#### **Centre for International Health**

# Examining who benefits, in what ways, and in what contexts from Mine Action in the Lao People's Democratic Republic and Kurdish Iraq

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This thesis is presented for the Degree of Doctor of Philosophy Centre for International Health Curtin University

## **Declaration**

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgment has been made.

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university.

Signature: J. Dow

Date: 7 February 2013

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#### **Abstract**

Following violent conflict, the continued presence of landmines and unexploded ordnance (UXO) and other explosive remnants of war (ERW) pose a barrier to rebuilding livelihoods. Mine action (MA) or humanitarian demining by the international community removes explosive remnants of conflict to enable affected households and communities to safely return contaminated land to productive use.

Informed by a realist approach to evaluation and using the livelihoods framework, this study undertaken in Lao People's Democratic Republic (PDR) and the Kurdish Region of Iraq explored the outcomes of MA at the household level and the contextual factors which mediated the extent to which demined land was used and livelihood impacts sustained. The underlying assumption was that the transfer of decontaminated land to households would act as an incentive for households to use the land in ways which would have multiplier effects on other livelihood asset holdings but that access to these assets would be mediated by context.

A mixed-methods design constituting a survey and qualitative interviews was selected for this study. The study was conducted in three phases. **Phase 1** was undertaken in the Mines Advisory Group (MAG) program in the Lao People's Democratic Republic (PDR). **Phase 2** was undertaken in MAG's program in the Kurdish Region of Iraq. The National Regulatory Authority in Lao PDR provided the setting for **Phase 3** of the study conducted first in Nong District and then in Paksong and Pek Districts. The qualitative component of the study explored the livelihood outcomes of mine action and contextual variables which mediated outcomes.

A livelihood asset scale was developed and validated during this study. In the third phase the greatest reported change in access to assets was reported to be in human and physical assets. This was also reflected in the type of post clearance land use which was often for improved schools and community facilities. The qualitative data in each phase, but particularly in the first and second phases, suggested that demining also enabled program recipients to connect with important cultural symbols and rituals, contributing to building self-esteem and collective resilience. The qualitative data revealed that major factors influencing outcomes were: 1) household context and access to assets, 2) the environment, 3) organisational capacity and 4) institutional arrangements.

In conclusion, the research makes a significant contribution in understanding how (MA) contributes to post-conflict recovery. It also made a significant contribution to the development of a livelihood asset scale which can be used to measure self-reported changes in household livelihood assets following a mine action intervention. The research has policy implications for MA in the sites of inquiry and of global relevance and suggests further avenues for research.

#### **Research Outputs**

#### Journal Articles

- Durham, J., Fielding, A. (in press) Development and Validation of an Access to Livelihood Asset Scale Using Qualitative Methods and Rasch Measurement in Lao PDR, Field Methods
- **2. Durham, J.,** Tan, B-K., White, R. (2011), Utilizing mixed research methods to develop a quantitative assessment tool: An example from an explosive remnants of war clearance program, *Journal of Mixed Methods Research*, 5 (3) 212-226
- **3. Durham, J.,** Tan, B-K. (2010) Lessons learned from an evaluation of an unexploded ordnance removal program in the Lao PDR, Evaluation Journal of Australasia, 10(1) 44-48.
- **4. Durham, J.,** Xayavong, X.; Inthaxay,B. (2010) MAG's Questionnaire to Assess the Impact of Clearance in Lao PDR *Journal of ERW and Mine Action*, 14(1) <a href="http://ateson.com/ws/r/maic.jmu.edu/journal/14.1/Notes/durham.htm">http://ateson.com/ws/r/maic.jmu.edu/journal/14.1/Notes/durham.htm</a>

#### **Conference Presentations**

- Durham, J., (2011) An example of using a mixed method design to evaluate the properties of a self-report livelihood assets scale in the Lao People's Democratic Republic (PDR), 8th Mixed Methods International Conference, Leeds, UK
- 2. Durham, J., (2010) Explosive remnants of war: Impact on well-being, Poster presentation, 37<sup>th</sup> Annual International Conference on Global Health, Washington DC, United States (New Investigator in Global Health, Global Health Council, award)
- 3. Durham J., (2010) Lessons learned from a mixed methods evaluation of an unexploded ordnance removal program in the Lao PDR Australasian Evaluation Society 2010 International Conference, Wellington, New Zealand
- **4. Durham J.,** Nathavong, V. (2010) Building resilient livelihoods in unexploded ordnance (UXO) affected communities in the Lao PDR: Assessing the contribution of UXO removal, *The Third International Conference on Lao Studies*, Khon Kaen, Thailand, July 14-162010

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#### **List of Abbreviations**

AUD Australian dollar

ASEAN Association of South East Asian Nations

CMT Classical measurement theory
DALY Disability-adjusted life years

DFID Department for International Development

DIF Differential item functioning ERW Explosive remnants of war

GDP Gross domestic product

HDI Human development index KDP Kurdistan Democratic Party

IMAS International mine action standard

INGO International non-governmental organisation

LAST Livelihood Asset Status Tracking

MAG Mines Advisory Group

MA Mine action

MDG Millennium Development Goals NGO Non-governmental organisation

NRA National Regulatory Authority for the Lao PDR

NEM New economic mechanism
PCA Principal component analysis
PDR People's Democratic Republic

PDS Public distribution system

PPS Probability proportional to size
PUK Patriotic Union of Kurdistan

UN United Nations

UNDP United Nations Development Programme

UNMAS United Nations Mine Action Service

US United States

UXO Unexploded ordnance

### **Glossary of Key Terms**

**Community liaison:** Community liaison is a process used by Mines Advisory Group (MAG) to connect communities with mine actions services. Community liaison staff work with communities to identify priorities and are an essential component of the task prioritisation process.

Cluster munitions: These consist of containers and submunitions. When launched from the ground, or dropped from the air, the containers open and disperse hundreds of tennis-ball sized submunitions over a wide area. Many fail to explode on impact, becoming unexploded ordnance (UXO). They remain dangerous, functioning like antipersonnel landmines and have an indefinite lifespan. They may explode when hit or disturbed.

