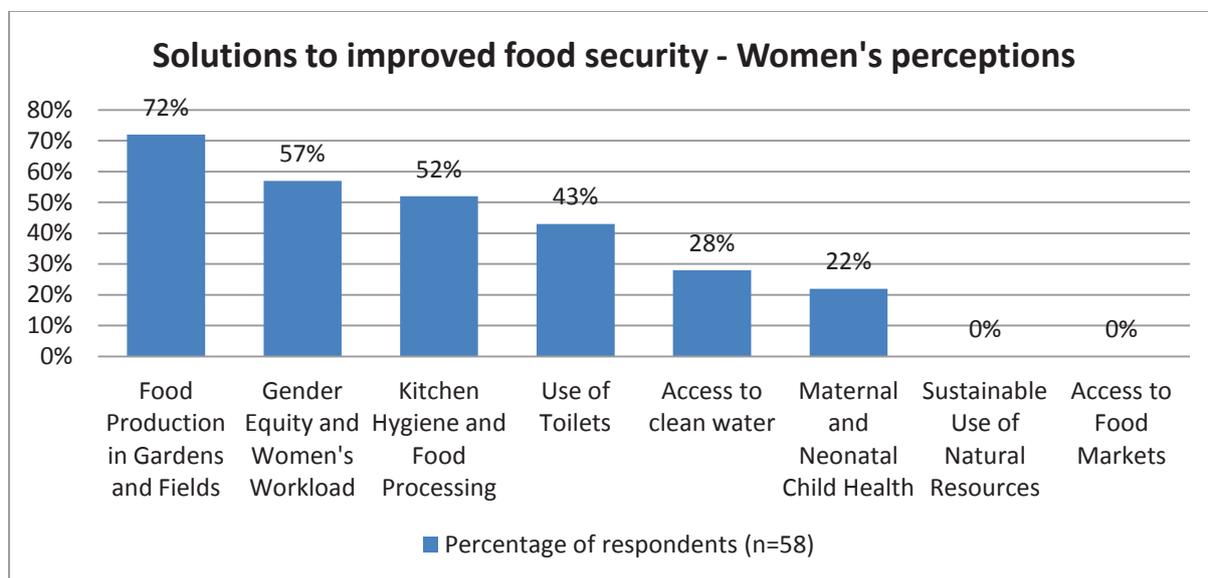
Statement by women’s FGD in Nafaimai village

4.8 Women’s Priorities Regarding Improved Food Security

After each household interview, women were asked about their priorities regarding improved security, i.e. what do they think would be the most effective way to have a more diversified diet. In order to get comparable results, the team used picture cards as shown in

Picture 11.

Figure 3: Solutions to improve food security and nutrition



Garden improvement was the top priority across all AEZs and wealth categories. A rich and diversified home garden as fresh fridge close to the house is a clear advantage seen by 72 percent of all interviewed women. At present, both home gardens and swidden fields are used for food production, they are not perceived as sufficient in quantity and quality. Home gardens could be improved by better knowledge of organic farming practices and preventing pests and diseases, and improved access to seed and seedlings. The second priority, mentioned by 57 percent of respondents, was improved gender equity, in particular sharing the workload to lower women’s

5. RISK AND VULNERABILITY FEATURES

5.1 Key Features from the Northern Uplands

Land tenure

- None of the villages visited has access to rice paddies, and in soil fertility is generally low. Improved local upland varieties were introduced by CARE, and with ILV yields raised to 1.6 to 2.3 tonnes/ha. Fields are far away from the villages, and all land use is based on customary rules.
- Farmers are eager to plant more, and marketing opportunities for livestock, vegetables, rice, and various NTFPs are very good and increasing.
- While villagers depend heavily on NTFPs for sale and consumption, the volume and variety of NTFPs from the forest are decreasing. CARE supports the domestication of various NTFPs (cardamom, galangal and broom grass) as a promising income source.
- Rice production is decreasing, as land under shifting cultivation has been reduced, with stable or slightly increasing yields resulting from the introduction of new varieties, and villagers prefer permanent upland cultivation and buying rice at the market.
- Resettlement has lacked comprehensive planning. Resettled villages have no access to productive land, so villagers walk back to their old swidden fields. The riverbank is not well protected, so village land is lost every year.
- Livestock is raised in special livestock areas, but diseases wipe out poultry and pigs regularly. Pigs are not free roaming, but fenced out from the village or kept in pig sheds.

Gender equity

- When women are able to reduce their workload, men feel more disadvantaged. This was a key issue in the resettled villages, where fetching water is less strenuous and rice mills have been introduced. Men feel that women have a more comfortable life, and should help them more in their work (for example, by cutting trees to help house construction).
- Women want to make better use of their time and generate their own income, but feel largely excluded from credit opportunities and relevant advice.
- Strong gender stereotypes and taboos around talking about women's health were found in the Akha village. Men would not help women with their work, and women's health is considered an unpopular topic of discussion.

Nutrition and health

- Food taboos are especially important among Khmu people. One example of an unhealthy practice is the limit placed on mothers' diets for 21 days after birth. A basic rice/galangal/MSG mix is the only meal permitted during this time. Akha have fewer food taboos than Khmu, and postpartum women are given chicken soup immediately after birth.
- Fat is increasingly found in diets, mainly due to the consumption of market purchases. CARE has supported the planting of sesame, which farmers have continued successfully. Insufficient protein is consumed; one option is to increase the consumption of fish.
- Understanding of malnutrition is incomplete. Across all interviews, malnutrition was understood as a function of food intake. No links to hygiene, sanitation or maternal and neonatal child healthcare were recognized.
- Sanitation is a concern. Only one of the villages visited had a toilet. There is poor hygiene practice in food preparation (for example, unclean utensils and cutting boards in kitchens).

5.2 Key Features from the Mekong Corridor

Land tenure

- Villages in the Mekong Corridor are less vulnerable as result of better infrastructure and more livelihood opportunities, but have higher exposure to hazards, especially floods, than other regions.
- There is access to irrigation and paddy land, and income is also derived from rice. However, due to short distances to towns and markets and better infrastructure, forest land is being converted to plantations or industrial land. Access to natural resources is decreasing drastically.
- Livestock is raised, but many livestock diseases and a lack of veterinary services mean that livestock is regularly wiped out.

Gender equity

- Some gender stereotypes, but women are better involved in income generation activities.
- Women see potential for improved food security in better family planning, and have experience in practicing birth control. However, there is need for improvement.

Nutrition and health

- Regular rice is preferred, but some glutinous rice is also grown. People said that there are generally few shortages.
- There are many post partum food taboos, even though the general education level of the population is better than in the Northern Uplands and Southern Highlands. Women also said they eat sticky rice with galangal and salt up to three weeks after delivery.
- The importance of cash income and money to buy food is increasing. A considerable amount of fruit and vegetables consumed is bought at markets (approx 20 to 30 percent) and up to 50 percent of fat is bought at markets. As well as selling food that to buy other food, rural labour is of increasing importance.
- Links between maternal and neonatal health care and malnutrition are clear to women. However, the importance of proper sanitation to nutrition is still a large area for improvement.

5.3 Key Features from the Southern Highlands

Land tenure

- Substantial support from local authorities and development partners after disasters or during resettlement was noted.
- Farming practices are traditional, but due to good soil quality and long fallow periods, yields seem to be high.
- One village is market-oriented and produces paddy rice and vegetables for the market. This village received extensive support from the district agricultural office. Farmers were asking for more advice on organic vegetable growing, as diseases and pests are increasingly emerging in the garden areas.
- Livestock is wiped out by diseases regularly. Livestock is usually free roaming, even in the village areas with one exception in the village, where agricultural extension has been extensively provided.

Gender equity

- Strong gender stereotypes were noted, as in the Northern Highlands. Men will not do household chores, as this would result in a loss of respect from other men.
- Women have high workloads, notably traditional rice milling.

Nutrition and health

- Smoking (among men and women) is common.
- Understanding of malnutrition is incomplete. In all interviews, malnutrition was understood as a function of food intake. No links were recognized with hygiene, sanitation and maternal and neonatal child health care.
- Only the market-oriented farming systems village had toilets, which were constructed by the villagers under a community-led sanitation scheme.
- Livestock were seen walking freely through all of the villages.
- No harmful food taboos during pregnancy and after giving birth were noted. Villagers laugh about their own beliefs, but still follow them; food taboos are more a matter of culture.
- Market access is limited, predominant sources of food consist of self production and hunting and gathering. Protein largely comes from hunting animals (wild pigs, rats, birds, monkeys, squirrels).

6. CONCLUSIONS AND RECOMMENDATIONS

The following recommendations feed the on-going debate among government, development partners and civil society organisations (INGOs, NPA) about how to tackle the issues related to food security and nutrition in rural of Lao PDR. One of the biggest challenges for Lao PDR to graduate from Least Developed Country status by 2020 is the comparatively high stunting rate, which is according to LSIS currently 38 percent – one of the highest in the region. A comprehensive effort involving all sectors is needed to solve this problem. These recommendations may help to enrich this debate and reframe some issues.

6.1 Develop Best Fit Solutions for Different Farming System Categories

Development efforts and natural conditions have led to different types of villages with different characteristics requiring different types of food security interventions. Three major categories have been identified. Diverse rural communities require adapted strategies that respond appropriately to specific challenges and priorities and to the predominant farming systems. A standard approach to village and rural development is not appropriate to this multi-faceted rural landscape.

Villages with part-time farming systems and increased access to rural labour markets: Usually found closer to district centres or rural townships, these villages need better opportunities to generate income via the emerging rural labour market. However, the rural labour market is presently temporary and seasonal and mainly concerned with processing factories and construction sites. Women participate much less in the rural labour market, as they have fewer job opportunities and very poor access to credit. As a consequence, it is common for Lao women to migrate from their villages to larger towns to get jobs in the service sector.

Rural work is more available than in the past and respondents said that wage rates are higher than ever. This is a positive trend, but it is offset by increasing costs of both food and non-food items at the household level. Additional income is not being spent on high value food items, or even high value non-food items such as medicine. Evidence that household income is being spent on tobacco, alcohol and MSG suggest that increased income does not necessarily result in nutrition-seeking behavior. Changing gender roles and changing food sources require new forms of nutrition education in these part-time farming households.

Depending on the access to and availability of farm land, off-farm and on-farm income generation is still a good entry point to increased food security, since in the future part-time farmers would buy larger quantities of their food on the local market.

Since farming is the backbone of rural economy, and in order to bridge the gap between decreasing food availability and access to local markets, intelligent solutions for food production near the home need to be developed. These solutions include: fruit and vegetable planting in a backyard or home garden to support the availability of food for children and elderly people; small backyard livestock raising; the provision of veterinary services; and ensuring access to good fodder bases to increase access to meat and to generate income from sales.

Villages with rice-based conservation farming systems: Traditional upland farming systems with swidden fields is a labour-intensive farming system that is deeply rooted in the culture of remote upland villages. As this farming system is often not productive enough to sustain livelihoods, it should be complemented and partly substituted by permanent upland farming with production oriented towards the market. The domestication of NTFPs, agroforestry systems and integrated farming systems would all contribute to permanent and more productive upland farming. Market links can be made through the formation of producer groups, and by linking producers to credit and potential buyers. Upland farmer cooperatives would be one measure to strengthen the voice of the scattered small-scale and largely market-inexperienced upland farmers.

As women play a big role in maintaining and harvesting the produce from the upland fields, but are largely excluded from decision-making and inter-village social networks, they should be explicitly included in development activities in permanent upland agriculture. Complementary measures should include infrastructure development and permanent land allocation to the farming families so they are better placed to invest securely in their land. A better understanding of upland households on household economics could raise awareness and knowledge on the division of labour within the family, the importance of production of food for own consumption in home gardens or backyard livestock raising to increase food security within the household. Household food production also would relieve the burden of upland farmers to collect food in the forests as daily activity.

Villages with market-oriented farming systems: This is the widely promoted and obvious strategy for rural development in Lao PDR, which also has, however, negative impacts on village and household economies. Decision-making on farming practices and produce is often induced by outsiders (in extreme cases by contract farming), and again, it is mostly men who are involved in these new networks. The negative side effects can be indebtedness and agricultural practices that harm the environment, such as increased and even inappropriate use of pesticides. Farmers also need to be encouraged to look for independent sustainable solutions. Indeed, during this survey, farmers asked for support on improved farming practices that help to solve the problem of pests and diseases, and that also contribute to the environment. Major intervention strategies to support these villages include farmers' cooperatives, organic farming and integrated pest management practices. This strategy acknowledges that farmers produce healthy agricultural products not only for the general market, but also sell their produce at local markets, in the community or for own consumption.