**Demining/clearance organisation:** Refers to any organisation (government, non-governmental organisation [NGO], military or commercial entity) responsible for implementing demining projects or tasks. Demining refers to the activity of removing sub-surface landmines, unexploded ordnance or explosive remnants of war.

**Evaluation:** A systematic examination of a program, or aspects of a program, that aims not only to describe or analyse the present program, but also provide data that can be used to make decisions about the future of the program. Evaluations may also be undertaken to test the assumption that the intervention is contributing to solving the problem that has been identified as well as helping to better understand how to tackle a certain problem.

*Household:* A household is defined as a group of people currently living and eating together "under the same roof" (or in the same compound if the household has two structures).

International Mine Action Standards (IMAS): Documents developed by the United Nations (UN) on behalf of the international community, which aims to improve safety and efficiency in mine action by providing guidance, establishing principles and, in some cases, by defining international requirements and specifications.

**Landmine:** An explosive device laid usually just below the surface of the ground and designed to explode based on the presence, proximity or contact of the victim. Anti-

personnel mines are small, detonated with only a few kilograms of pressure and are designed to harm rather than kill. Fragmentation mines are designed to kill or injure not only the person who detonates them but also others by spraying shrapnel or ball bearings. In war, landmines have been used both defensively and offensively.

**Program** or **project:** An attempt to put certain policies or ideas into action by dedicating resources to a specified purpose and creating roles of responsibility, a management structure and a form of organisation and a timeframe in order to implement reform or innovation to promote learning.

Mine action (MA)/humanitarian mine action (HMA): As contained in the International Mine Action Standards (IMAS), mine action is described as "activities which aim to reduce the social, economic and environmental impact of mines and UXO" (United Nations, 2003, p. 20) Humanitarian mine action (HMA) usually refers to an intervention, primarily for the clearance of landmines and unexploded ordnance, in a relief or emergency scenario. It may also be used as a more generic term to include clearance interventions addressing any unexploded remnants of conflict (landmines, unexploded ordnance [UXO], small arms and light weapons) at any or multiple points on the relief to development continuum, designed to remove the risk and threat to communities, or free community assets.

*Outcomes:* Results of a program and the resources it provides to beneficiaries.

**Remnants of conflict:** Includes landmines, UXO, abandoned explosive ordnance (AXO) and small arms and light weapons (SALW).

**Stakeholders:** Defined as people or groups who impact a program in significant ways or who are similarly affected by a program. Stakeholders may be primary stakeholders, that is those involved and ultimately affected by the program or secondary stakeholders. That is, those that are going to have an intermediary role.

*Unexploded ordnance:* Explosive weapons that for some reason fail to detonate as intended become UXO or explosive remnants of war (ERW). Like landmines, these remnants of armed conflict often have an indefinite lifespan and are usually activated by the victim by disturbance, force or movement.

#### **CHAPTER 1**

#### Introduction

Following violent conflict, the continued presence of landmines, unexploded ordnance (UXO), for example bombs and cluster munitions, as well as other explosive remnants of war (ERW), pose a serious public health risk and act as a barrier to future development (Andersson, Palha de Sousa, & Paredes, 1995; Bolton, 2010; Geneva International Centre for Humanitarian Demining [GICHD], 2007; Rutherford, 2011). Since the late 1980s, mine action (MA) has been the international community's response to this hazard. The term 'mine action' differentiates humanitarian demining activities from those with a military purpose. It aims to create a post-conflict environment where people can live safely, where economic and social development can occur free of the constraints of ERW and where mine/UXO survivors can be fully integrated into their societies (UN, 2003). However, there is scant information about how local livelihoods are reworked and improved by MA (GICHD, 2011; Maslen, 2004). The purpose of this research was to begin to address this lacuna.

This chapter introduces the research and the key concepts which informed the inquiry. It begins by providing an overview of the research design, question, objectives, methods and underlying assumptions. Next, it introduces the MA sector, perspectives of poverty, policy instruments to alleviate poverty and the concepts of development. This is followed by an introduction to the specific sites of inquiry, and the broader social, economic and political discourses which influenced the sites.

#### 1.1.1 Research Question

The question is multipart and is derived from realist frameworks to evaluation:

Who benefits from demining, in what ways does it affect household livelihoods, and in what contexts?

#### 1.1.2 Research Objectives

The research objectives are to:

- 1. Document the outcomes of demining on household livelihoods from the perspective of program recipient households in the sites of inquiry.
- 2. Identify the context (household, community, organisation, policy, broader socio-economic) and processes by which benefits are accrued and sustained.

Subsequently a third objective was added:

 Develop and validate an appropriate and workable livelihood asset scale to assess households' self-reported changes in access to livelihood assets resulting from demining on household livelihoods.

This third objective arose due to the lack of a validated outcome measure at the household level.

#### 1.1.3 Arriving at the Research Question

One of the main reasons I chose the research question was professional interest. As a practitioner and manager of MA programs, I realised we did not really understand who benefited from the removal of landmines, UXO and other ERW, and in what ways and in what contexts household livelihoods were affected by MA. Yet increasingly we were being asked by donors to demonstrate the value of MA. As a practitioner, I also believe that evaluative research can be an important and powerful tool in guiding the implementation and outcome of social programs.

My choice of question was also informed by my work and observations as a practitioner. I had observed people knowingly use contaminated land. I knew that many people had adjusted to living with explosive post-war contamination. For many, improved access to potable water, roads and education were a higher priority than demining. However, the presence of explosive post-war contaminants acted as a disincentive for development agencies which in turn denies communities livelihood projects. I therefore intentionally set out to understand how, and in what ways MA contributed to household livelihoods. In doing so I acknowledge that there are many other priorities for post-conflict communities which were not explored in this research. Inevitably, I was guided by my subjective judgments. My interpretation of the findings reflect my previous work, values and strengths. Given this research was

largely exploratory this focus was appropriate (Creswell, Shope, Plano Clark, & Green, 2006).