6.2 Contribute to More Land Tenure Security in Rural Areas

The assessment did not explicitly deal with land issues. However, the actual debate in Lao PDR apparently calls for a conclusion within the scope of this survey. Findings across all villages support the necessity of acknowledging customary rights and promoting land tenure security at village and individual level. Of utmost importance is the role of NTFPs as a source of income, while access to NTFPs is changing, with the volume and diversity of items collected diminishing.

Respondents were pessimistic about the future. Changes in the environment were rated negatively across the board, including: fewer fish; rice shortages due to flooding; hotter weather; irregular and unpredictable rainfall; a lack of land; and deforestation. Respondents said that this would result in greater difficulty in foraging and lower agricultural productivity. However, families with more land usually do better.

Increased land tenure security for smallholder farmers will allow increased food security, and not just because of increasing investment and productivity in land. Cases in Phongsaly, Khammouane and Sekong show that different resettlement processes lead to different results. A community that is able to negotiate with public stakeholders on a level playing field is much more successful in obtaining fair compensation and a smooth resettlement process, as shown by one village in Sekong. Here, resettlement was not done with the intention to move people and change them from swidden farmers to rural labourers – the villagers were able to continue their traditional livelihood activities in the new location, which often is not the case in resettlement areas. In Phongsaly the resettlement process was more difficult, with villagers being forced to completely change their livelihood at the new location. Simultaneous resettlement and transformation of livelihood requires more support to if it is to be achieved smoothly, and if compensation is to be fair. The case of Vakneua, Sekong, even if very positive so far, may face problems in the future, as the land allocation and land titling process have not even started. With the new district centre nearby, land disputes will emerge when new stakeholders want to move into the area. Establishing the village boundary and a communal land titling process are regarded as the minimum interventions to secure land tenure for the affected villagers, who overall benefit from being close to the new district center.

6.3 Transform Gender-Blind Food Security Strategies to Food and Nutritional Security Interventions Targeted Explicitly at Women and Poor People's Priorities

The availability of and access to food, which is still a challenge across all survey villages, in particular for very poor households is only one underlying aspect of food insecurity.

Female respondents who participate in developing the economy said that it is easier than it used to be to feed their families, primarily because they can buy food with their earnings from selling vegetables and with their wages. Overall, however, many women stated that there has not been a real change, because they see large gap between their responsibility to feed the family and their decision making power. This lack of freedom means that feeding the family becomes a severe burden that leads to frustration and fatalism.

Having a large family size with many children continues to be a common coping strategy in rural Lao PDR. The findings of this report are borne out by the 2012 Lao Social Indicator Survey. The viability of a large family as a long-term coping mechanism may be sound, but it also increases daily costs and liabilities at household level. Many survey participants suggested that families with more labour have an easier time getting enough food, and many recognized that having a lot of children also leads to less land in the future, potentially compounding current problems. *“Too many mouths eating and less land”*, was a common refrain. Birth control methods are largely unknown, and only in the more accessible Mekong Corridor villages have women tried different forms of contraception. Birth control and integrated mother and child health education are promising interventions.

At all survey locations, improvements in major infrastructure, including roads, electricity, water systems, markets and communication networks were noted, and appreciated. These measures were identified by respondents as important factors in resilience to and recovery from disasters, and an encouraging trend. However, improvements in educational systems were not noted. Given the importance of schools as a venue for food, agricultural and nutrition-based learning, and the fact that income generating potential and nutritional knowledge are proved to be connected to the educational status of women in particular, this is cause for concern and renewed effort.

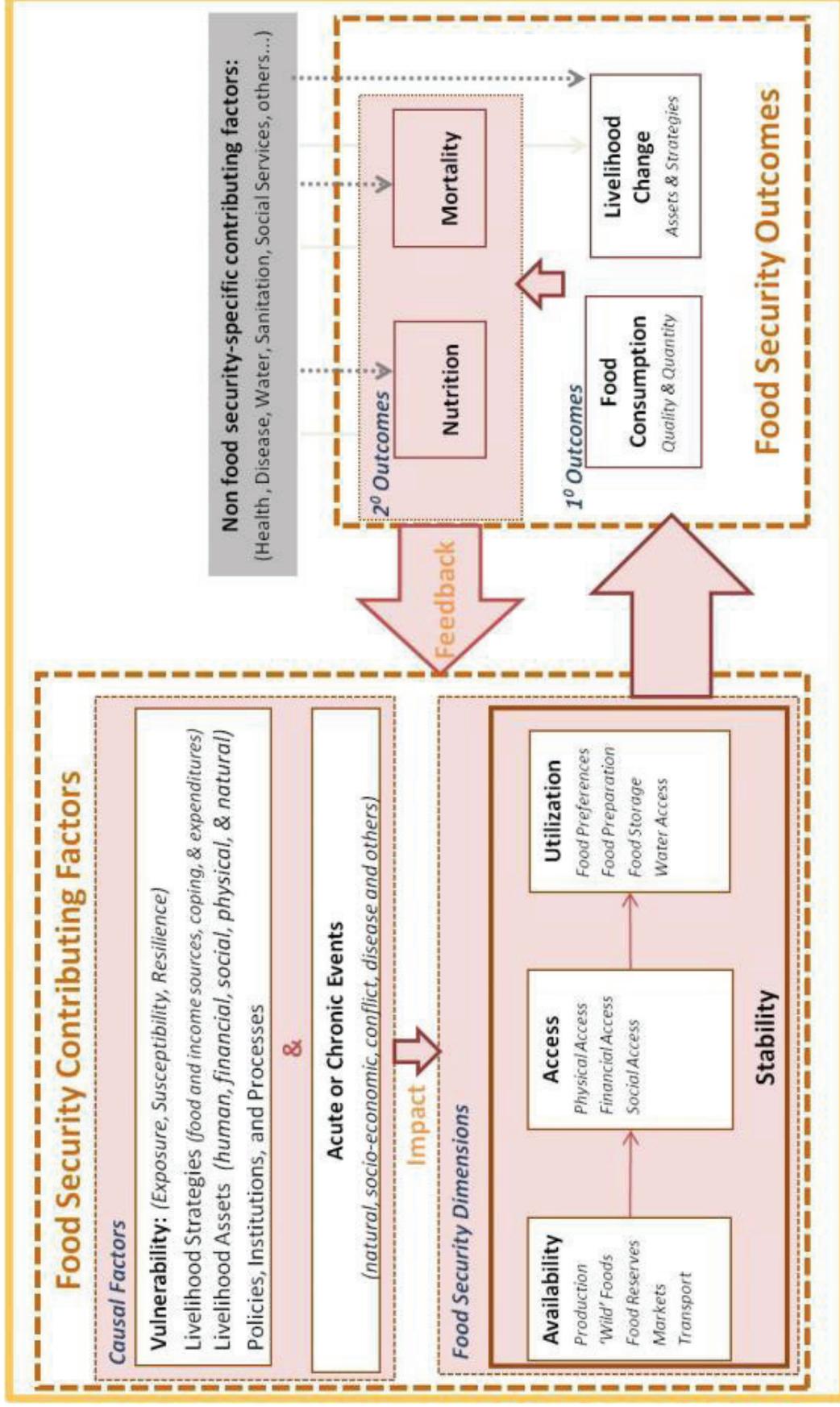
Women have not been allowed to take full advantage of improvements in infrastructure and income generating opportunities for a variety of reasons. Poor levels of education, a lack of linguistic skills, traditional work norms and male expectations all entrench the idea of a women's role as being closely tied to the household, the needs of her children and a livelihood based on self-employment. Female respondents with higher assertiveness and higher status in the community stressed repeatedly that exclusion from development efforts is a major constraint to fulfilling their role to contribute to family food security. These women want access to credit, education, agricultural extension and maternal and neonatal child health care. Gender-sensitive rural development efforts and awareness campaigns also need to address the fair sharing of workloads and responsibilities. This definitely includes pregnant and post-partum women.