Additionally, in choosing the research question, I was influenced by wider contextual factors. First, the MA sector is being linked to broader development policies and in particular economic development and achievement of the millennium development goals (MDGs) (Van Der Linden, 2006). However, research into how MA contributes to the broader development objectives is limited (GICHD, 2011). The most common approaches have been cost-benefit methods (GICHD, 2011; Harris, 2000, 2002; Harris & Elliot, 2001; Keeley, 2004; Paterson, 2001). These approaches are frequently limited in post-conflict and developing countries where there is limited data (Horwood, 2003b). Qualitative studies have tended to be small scale and have focussed primarily on pre-clearance socio-economic impacts or immediate outcomes (Horwood, 2003a, 2003b).

Finally, wider calls within the public sector are demanding that policymaking and publicly funded social programs become more evidence-based (Donaldson, 2009; Kazi, 2003; Pawson, 2006). Mine action is not immune to these wider demands and is also being asked to demonstrate its worth (GICHD, 2005). Thus, both professional interest and the broader context influenced the formulation of the research question. It makes the research pertinent, not only to the affected populations, but also to the sector and broader society.

#### 1.2 Research Design

The overall research design is a mixed method case study design. The research was undertaken across three different but inter-related cases. The first was the Mines Advisory Group (MAG) Lao, the second MAG Iraq. MAG is an international NGO. The third case was the national Lao People's Democratic Republic (PDR) UXO program which is internationally funded, but nationally managed. A case study method was employed as the parameters for each of the three programs. Each case of interest shared common characteristics belonging to a collection of cases (MA programs) or a *quintain* (Stake, 2006, p.3). The aim was to understand the single cases in order to understand the quintain (Stake, 1995, 2006; Yin, 2009).

Early discussions with key stakeholders, including sector experts and program staff suggested a mixed design. Initially the plan was to undertake an impact

evaluation of the MA programs. A lack of baseline data, outcome measures and difficulties in identifying appropriate comparison research sites made this problematic. For these reasons a realist approach to evaluation was selected. Realist evaluation strategies are part of the family of theory-driven approaches to evaluation (Funnell & Rogers, 2011; Kazi, 2003; Pawson, 2006; Pawson & Tilley, 1997). Realist evaluation does not attempt to place a value on outcomes. Instead, the purpose is to uncover what makes a program work and in what contexts certain outcomes are observed.

The livelihood approach (Chambers & Conway, 1992) provided the conceptual framework. The approach proposes that regardless of status, all households have resources which can be invested to create more resources for the short, mid, and long-term (Ashley & Carney, 1999; Bebbington, 1999; Bebbington & Batterbury, 2001; Carney, 2008; Ellis, 2000; Scoones, 2009). A household's choice of productive activity depends on its mix of available livelihood assets. Vulnerability is not poverty. It refers to the likelihood of falling into greater poverty. It is people's ability to manage the vulnerability context, that is, trends, shocks (for example armed conflict and natural disasters) and seasonality and to take opportunities, based on their coping strategies and stock of assets (Ashley & Carney, 1999; Bebbington, 1999; Bebbington & Batterbury, 2001; Carney, 2008; Ellis, 2000; Scoones, 2009). Often, vulnerability to negative pressures forces the poor into low risk activities and into adopting a low return livelihood strategy, which over time can contribute to trapping poor households into persistent and chronic poverty (Wood, 2003). The approach explicitly recognises the importance of agency. Agency and the ability to affect change are influenced by context including social position and institutional structures in affecting livelihood outcomes (Collinson, 2003; Green & Hulme, 2005; Scoones, 2009; van Dijk, 2011).

In this study, consistent with the livelihood approach, the household was the unit of analysis. The research also focussed on contextual factors which mediated household outcomes and their sustainability.

#### 1.2.1 Identifying the Research Sites

In order to develop an understanding of what works in what contexts to produce what outcomes and to validate the livelihood asset scale, three different but inter-related

research sites were selected. Two were in the Lao PDR and the other in Kurdish Iraq. Phase 1 of the research was conducted in Lao PDR. Phase 2 was conducted in the Kurdish Region of Iraq and Phase 3 was conducted in Lao PDR.

In Phase 1, the research was undertaken in MAG Lao's site in Khammouane Province, central Lao where MAG has worked since 2003. The national survey on the socio-economic impact of UXO in the Lao PDR ranked Khammouane as the fourth most UXO-contaminated province in the country (Handicap International, 1997). This cross-sectional survey ranked communities based on the number of landmine/ERW injuries within the 24 months prior to the survey and on the estimated area of contamination (Handicap International, 1997). A total score was calculated for each community and communities were subsequently classified as 'high, medium or low' impact (Handicap International, 1997). Most of the contamination consists of cluster munitions resulting from the Vietnam War. This affects mostly agricultural land and prevents infrastructure development. MAG operates in Boulapha, Ngommalat and Mahaxay, which are three of the most contaminated areas based on ranking assigned in the socio-economic survey (see map in Appendix 1). They are also identified as three of the poorest areas by government surveys, which rank districts based on food security and other variables, such as access to potable water, roads, schools and health services (Government of the Lao People's Democratic Republic [GoL], 2006).

The setting for Phase 2 was MAG's program in the Kurdish Region of Iraq. This program had operations in 2000 villages spread over six governorates. The specific sites of inquiry were in Sulaimaniya and Kirkuk governorates although parts of Kirkuk governorate, were excluded due to security problems (see map in Appendix 2). These are the most contaminated governorates based on the Iraq Landmine Impact Survey (LIA), which used a similar ranking process to the Lao survey described above (Information Management and Mine Action Programs [iMMA], 2006). Most of the contamination is landmines as a result of the Iran/Iraq War and the 'Anfal' genocide campaign (iMMA, 2006). The continued presence of landmines hinders the safe return of displaced people and constrains reconstruction and rehabilitation of the agricultural sector (iMMA, 2006; RTI International, 2008). The worst affected are rural communities where the main livelihood activities are

farming (fixed and migratory), public service and business (iMMA, 2006; RTI International, 2008).