ANNEXES

Annex I: Indicative Schedule of Activities

Activity	Nov	Dec	Jan	Feb	Mar	April
Sampling	XX					
Instrument design	XX					
Recruitment of researchers	XX					
Training of researchers	XX					
Field work		XX				
Data processing		XX	XXX			
Qualitative data analysis				XX		
Report writing			XX	XX	XX	XX
Dissemination of report						XX

Annex II: Integrated Phase Classification



Annex III: Definition of Major Terms Used in this Survey

Hazard: *dangerous phenomenon, human activity, or conditions that may cause loss of life, injury, damage or loss of livelihoods*

Vulnerability: *inadequate ability to protect oneself against the adverse impacts of external events or to recover quickly from them*

Coping Strategy: *human effort (action, knowledge, capability) that people employ to deal with stress*

Risk: *possibility of suffering harm or loss, danger*

Risk: *(Hazard x Vulnerability)/Coping strategy*

Annex IV: Agro-ecological Zones of Lao PDR¹⁰

Mekong Corridor: The Mekong Corridor includes the banks and floodplains of the Mekong River and the lower alluvial valleys of its tributaries. Altitudes range from 100 to 200 meters, annual rainfall is between 1,500 and 2,000 millimeters, and the agricultural growth period ranges from 180 to 200 days. The landscape consists mainly of plains and modestly sloping areas. The original lowland forest cover has long been removed for intensive farming, as the area is well suited for a wide range of crops, particularly lowland rice. The total rural population of the Mekong Corridor is about 1.5 million, making it the most densely populated area in Lao PDR.

Central-Southern Highlands: This zone includes parts of Khammouane, Savannakhet, Saravane, Sekong and Attapeu Provinces and extends parallel to the Mekong, covering the upper valleys of its tributaries and upland areas. Altitude range varies from 200 to 500 meters. Rainfall ranges from 2,000 to 3,000 mm and the length of growth period is between 210 and 240 days. Population density is low, with the rural population estimated at around 15 people per square kilometer, and there are fewer than 300,000 people. The zone is generally characterized by poor acid soils with little potential for productive agriculture. In addition, the high risk of unexploded ordnance prevents the cultivation of a large portion of the available land.

Vientiane Plain: The Vientiane Plain extends over parts of Vientiane, Bolikhamxay and Khammouane Provinces and covers the higher plains and lower slopes of these areas. Altitude ranges from 500 to 1,000 meters and the annual rainfall measures between 2,500 and 3,000 mm. The growth period is 240 to 270 days. The landform is dominated by rolling topography and middle mountain areas. Natural forests still exist but have been affected by shifting cultivation. Upland rice cultivation is one of the main agricultural activities but animal husbandry is also of some importance. The total rural population is approximately 300,000, and the population density is low to medium.

Boloven Plateau: This zone includes parts of Saravane, Sekong, and Attapeu Provinces in the south of the country. Altitude varies from 500 to 1,500 meters and rainfall ranges from 2,500 to 3,000 mm.

¹⁰ Source: Lao PDR: Rural and Agriculture Sector Issues Paper, World Bank 2006 (see: <http://lad.nafri.org.la/fulltext/LAD010320071391.pdf>)

Today, the natural vegetation mainly consists of savannah, forest and grassland formations. Land is primarily used for cultivation of tree crops (coffee, tea and cardamom) but some shifting cultivation for upland rice production also occurs. Livestock production is of major importance in this area. The total rural population is estimated to be around 60,000.

Northern Highland Areas: This zone covers the mountain areas of Phongsaly, Luangnamtha and Bokeo in the extreme northwest, parts of Huaphanh and Xiengkhuang and eastern parts of Bolikhamxay. Altitude varies from 1,500 to 2,500 meters and annual rainfall ranges from 1,300 to 2,500 mm. The zone is characterized by remoteness, inaccessibility and high erosion risk due to the steep mountainous topography. However, soils are well suited for farming and there is good potential for animal husbandry. Natural forests have been largely removed and shifting cultivation is the predominant land use. Although the total rural population is approximately 1 million, population density is low.

Northern Lowlands: This area comprises parts of Luang Prabang, Phongsaly, Oudomaxay and Xayabouli. Altitude ranges from 500 to 1,500 meters and annual rainfall ranges from 1,500 to 2,000 mm. This is a predominantly mountainous zone, similar to the Northern Highlands. The original natural forests have been removed and the remaining forest is largely shaped by shifting cultivation and livestock grazing. The total rural population is estimated at 1 million, and the population density is higher than that of the Northern Highlands.

Annex V: Research Team Members

Name and Surname	Position	RVS function
Dr. Chusana HAN	CARE Gender Advisor	Team leader Phongsaly
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Ms. Silinanh LUANGKHOT	NUoL Faculty of Social Sciences, 3 rd year student	Team Phongsaly
Ms. Phoudsady SIPHAINGNAM	Pakpasak School, Accounting graduate	Team Sekong
Mr. Bounpheng DUANGMALA	CARE Programme Support Team	Team Khammouane
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Annex VI: Table of Food Sources and Food Groups

Province	Food group	Produced on farm	Collected in forest	Bought in cash
Sekong, Central-Southern Highlands	Staples	73% rice, maize, cassava	10% taro, tubers	17% rice, noodles
	Vegetables	60% pumpkin, eggplants, spring onions	37% fern, paknam, Job's Tear, young banana leaves, bamboo	3%
	Fruit	70% pineapple, mandarin, pomelo, mango, banana	30%	0%
	Protein	43% ducks, chickens, pigs	57% wild pig, fish, hog, deer	0%
	Calcium	33% sesame, tamarind	67% insects, small fish bones	0%
	Fat & oil	27% pig fat, coconut	17% fatty seeds	17% vegetable oil
	Staples	83 % rice, maize, cassava	3% wild tubers	13 % rice
	Vegetables	53% pumpkin, chilies, beans, sesame, eggplants, cucumber, galangal, papaya, ginger, garlic, ladies fingers, lettuce, coriander leaves, spring onions	27% mushrooms, paknam, paktui, Job's Tears, banana leaves, smek and bamboo	20% cabbage, tomatoes, lemon
	Fruit	43 % banana, mangoes, coconuts, pineapple, star fruit, guavas, papaya, jack fruit, longans	30% banana, peanut, njeo, ngot	27% longans, apple, oranges, pomegranate
	Protein	40% ducks, chicken, pigs and fish	37 % wild pig, fish, hog, deer, frog, rodents	23% buffalo and cow meat
Phongsaly, Northern Highlands	Calcium	23% sesame, tamarind	73 % insects, small fish, aquatics animals	3 % insects, tamarind
	Fat & oil	50 % pig fat, soy bean, coconut	0%	50% vegetable oil
	Staples	83% rice, maize, cassava	15 % wild tubers	10% Rice, noodle
	Vegetables	60% pumpkin, chilies, beans, egg-plants, cucumber, garlic, lettuce, coriander leaves and spring onions, lemons, cabbage	34% mushrooms, bamboo, wild vegetable, makduea, makban, makkae	6% cabbages, beans
	Fruit	60% banana, mango, longan, oranges, pineapple, guavas, papaya, jack fruit, mandarin	30% makfai, makkinoo, ngot, wild fruits	10 % banana, pear, apple, orange ...
	Protein	46% ducks, chickens, pigs, cattle, buffalo, dog, fish	34% wild pig, rodents, wild chickens, fish, deer	20% pig, buffalo, cattle, fish
	Calcium	23% sesame, tamarind	57% insects, small fish bones, aquatic animals	20% crab, frog, sesame, tamarind
	Fat & oil	50% pig fat, sesame, soy-bean, pumpkin seed	30 % makkoo, makging	20% soybean, pig fat, coconut

Food availability in all food groups has remained the same over the years, but almost foods collected from nature have decreased while food bought for cash has increased (especially fruit, protein and oil).

Annex VII: Acronyms and Abbreviations

AEZ	Agro-ecological zone
DAFO	District Agriculture and Forestry Office
FAO	Food and Agriculture Organization of the United Nations
FGD	Focus group discussion
HH	Household
ILV	Improved local varieties
INGO	International non-governmental organisation
Lao PDR	Lao People's Democratic Republic
LSIS	Lao Social Indicator Survey
LWU	Lao Women's Union
MAF	Ministry of Agriculture and Forestry
MNCH	maternal and neo-natal child health
NGO	Non-governmental organisation
NPA	Non-profit association
NTFP	Non-timber forest products
NUoL	National University of Laos
PAFO	Provincial Agriculture and Forestry Office
PWD	People with disabilities
RVS	Risk and vulnerability survey

Annex VIII: Village data

Village code	Village Name	Village name Lao	Number of households	Number of families	Population	Number of women	No of poor HH (RDC)	Poor households in % (RDC)	Number of better off HH	No of middle income HH	No of poor households	No of very poor HH	Poor & very poor HH in %	Very poor HH in %	No of HH with PWD	No of female headed HH	Female headed HH in %	Women deliver in hospital
204024	Houaithong	ຫົວ ສາທອງ	28	34	144	65	24	83%	9	9	8	2	36%	7%	1	0	0%	few
204065	Namloy	ນ້ຳລາຍ	59	66	324	165	47	83%	22	19	14	4	31%	7%	4	3	5%	few
204067	Lao lew	ລາວເລວ	148	202	975	491	141	97%	21	51	12	64	51%	43%	24	8	5%	few
1205024	Natherd	ນາທຣຸດ	63	69	296	146	26	38%	6	20	43	43	77%	38%	3	10	16%	most
1205028	Nafaimai	ນາໄພໄຫມ	123	133	560	270	131	98%	18	0	103	2	85%	2%	4	15	12%	most
1205033	Phonesaed	ໂພນເສດ	121	132	591	311	130	98%	25	105	2	2	3%	1%	7	24	20%	few
1502015	Jing	ຈິງ	33	42	220	106	17	52%	11	15	3	4	21%	12%	2	1	3%	few
1502022	Vakneua	ວັກເຫນູ້	34	68	321	158	23	67%	13	10	7	4	32%	12%	5	2	6%	some
1502073	Thamdeng	ຖ້ຳເດງ	43	53	331	160	24	55%	2	11	10	21	70%	48%	4	1	2%	most
	Total		652	799	3762	1872	563	75%	127	240	202	146	45%	19%	54	64	8%	