The setting for Phase 3 was in the National Regulatory Authority (NRA) for the UXO sector in Lao PDR, established in 2006. The NRA is responsible for coordination of the countrywide program. This program is implemented by the Government of Lao PDR, and supported by the United Nations Development Program (UNDP). Three districts, each considered highly UXO impacted based on the 1997 survey (Handicap International, 1997), were selected from this site. These were Paksong in Champassack province, Pek in Xieng Khouang province, and Nong in Savanakhet province (see map in Appendix 3). As in the first site, most of the contamination is cluster munitions as a consequence of the Vietnam War. It is mostly agricultural land that is affected, but the presence of this explosive contamination also prevents infrastructure development (Handicap International, 1997).

The MAG Lao and MAG Iraq programs were selected because, although they have the same overall objectives, they have different historical, socio-economic, cultural and political settings, different contaminants and different organisational structure, staff, strategies, processes and standard operating procedures. The third site was added after completion of data collection in MAG Lao and MAG Iraq and was selected mainly for pragmatic factors such as access, funding and researcher familiarity with the context. The third site shared the same broader contextual parameters as the MAG Lao program, but the program structure and organisational development was substantially different, albeit both are informed by the same national standards.

#### 1.2.2 Research Methods

Mixed methods was selected as the best way to answer the research question which held the complexity of important and abstract issues, and because of the broad range of interests expressed by different stakeholders, for example, donors, government, program staff and program recipients. Method choice was also based on my experience in MA where I have increasingly observed a change in donor demands from quantitative output measures, for example, the number of explosive items removed from a given area, to outcome measures of how clearance impacts on micro

and macro-economies. As a practitioner, my own interest is at the micro-level as I believe this is where social programs can have the most tangible impacts.

The lack of an existing validated quantitative tool to assess outcomes precluded quasi-experimental designs and methods such as propensity score matching and led to the third objective of developing and validating a livelihood asset scale. To achieve this in each site of inquiry, two tasks were conducted concurrently. One part was a mixed methods cross-sectional survey. The second part was developing, testing and validating a livelihood asset scale.

Throughout the research I maintained a reflective diary and checked emerging understandings with an international and national reference group. As a MA practitioner this was particularly important. My position as a practitioner gave me entry to the field sites and an understanding of the history of MA and how such programs worked. At the same time, I had to remain alert to my previous work experience and not allow it to be a barrier to learning where emerging findings were inconsistent with my experiences.

#### 1.3 Assumptions

The following assumptions underpin this research:

- 1. Programs are theories incarnate. That is, they are underpinned by the assumption that by implementing activities they will achieve the desired outcomes (Pawson, 2006).
- Social programs on their own do not result in outcomes. Rather it is the
  extent to which programs introduce appropriate ideas and opportunities to
  populations in keeping with social and cultural contexts, including
  structural context such as societal power hierarchies that determine
  outcomes (Pawson, 2006; Pawson & Tilley, 1997; Sayer, 2000).
- 3. Social action has real consequences that may be experienced differently depending on cultural, social, economic, gender, political and other values (Mertens, 2010b).
- 4. Privilege influences what is determined as real with consequences of accepting one version of reality over another (Mertens, 2010b).

The assumptions that undergird this research illustrate the importance of understanding context at the global, national and local levels as context mediates outcomes and determines how outcomes are perceived. The remainder of this chapter, therefore, discusses the broader contextual environment that influenced MA programs (the quintain) at the research sites.

#### 1.4 Mine Action

Mine action started in Afghanistan as the international response to landmine, UXO and other ERW contamination. Since the early nineties it has been provided by a mix of international and national private, public and not-for-profit organisations. It is a non-military intervention, underpinned by military principles (Horwood, 2003b). However, unlike military demining where the intent is to provide a safe path for troops as quickly as possible while minimising human risk, demining for civilian purposes prioritises safety over speed (Bolton, 2010).

First framed as an emergency program to allow the safe return of displaced people, MA was placed within a humanitarian narrative whereby the pressing need was to save lives (Horwood, 2003b). Contemporary MA has become more goalorientated, emphasising poverty reduction, promoting livelihoods and contributing to post-conflict reconstruction and economic development (Horwood, 2003b). Donor strategies also reflect this shift (see for example DfID, 2010). In this more goal orientated narrative the underlying assumption is that once demined, land will act as an incentive for farmers and other land users to put the land to productive economic use in order to improve livelihoods. The ways in which MA contributes to economic development and post-conflict poverty reduction remain poorly understood. Similarly, the beneficiaries of MA programs have not been conclusively identified and therefore no comprehensive study has been undertaken to into the nature or context of the benefits resulting from MA programs (GICHD, 2009). This gap in MA research provided the impetus for this current study. Understanding how demining contributed to development and poverty reduction required an understanding of development processes, the nature of poverty, policy instruments and the contextual factors, which mediate development. The following sections review these concepts and then look at how these concepts are perceived within the sites of inquiry.

#### 1.5 Development

Development as a concept is contested both theoretically and politically with no single agreed definition (Sumner & Tribe, 2008). While there is general agreement that development means positive change, the notion of positive change is inherently value-laden. In academia the predominant narrative is of development being a process of structural change and a modernising force, transforming traditional societies to a modern one, underpinned by a demographic transition (Sumner & Tribe, 2008). This intersects with the narrative of development as a process of economic growth facilitated by the free-market economy (Vazquez Barquero, 2010). For others, development is a process of empowerment and the freedom to live the life one has reason to value (Sen, 1999). Others see development as a measure of progressive change as exemplified in the widely accepted MDGs (Sachs, 2005; Sumner & Tribe, 2008).