Annex IX: Qualitative Assessment Form

The Key Questions	Guidelines/Forms/Helping questions to answer the key questions	Methods
<p>1. What is the social-economic profile of the village? ສະພາບລວມກ່ຽວກັບເສດຖະກິດ ສັງຄົມຂອງບ້ານເຮົາ ປັດຈຸບັນເປັນແນວໃດ ?</p>	<p>Village Survey Form as used in CARE International Phongsaly Village Social Map with 4 categories of wealth 21 guiding questions related to health, gender, education, information, networks, and veterinary issues.</p>	<p>The village map will be made by the village committee, and rank the better-off, middle income, poor and poorest. This will help the selection of the poor and poorest households for interview. ຫຼື ຫ້າງານນາຍບ້ານ ຫຼື ນະບ້ານແຕ່ມແຜນທີ່ກ່ຽວກັບບ້ານຂອງທ່ານພ້ອມທັງໃສ່ເຄື່ອງໝາຍບົງບອກເຖິງສະຖາ ນະພາບຂອງຄອບຄົວທີ່ຂ້ອນຂ້າງດີ, ບານກາງ, ທຸກ ແລະ ທຸກຍາກທີ່ສຸດໃນບ້ານ. ຂໍ້ມູນດັ່ງກ່າວຈະຊ່ວຍໃຫ້ພວກເຮົາເລືອກເອົາຄອບຄົວທີ່ຈະສໍາພາດໄດ້ຖືກຕາມເບົ້າໝາຍທີ່ຕ້ອງການ</p>
<p>2. What products do you get from your different kinds of land? (Agriculture, community forest, garden, village conservation forest, pond and stream) (Ask at male FGD) ມີຜົນຜະລິດປະເພດໃດແດ່ທີ່ທ່ານຫາມາຈາກແຫຼ່ງຕ່າງໆ (ດິນເຮັດກະສິກໍາ, ປ່າໄມ້ຊຸ່ມຊົມ, ປ່າອະນຸລັກ, ສ່ວນ, ໄຮ່, ນາ, ຫ້ວຍ,</p>	<p>What are the products from the different kinds of land you have? ມີຜົນຜະລິດປະເພດໃດແດ່ທີ່ທ່ານໄດ້ມາຈາກພື້ນທີ່ທີ່ແຕກຕ່າງກັນ? Does anybody in the village have sufficient access to land? ໃນບ້ານຂອງທ່ານມີຜູ້ທີ່ມີເນື້ອທີ່ດິນພຽງພໍສໍາລັບທຳມາຫາກິນບໍ່? If not, what was the main problem found? (secured land tenure, labor shortage) ຖ້າບໍ່ມີ, ແມ່ນຫຍັງທີ່ທ່ານພົບທີ່ເປັນບັນຫາ (ສິດຄຸນມາດຕະຖານທີ່ດິນ, ຄວາມຂາດແຄນແຮງງານ...) What was the land tenure situation 10 years ago? ສະພາບຂອງເນື້ອທີ່ດິນທຳການປູກຝັງກ່ອນໜ້ານີ້ປະມານ 10 ປີເປັນແນວໃດ How it will be in the future? ໃນອານາຄົດທ່ານຄິດວ່າຊິເປັນແນວໃດ ? In which way can you improve your land to produce or collect better and/ or more food? ມີຫິນທາງໃດທີ່ທ່ານຈະປັບປຸງທີ່ດິນຂອງທ່ານເພື່ອໃຫ້ໄດ້ຮັບຜົນຜະລິດຫຼາຍຂຶ້ນ?</p>	<p>The village's resources map will be developed in the men FGD ຂໍໃຫ້ອ້າຍນ້ອງຊາຍແຕ່ມແຜນວາດກ່ຽວກັບບ່ອນທຳມາຫາກິດ ຫຼື ແຫຼ່ງທີ່ມາຂອງອາຫານສໍາລັບບ້ານທ່ານ</p>

The Key Questions	Guidelines/Forms/Helping questions to answer the key questions	Methods
<p>ໜອງ, ບົ່ງ ຫຼື ແມ່ນ້ຳ) ? (ຖາມ ອ້າຍນ້ອງຊາຍ)</p> <p>3. What are the different sources of food, by food groups eaten now?</p> <p>ແຫ່ງອາຫານໃນແຕ່ລະ ໝວດທີ່ພວກເຮົາຮັບປະທານຢູ່ທຸກວັນນີ້ມີຫຍັງແດ່?</p>	<p>Food sources - ແຫ່ງທີ່ມາຂອງອາຫານ</p> <ul style="list-style-type: none"> • Produced /grown/raised - ປູກເອງ • Collected from forest/ forage- ຈາກທຳມະຊາດ • Bought in cash (where?) - ຊື້ (ສະຖານທີ່ຊື້) • Other sources: Barter (with whom?), Food Aid, Borrow from relatives - ແຫ່ງອື່ນໆ: ແລກປ່ຽນ (ກັບໃຜ) ການຊ່ວຍເຫຼືອ, ຍືນຈາກຍາດພີ່ນ້ອງ... <p>Food groups- ການແບ່ງໝວດອາຫານ</p> <ul style="list-style-type: none"> • Staples (note which staples are eaten in the box)- ອາຫານຫຼັກ (ສັ່ງເກດເບິ່ງ ໝວດອາຫານຫຼັກຕາມ ພາບທີ່ໃຫ້ມາ) • Vegetables (note which kind of vegetables)- ປະເພດພັກ (ສັ່ງເກດເບິ່ງ ໝວດອາຫານຕາມ ພາບທີ່ໃຫ້ມາ) • Fruit (which kinds of fruit)- ໝາກໄມ້ (ສັ່ງເກດເບິ່ງ ໝວດອາຫານຕາມພາບທີ່ໃຫ້ມາ) • Protein (which kind of meat, beans)- ໄປຣຕີນ (ສັ່ງເກດເບິ່ງ ໝວດອາຫານຕາມພາບທີ່ໃຫ້ມາ) • Calcium (which kind of calcium)- ແຄຊຽມ • Fat (what kind of fat)- ທາດໄຂມັນ (ສັ່ງເກດເບິ່ງ ໝວດອາຫານຕາມ ພາບທີ່ໃຫ້ມາ) <p>In which month do you lack of the respective food group? (Ask each food group) ມີຊ່ວງໄລຍະເດືອນໃດທີ່ພວກທ່ານອາຫານໝວດຕ່າງໆໄດ້ຍາກທີ່ສຸດ ຫຼື ບໍ່ສາມາດຫາໄດ້? (ຖາມແຕ່ລະກຸ່ມ)</p> <p>The amount of food from the various food sources compared to 10 years ago, more or less? Only ask this for the most important food sources .ຈຳນວນອາຫານທີ່ຫາໄດ້ຈາກແຫ່ງ</p>	<p>Picture cards: Food source, food groups and amount of food will be used at the women's FGD by ranking (10 stones per row)</p> <p>ຂໍໃຫ້ ກຸ່ມຂອງເອື້ອຍນ້ອງແມ່ຍິງເປັນຜູ້ຊ່ວຍຈັດການປະເພດຂອງໝວດອາຫານ, ແຫ່ງທີ່ມາຂອງອາ ຫານ, ແລະ ຈຳນວນອາຫານ ໂດຍໃຊ້ກ້ອນຫີນ ຫຼື ເມັດສາລີ ເພື່ອບົ່ງບອກເຖິງແຫ່ງທີ່ມາຕາມລຳດັບ ນ້ອຍ-ຫຼາຍ</p>