#### 1.6 Poverty

Poverty as a concept, its determinants and its solutions are also contested (Sumner & Tribe, 2008). At the macro-level, the World Bank groups countries by income based on Gross National Income per capita. The United Nations Development Programme (UNDP) rates countries based on a composite measure on their Human Development Index (HDI) informed by the capability approach (Sen, 1999). The United Nations Conference on Trade and Development (UNCTAD) bases its assessment of a country's wealth on three components: 1) Gross National Income per capita; 2) indicators for human assets; and 3) an economic vulnerability indicator.

At the micro-level, poverty is often seen in absolute terms, framed within a physiological model of deprivation. For example, the ability of people to satisfy their basic needs in terms of nutritional intake, shelter and basic amenities plus their ability to take advantage of opportunities such as education will be measured. Living standards are calculated on the basis of the consumption expenditure equivalent of market and non-market goods required to satisfy these needs. This defines the poverty line with poor households classified as those with consumption below the level considered sufficient to maintain basic needs. While it may be argued this approach rakes a narrow view of poverty, it is nevertheless a common approach with

well-developed methods for data collection and analysis (Kanbur, 2006; Kanbur & Shaffer, 2007; Sumner & Tribe, 2008). More recently there has been a focus on using asset indices to assess poverty based on the livelihoods approach.

Sachs (2005) identifies three levels of poverty: absolute, moderate and relative poverty. Those who fall into the category of absolute poverty are chronically hungry and lack access to basic needs. The moderately poor struggle to meet their basic needs and lack access to basic amenities such as safe drinking water and sanitation, but may have access to a school and adequate clothing. Those who live in relative poverty have a household income level that is below a given proportion of average national income (Sachs, 2005). Relative poverty can also be socially constructed and depends on one's position and access to assets including social, political and cultural assets. Poverty may also be chronic or transient, resulting from multiple deprivations, including the lack of access to forms of social and political inclusion and equity (Barrientos, 2011; Barrientos, Hulme, & Shepherd, 2005). While there are different ways of understanding poverty, there is a consensus that the poor are not a homogenous group and neither are they passive. However, the poor are exposed to more livelihood shocks and stresses and have fewer resources than those with more resources who are better able to protect themselves against the negative or downward shocks and stresses such as armed conflict.

#### 1.6.1 Policy Instruments to Address Poverty

Addressing poverty requires short, medium and long-term interventions at both the macro and micro-level. For poor communities recovering from violent conflict the shift out of poverty is usually non-linear and requires a range of interventions. At the macro-level interventions should support security, rebuild social networks and institutions, re-establish public services, support democracy, diversify productivity and support labour markets, as well as promote equitable economic development (Hailu & Weeks, 2011). In the medium term, the focus should be on investing in transport networks, communication systems and human capital to support the flow of information and create the conditions for public and private investment and on strengthening the tax base and encouraging savings (Todaro, 2009; Vazquez Barquero, 2010). As the economy recovers, macro-economic policies may range from modernisation policies of accelerated growth, redistribution, attracting

international investors and multinational companies and the integration of markets to structural adjustment using neo-liberal reform models (Todaro, 2009; Vazquez Barquero, 2010). In resource-rich post-conflict contexts such as the Kurdish Region of Iraq, the State may need to intervene to prevent market distortions in order to prevent excessive overheating of the economy and appreciation of the exchange rate (Hailu & Weeks, 2011). Developing rural areas post-conflict is challenging as these areas already had poor infrastructure and fewer opportunities for diversification of labour. Yet for growth to be equitable, developing agriculture and the rural economy is crucial (Rauniyar & Kanbur, 2010).

At the micro-level, policy interventions can be placed along a continuum from residual welfare through to agendas relating to social justice, citizenship and human rights. Social assistance, often through an incentive, is the primary protection instrument available (Barrientos, 2011; Barrientos et al., 2005; Bastagli, 2009). The aim is generally to strengthen productive capacity and to protect households from adverse shocks such as droughts in the post-war period (Barrientos, 2011; Barrientos et al., 2005; Bastagli, 2009; Bozzoli & Brück, 2009). Incentives or transfers may be provided through cash or in-kind income to the poor by providing subsidised goods and services or employment guarantees. This may include the raising of livestock or basic food-for-work schemes. The intent is to provide the means by which recipients can participate in some activity which is beyond their normal means in order to improve human capital outcomes, increase access to productive assets, promote processes of resilience, bridge access to basic services and reduce exclusion (Barrientos, 2011; Bastagli, 2009; Slater, 2011).

Incentive programs are expected to work through several processes (Funnell & Rogers, 2011; Pawson, 2002). Firstly, there is a communication component that raises awareness of the program and eligibility so that the target population will apply, be assessed for eligibility and, where appropriate, be included in the program. Secondly, there is the delivery of the incentive. The primary benefit is realised directly by the transfer. The assumption is that the recipient will use the transfer as intended with second-order effects flowing through to the other assets. The other underlying assumption is that recipients have the capacity to enact the desired behaviours as well as believing they have the necessary skills (self-efficacy) and believing the task will be beneficial (task efficacy) (Phillips, 1997; Tolli, 2008;

Vancouver, 2008). Incentives can also be used to accelerate behaviours that would occur anyway (Barrientos, 2011; Barrientos et al., 2005; Pawson, 2002).

Incentives can be a stand-alone intervention or incorporated into a comprehensive package. They may be conditional, for example conditional on some form of public work as is the case in food for work programs. Incentives may also be targeted. That is, resources are focused on a target group identified on the basis of certain criteria. To be effective the criterion needs to be clear and transparent or it is vulnerable to clientelism and exclusion of those it is designed to protect particularly in the post-conflict environment (Hailu & Weeks, 2011). Generally, in the postconflict environment, universal transfers are preferred because targeted transfers may be perceived to be socially or ethnically discriminatory (Hailu & Weeks, 2011). In a realist review of a range of different transfer programs in developed country contexts, Pawson (2002) found a number of contextual constraints to the expected benefits of the incentive. These included limited access to other assets, the lack of monitoring by the provider agency, inappropriate targeting and bureaucratic constraints making it hard for eligible recipients to access the incentive (Pawson, 2002). Post-conflict transfer and incentive policy options may help the transient and newly poor to rebuild their asset base. For the chronically poor, policy interventions need to go beyond incentives in order to address underlying determinants of poverty and they need to be long-term.

Other micro-approaches to poverty reduction may include strengthening investment in education, health and nutrition and introducing programs which boost the primary incomes of the poor to increase longer-term productivity. Approaches may also aim to increase productivity by providing access to inputs such as seeds, equipment and training. The smoothing of market fluctuations and promotion of social exchange, are also likely to enhance human welfare (Todaro, 2009; Vazquez Barquero, 2010). Longer term approaches to poverty reduction should directly address the role that assets and capabilities play in improving individual and household social and economic well-being. These approaches should also include measures which improve people's ability to manage the impacts of livelihood shocks (Scoones, 2009). Interventions should involve helping poor or vulnerable families to add to their assets, to achieve higher returns on those they hold and to maintain those they hold in the face of shocks (Ellis, 2000). The focus is likely not only to be on

building individual and household assets but also on the accumulation of community assets. It will include addressing the vulnerability context in which assets exist as well as the structures (organisations from government through to the private sector) and processes (police, laws, rules of the game and incentives) that define people's livelihood options. This broad approach is likely to be more effective as it stabilises consumption and facilitates human development objectives. However, integrated programs are resource intensive and rely on good governance.

#### 1.7 Social Capital

In addition to economic policies and interventions, social capital has been found to be particularly important for upward mobility and for societies to prosper and recover from conflict (Baxter, 2009; World Bank, 2001). Social capital is made up of the interactions among groups and individuals for mutual support. It can be both bonding that is, among similar people and groups and bridging that is, across differences of place, class, gender, ethnicity, and religion (Baxter, 2009; Butler & Gillespie, 2009; Putnam, 2000). Bridging social capital is thought to be more important in facilitating upward mobility and diffusion of innovation because it provides links outside the immediate family network (Baxter, 2009; Dale & Newman, 2010; Valente, 2010). Poor communities often have strong internal social networks but lack bridging capital. Women are also more likely than men to lack bridging capital (Baxter, 2009; Dale & Newman, 2010; Valente, 2010).

Access to bridging and bonding social capital facilitates access to information and innovations with repeated interaction generating trust and reducing opportunistic behaviour. It can help secure informal insurance from friends, neighbours, and the community (Baxter, 2009; Valente, 2010; World Bank, 2001). It can help develop political capital enabling people to collectively participate in effective local decision-making. However, social capital is not always positive and the ways in which social capital is reproduced can be used to further marginalise the disenfranchised (Cleaver, 2005).

Social capital is often depleted during conflict and rebuilding it is critical in the post-conflict environment. Re-creating community structures, social bonds and networks also contributes to collective resilience. Collective resilience is a protective factor and refers to groups of people whose communities have been destroyed and

who are learning to manage in a new world where communities may be non-existent, new or emerging, or multiple (Fielding & Anderson, 2008). Rebuilding collective identity also contributes to collective resilience. Collective identity is based on the human need for intimacy and trust (Castells, 2010; Fielding & Anderson, 2008). It provides a way of managing a network society, which results in a disjuncture between local and global forces and separation between the social, cultural and political spheres (Castells, 2010).

The processes of poverty reduction and development and how they are experienced and perceived at the national and local level is inextricably bound up in the past, the present and the vision for the future and influenced by global, regional and local historical, political, cultural, economic and social factors (Sumner & Tribe, 2008). The following section further situates the specific sites of inquiry in this research project by considering these sites contextual spaces.

#### 1.8 Case Study Context

Context as used in this thesis is not the same as locality. Contextually significant factors may include global, regional, national and local community contexts (Stake, 2005, 2006). It includes organisational culture and professionalism as well as individual household context. Further, context is dynamic, exerting influence in different ways over time, controlling and shaping power and knowledge relations including what constitutes valuable knowledge, what issues are included in the social policy agenda and how social issues are problematised and solved. Context is a crucial mediating factor in the outcomes of social programs such as MA and the sustainability of outcomes (Pawson, 2006).

#### 1.8.1 Global and Regional Discourse

The global discourse is largely one of market integration and economic reform in previously closed countries. International Monetary Fund (IMF) and World Bank policies encapsulate this discourse, promoting financial and trade liberalisation, deregulation, private sector, foreign investment and land reform.

In Lao PDR and Kurdish Region of Iraq the regional discourse is one of integration. This sees Lao PDR as a component part of a wider Southeast Asian region and a member of the Association of South East Asian Nations (ASEAN). The

ASEAN agenda, supported by the Asian Development Bank, largely reflects global priorities of increased cross-border trade and investment, enhanced private sector participation in development and improved competitiveness, the development of human resources, and the protection of the environment (Chongsuvivatwong et al., 2011; Pholsena & Banomyong, 2006; Rigg, 2005). It includes national borders becoming more permeable, enabling the flow of people and commodities between regions, with Lao PDR moving from being a 'landlocked' country to one that is 'road-linked'.

In the Kurdish Region of Iraq the regional discourse includes increased trade with Turkey, which has funded international airports in Erbil and Sulaimaniya. Regional politics are also concerned over Kurdish autonomy in Iraq fearing repercussions from other Kurds living in the region. Additionally, there are many Kurdish Iraqis who have, over the years, migrated to neighbouring countries for commercial, political, religious or familial factors.

#### 1.8.2 National Identity Discourse

The national<sup>1</sup> discourse focuses on uniqueness. In Lao PDR this is largely about carving a separate identity from its key neighbour, Thailand, which shares a similar language and culture and is a key trading partner (Rigg, 2009). The Kurds in Iraq emphasise their differences from their Arab neighbours in the rest of Iraq and neighbouring countries (Gunter, 2008).