The Key Questions	Guidelines/Forms/Helping questions to answer the key questions	Methods
	ຕ່າງໆ ຖ້າສົມທຽບ 10 ປີ ຄົນຫຼັງ ມັນເພີ່ມຂຶ້ນ ຫຼື ລຸດລົງ (ຖາມສະເພາະໝວດອາຫານທີ່ສໍາຄັນ)	
4. Women's and men's daily workload and ability to take care of children and maternal health	<p>How does your daily workload (collecting firewood, fetching water, cooking, collecting food, farming, feeding chickens and pigs and cleaning house) affect your ability to bring enough food to all members of the family? Do you have enough time to feed your children? To breastfeed your baby? Have you ever attended training on food and hygiene? How do you propose to reduce your workload?</p> <p>ວຽກທີ່ທ່ານເຮັດປະຈຳວັນ (ຫາໝັ້ນ, ຕັກນໍ້າ, ຄົວກິນ, ຫາອາຫານ, ປູກຝັງ-ລົງສັດ, ລົງດູລູກ, ອາໄນະໄມເຮືອນຊານ ລວມທັງ ເກືອສັດຕ່າງໆ) ມີຜົນກະທົບແນວໃດຕໍ່ກັບຄວາມສາມາດໃນການຫາອາຫານ ມາສູ່ຄອບຄົວ? ທ່ານມີເວລາພຽງພໍສໍາລັບເບິ່ງແຍງ ແລະ ລົງດູລູກຂອງທ່ານບໍ່? (ການລົງດູລູກດ້ວຍນົມແມ່), ທ່ານເຄີຍເຂົ້າຮ່ວມການຝຶກອົບຮົມກ່ຽວກັບອາຫານ ແລະ ສຸຂະອານາໂມບໍ່? ທ່ານມີຂໍ້ສະເໜີຫຍັງທີ່ຍາກສະເໜີເພື່ອແບ່ງເບົາ ຫຼື ລຸດຜ່ອນວຽກທີ່ທ່ານເຮັດປະຈຳວັນ ?</p> <p>How does the government promote nutritional food during maternity in the village? ພາກສ່ວນລັດຖະບານມີການຊຸກຍູ້ກ່ຽວກັບໂພສະນາການອາຫານແນວໃດໃນຊ່ວງທີ່ເປັນແມ່ລູກອອນ?</p> <p>How does the NGO promote nutritional food during maternity in the village? ບັນດາອົງການທີ່ບໍ່ຂຶ້ນກັບລັດຖະບານມີການຊຸກຍູ້ກ່ຽວກັບໂພສະນາການອາຫານແນວໃດໃນຊ່ວງເປັນແມ່ຢູ່ໃນບ້ານ?</p>	The use gender daily activities profiles ໃຊ້ຕາຕະລາງປະຈຳວັນຂອງແມ່ຍິງ - ຜູ້ຊາຍ
5. Which hazards have occurred in the village within the past 10 years? ກ່ອນໜ້ານີ້ປະມານ 10 ປີຜ່ານມີໄພພິບັດ ຫຼື ເຫດການປະເພດໃດ	<p>The hazards are: ເຫດການດັ່ງກ່າວແມ່ນ</p> <ul style="list-style-type: none"> • Flood - ໄພນໍ້າຖ້ວມ • Drought - ໄພແຫ່ງແລ້ງ • Heavy rain - ຝົນຕົກໜັກ • Pest - ສັດຕູພືດ • Land Slide/Soil erosion - ດິນເສາະເຈື່ອນ ຫຼື ດິນເຊື່ອມສະພາຍ • Storm - ພະຍຸ 	The hazard historical timeline will be used at the male FGD ຄວາມເປັນມາກ່ຽວກັບໄພພິບັດຕ່າງໆອາດຈະຖາມກຸ່ມອ້າງນ້ອງຊາຍ