#### 1.8.3 Sub-National Identity Discourse

The sub-national discourse highlights the differences between urban and rural areas. In both contexts populations in rural areas score lower on health and development indicators than their peers in urban areas with reduced access to a range of resources. Further, the shift to market integration is increasing inequalities between urban and rural areas.

These global, regional and local discourses are pertinent to this research as they help shape development and poverty reduction policies, which MA aims to support.

<sup>&</sup>lt;sup>1</sup> National is used here as an aggregation of persons of the same ethnic language or cognate languages, The concise Macquarie Dictionary, 1982 p.829

The following section looks more specifically at poverty and development in the Lao PDR and Kurdish Iraq with the purpose of further situating the research.

#### 1.9 Poverty and Development in Lao PDR

Poverty in Lao PDR did not officially exist until 2001 when the government approved a definition of poverty based on the inability to provide 2,100 Kcal per person per day or where the income is less than kip 192,000 per person per month (AUD19) and basic needs are unmet. The government accepted the term *thuknyak* or poverty in 2002. *Thuk* is a Buddhist term for suffering and *nyak* means difficult. Nevertheless, using the government's definition of poverty, after the transition from a centrally planned to a market-oriented economy that began in the late eighties, the incidence of poverty has fallen considerably (Davading, 2010, p. 3). Further, the national Gini coefficient of .33 indicates a relatively low degree of inequality in per capita expenditure although there are significant urban-rural welfare differences in both poverty incidence and the average per capita expenditure (Epprecht, Minot, Dewina, Messerli, & Heinimann, 2008; UNDP, 2011). Population health outcomes are generally poor and among the worst in the region with disparities between rural and urban areas and Lao-Tai, the main ethnic group, and ethnic minority groups (Chongsuvivatwong et al., 2011).

#### 1.9.1 Historical Space

From the end of the seventeenth century the Kingdom of LanXang, modern-day Lao PDR, was characterised by internal strife and aggression between its neighbours Siam and Dai Viet, present-day Thailand and Vietnam, respectively. In the eighteenth century it was split into four territories—Luang Prabang and Xieng Khouang in the north, Vientiane in the centre and Champassack in the south while continuing to be the object of Siam and Dai Viet expansionism (Evans, 1995; Stuart-Fox, 2000). Towards the end of the 1800s, Laos became a French colony and the object of French and British trading thus enabling France and Britain to maintain their influence in Southeast Asia. After the Second World War, Laos declared independence but after the capitulation of Japan in 1945 returned to being a French Protectorate with a constitutional monarchy (Evans, 1995; Stuart-Fox, 2000). In the 1950s, rivalry between its neighbours Vietnam and Thailand with its political ally the

US, coupled with a split within its own political elite, led to civil war in Laos and eventually to international conflict between the US and the Democratic Republic of Vietnam in the north (Evans, 1995; Stuart-Fox, 2000).

The escalation of the Vietnam War in the 1960s increased military confrontation, and the 1,130 kilometres common border between Eastern Laos and North Vietnam was used as the land route for Vietnamese communist troops to reach the south along what became known as the Ho Chi Minh trail. To mitigate the impact of this and to limit rural support for the communists, the US undertook the heaviest aerial bombardment in history dropping over 2 million tonnes of munitions on the country with an estimated 70,000 cluster munitions strikes between 1964 and 1973 (Handicap International, 1997; Landmine Monitor, 2010). The victory of the Vietnamese and the Pathet Lao in 1975, led to the reunification of the country although intermittent conflict with Thailand continued (Evans, 1995; Pholsena & Banomyong, 2006; Stuart-Fox, 2000).

Most of the UXO contamination in the country resulted from this war and particularly from a 1964-1975 US bombing campaign (NRA, 2010). The intensity of the US bombing campaign was such that per capita Lao PDR currently has the distinction of being the most heavily unexploded ordnance (UXO) contaminated country in the world. Most of the consequent contamination is cluster munitions and is mainly in rural areas. Part of the reconstruction effort following the Pathet Lao victory included efforts to decontaminate land of UXO. This clearance was performed primarily by the military with some help from the Vietnamese and Soviet Union but in many cases villagers were left to undertake clearance themselves (Handicap International, 1997). A formal MA program did not commence until the mid-nineties. Progress has been slow and despite over a decade of MA activities, many contaminated areas are either under-serviced or have no access to services (NRA, 2010).

#### 1.9.2 Political Space

The political space is one of nation building alongside integration of ethnic groups. The first attempt at nation building was during the Second World War when the French Vichy government in Hanoi began a modernist nationalist discourse

conceptualising Laos as a nation State (Ivarsson, Svensson, & Tønnesson, 1995, p. 76).

Following the end of the Vietnam War, and the success in 1975 of the communist Pathet Lao, the country was reunified and one of the themes of the new government was nation building. The population of Lao PDR is composed of 45 officially recognised ethnic groups. People from the Lao-Tai group, which includes the lowland Lao, have Lao as a mother tongue or a language closely related to it. Other ethnic groups speak a variety of languages, which have little or no resemblance to Lao and are largely unwritten. However, under the goal of national unity, only the Lao language is used in public life and education (Stuart-Fox, 2000).

Since the end of the Vietnam War, the political space has been dominated by a strong relationship with Vietnam and, before its collapse, with the Soviet Union. The political space has also been characterised by the relationship with Thailand, which has shifted from being hostile to cordial, largely depending on the stance of the Thai government. However, with increased regional market integration globally and regionally, Thailand is now one of its biggest trading partners and investors (Pholsena & Banomyong, 2006). Since the second half of the 1980s Lao PDR has also pursued a more autonomous foreign strategy and the Lao government is playing a larger role in regional and global politics (Pholsena & Banomyong, 2006). It continues to rely on a strong administrative system with public authorities and 'mass organisations', such as the Lao Front, Lao Youth and the Lao Women's Union to deliver public programs.