The Key Questions	Guidelines/Forms/Helping questions to answer the key questions	Methods
<p>ແຕ່ທີ່ເກີດຂຶ້ນໃນບ້ານຂອງທ່ານ?</p>	<p>What the effects of the hazard? And how did they cope with each effect? ເຫດການດັ່ງກ່າວມີຜົນກະທົບແນວໃດ ແລະ ພວກທ່ານມີວິທີຈັດການແນວໃດ ?</p> <ul style="list-style-type: none"> • Food shortage -ຄວາມຂາດແຄນອາຫານ • Destroyed House - ການທຳລາຍບ້ານເຮືອນ • Death of livestock - ສັດລ້ຽງສູນຫາຍ ຫຼື ຕາຍ • Death/Injury of the household member - ສະມາຊິກໃນຄອບຄົວໄດ້ຮັບບາດເຈັບຫນັກຫຼື ເສຍຊີວິດ • How can we prepare to minimize the risks of hazards that might happen in the future? ພວກທ່ານໄດ້ມີການກະກຽມມີວິທີການແນວໃດເພື່ອເຮັດໃຫ້ຜົນເສຍຫາຍທີ່ອາດຈະເກີດຈາກໄພພິບັດຕ່າງໆໃນອານາຄົດລຸດລົງ ? 	
<p>5. What is the intra household food distribution and decision making for food preparation? ມີການ ແຈກຈ່າຍ ແລະ ການຕັດສິນໃຈກ່ຽວກັບການກະກຽມ ອາຫານໃນຄອບຄົວແນວໃດ?</p>	<p>The statements will be discussed with the participants, both men and women.</p> <ul style="list-style-type: none"> • Tomorrow a heavy storm will enter a village, the stored food is mainly lost, the lean season starts. Who of you in the family would most need to reduce food intake? Wife, husband or children? ໃນຊ່ວງໄລ່ຍະເວລາທີ່ມີການຂາດອາຫານຢ່າງຮ້າຍແຮງ, ເອື້ອຍນ້ອງແມ່ຍິງຈະລົດການກິນຂອງຕົນເອງລົງບໍ່? • Who in your family would usually prepare the meals? Wife, husband or both? ຖ້າແມ່ຍິງ ຫຼື ລູກສາວໄປໄປເຮັດວຽກ (ເຮັດໄຮ່, ນາ...) ພືດມີ້, ຜູ້ຊາຍ ຫຼື ລູກຜູ້ຊາຍ ຈະເປັນຜູ້ແຕ່ງອາຫານ • Who in your family decides what kind of food is put on the table? Wife, husband or both? ໃນການຮັບປະທານອາຫານແຕ່ລະຄັ້ງວ່າມີອາຫານເທິງພາເຂົ້າຈະຮັບປະທານຫຍັງແມ່ນແມ່ຍິງເປັນຜູ້ຕັດສິນໃຈ 	<p>Scenario and value clarification technique will be used in both female and male FGD, and stones will be put in 3 boxes to give the answer</p> <p>ໃຊ້ເຕັກນິກໃນການອ່ານຂໍ້ຄວາມ ແລະ ໃຫ້ກຸ່ມສະແດງຄວາມຄິດເຫັນ ເພື່ອເປັນການປະເມີນທີ່ສອດຄ່ອງກັບຄວາມເປັນຈິງ ແລະ ເຫັນພາບທີ່ຈະແຈ້ງ ຖາມກຸ່ມ (ແມ່ຍິງ ແລະ ຜູ້ຊາຍ) (ທຸກຄົນຈະມີກ້ອນຫີນຢູ່ໃນມື ແລ້ວກໍາໄປວາງໃສ່ຫ້ອງທີ່ກຳນົດຕາມຄວາມຄິດເຫັນຂອງທ່ານວ່າທ່ານເຫັນດີ ຫຼື ບໍ່ເຫັນດີ)</p>
<p>6. What are the cultural practices as they relate to food consumption? ມີປະເພນີ ຫຼື ຄວາມເຊື່ອ</p>	<p>What are the food taboos during pregnancy? ອາຫານທີ່ຫ້າມບໍລິໂພກເວລາຖືພາມີຫຍັງແດ່ ?</p> <p>What are the food taboos for mothers after the baby delivered? ອາຫານທີ່ຫ້າມບໍລິໂພກສຳລັບແມ່ທີ່ເກີດລູກໃໝ່ມີຫຍັງແດ່?</p> <p>How do the mothers take care themselves during breast feeding? (Hygiene, workload,</p>	<p>Household interview ສຳພາດຄົວເຮືອນ</p>

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<p>ຫຍັງແດ່ທີ່ກ່ຽວຂ້ອງກັບການບໍລິໂພກອາຫານ?</p>	<p>food intake, emotion) ແມ່ ທີ່ເກີດລູກໃໝ່ມີວິທີເບິ່ງແຍ່ງຕົນເອງແນວໃດເວລາລູກຍັງດື່ມນົມແມ່? (ສຸຂະພາບໄມ, ການເຮັດວຽກຫັກ, ປະລິມານອາຫານທີ່ບໍລິໂພກ ລວມທັງອາລົມຈິດ)</p>	
<p>7. What is the utilization of food? ອາຫານທີ່ມີປະໂຫຍດແມ່ນຫຍັງ? ຫຼື ອາຫານທີ່ມີປະໂຫຍດແມ່ນແນວໃດ</p>	<p>How do the school children access meals before or after schooling? ກ່ອນ ຫຼື ຫຼັງ ໄປໂຮງຮຽນເດັກໄດ້ບໍລິໂພກອາຫານບໍ່? (ສໍາພາດພຽງແຕ່ ຄອບຄົວທີ່ມີລູກໄປໂຮງຮຽນ) What do you know about food storage? How is it important to health? ທ່ານມີວິທີການເກັບຮັກສາອາຫານແນວໃດ, ເກັບໄວ້ໃສ່ ແລະ ການເກັບຮັກສາອາຫານມີຄວາມສໍາຄັນແນວໃດຕໍ່ສຸຂະພາບ? How you ensure you eat diverse food? ມີຄວາມໝັ້ນໃຈແນວໃດ ຫຼື ສໍາໃດວ່າອາຫານທີ່ບໍລິໂພກມີຄວາມຫຼາກຫຼາຍ? (ຕອນແລງວານນີ້ ຫຼື ຕອນເຊົ້ານີ້ທ່ານກິນຫຍັງ) How to you prepare your meals and which steps are important? ທ່ານມີວິທີການປຸງອາຫານ ຫຼື ມີຂັ້ນຕອນການປຸງອາຫານແນວໃດ? (ຈໍາຍົກຕົວຢ່າງວິທີແຕ່ງອາຫານມີວ່ານໃຫ້ຜັງໄດ້ບໍ່) How do you handle cleanliness and hygiene during food preparation? ທ່ານມີວິທີສຸຂະອານາໄມ ຫຼື ຮັກສາຄວາມສະອາດ ແນວໃດເວລາກະກຽມ ຫຼື ເວລາປຸງແຕ່ງອາຫານ?</p>	<p>Household interview ສໍາພາດຄົວເຮືອນ</p>
<p>8. Talk about solutions to improving food security ຍາກເຮັດໃຫ້ໄດ້ ຫ້າກ່ຽວກັບການປ່ຽນແປງ</p>	<p>Close of interview: which of the options you see here is most important in developing or improving your food security and health situation? ຫຼັງຈາກ ສໍາພາດແລ້ວ ເອົາພາບທີ່ເຮົາຖືມາໃຫ້ຜູ້ຖືກສໍາພາດລຽງຄວາມ ສໍາຄັນຕາມລຳດັບ</p>	<p>Use picture card solution to malnutrition and ranking of three most important aspects and the least important aspect</p>