# 1.9.3 Cultural Space

Lao PDR remains a largely collectivist society. The national discourse is one of unity and equality between people in a multi-ethnic state. However, there are significant inequalities with ethnic minority groups scoring lower on almost all development indicators. Much of the ethnic minorities' economies have been traditionally based on swidden or shifting agriculture.<sup>2</sup> This is becoming increasingly difficult with shorter periods of fallow and a government policy encouraging a shift to lowland rice cultivation.

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<sup>&</sup>lt;sup>2</sup> Sometimes called *slash and burn*.

Rice is the staple food with the Lao people preferring glutinous rice which distinguishes them from their Thai neighbours. It is also an indicator of wealth, a source of pride and the basis of many of the cultural and social traditions of farming families. The socialist Lao discourse portrayed Lao farmers as essential to the egalitarian revolution (Schiller, Appa Rao, Inthapanya, & Hatsadong, 2006). Also central to Lao social life are concepts of having fun *(muan)*, partying *(bun)*, being together and relaxing (Boike, 2011). Increased exposure to and linkages with countries outside of the Lao PDR's natural political partners, is bringing in elements of Thai and Western culture and people's aspirations are being linked to increased material wealth (Rigg, 2007).

# 1.9.4 Economic Space

Following the end of the Vietnam War the new government inherited a country severely damaged by continuous aerial bombardment for nine years and whose economy had been artificially maintained by American aid (Stuart-Fox, 2000). Additionally, the government continued to fight anti-communist forces in the north and south, and was faced with a serious drought in 1977 (Stuart-Fox, 2000). Economic policies pursued by Thailand also affected the economic health of the country. In 1976 for example, Thailand imposed trading restrictions on strategic products (Pholsena & Banomyong, 2006). Government economic policies also contributed to a decline in internal and external trade and a retreat of rural populations to high levels of self-sufficiency (Evans, 1995). By 1979, facing near economic collapse the government started to introduce economic reforms (Evans, 1995).

The economic space has moved from a planned, centralised economy to one of market integration and a belief in the efficacy of the markets. This is exemplified by the reforms of the New Economic Mechanism (NEM) or 'Chin Thanakaan Mai' (New Economic Thinking) policy followed since the late 1980s and influenced by the former Soviet Union's 'glasnost' and 'perestroika' policies. These policies can be mapped onto the wider global economic discourse of the free-market economy, and alongside integration into ASEAN, have ended economic isolation. Increasingly, industry occupies a larger space particularly in the emerging mining and

hydroelectric sectors. However, agriculture remains a key sector employing approximately 75% of the population.

The rural-development policy focuses on increasing productivity and concentrating resources and services in particular areas, relocating people to these development centres, which often includes relocating upland people from their traditional lands and shifting cultivation to settled agriculture in the lowlands. The political nation-building agenda partly informs this policy as does the shift to market integration where improved access to infrastructure is seen as a key driver of poverty reduction (Davading, 2010). Market-integration is also changing patterns of economic activity with the market extending to previously remote areas and an intensification of the flow of consumables increasing cash needs and aspirations. The presence of UXO, mainly from the Vietnam War continues to limit the development of the rural sector and provision of public services (Epprecht et al., 2008).

# 1.9.5 Social Space

Development, informed by the global, regional and national narratives of market integration, is visibly changing the social space in urban and rural settings as households respond to change. Vientiane, the capital, for example is bustling with construction sites, with buildings up to six stories tall. The city has much of the infrastructure of a modern city, including street lights, paved roads, banks, hotels and an international airport. While women tend to wear traditional dress when going to the temple or when working in government ministries, many people, especially the young, wear western style clothing, listen to western and Thai pop music, watch Thai television and move around the city on motorbikes and in cars. While not urbanised in the western sense of the word, Vientiane stands in stark contrast to district centres and villages.

Districts are made up of a number of 'bans' (villages). District towns house government offices and hospitals. However, the condition of public buildings is poor and the standard of care in medical facilities is rudimentary due to a lack of equipment and human resource constraints. Each district town has a market which sells local produce and increasingly consumables from Vietnam or China. Roads are generally narrow and pot-holed without pavements, curbs, painted lines, or road signs. Moving out of the district towards the villages, the roads become rougher and

may turn into narrow dirt tracks with limited access during the rainy season. Many villages have no access to potable water, sanitation, electricity or modern communication technologies (Epprecht et al., 2008). Increased market access, trade and opportunities for migration are all widening horizons and changing aspirations as rural communities diversify their livelihoods, either in response to opportunities or threats as they transition into a monetised economy (Rigg, 2005). The following section considers poverty and development in the Kurdish Region of Iraq.

# 1.10 Poverty and Development in the Kurdish Region of Iraq

Accurate data on poverty and development in Iraq is difficult to obtain due to ongoing security concerns. It is estimated that in 2008 Iraq had a 25% incidence of poverty although the northern Kurdish areas are considered to have lower poverty than the national average. Inequality at .33 is relatively low as measured by the Gini coefficient but there are regional and urban/rural disparities (World Bank, Central Organization for Statistics and Information Technology (COSIT) of Iraq, & Kurdistan Region Statistics Organization (KRSO), 2007). In particular, rural areas have inadequate basic social services and infrastructure. Population health outcomes are generally poor as a result of on-going conflict and displacement, particularly among the rural population (The World Bank, COSIT, & KRSO, 2007).

#### 1.10.1 Historical Space

Spanning the borders where Turkey, Iran, Iraq, and Syria converge in the Middle East, the Kurds are the largest ethnic group without a nation (Gunter, 2008; Hassanpour & Mojab, 2005). They are predominantly Sunni Muslim, Indo-European-speaking people, different from Arabs but sharing similarities with Iranians. Since Great Britain artificially created Iraq after World War I from the former Ottoman provinces of Mosul, Baghdad, and Basra, the Kurdish Autonomous Region of Iraq has been the site of intense and prolonged violent conflict with multiple insurgencies, land battles and especially aerial warfare (Gunter, 2008).

The Kurdistan Democratic Party (KDP) was established in 1946. However, political in-fighting, tribal allegiance and continued government oppression, led to the establishment of another Kurdish Iraq political party, the Patriotic Union of Kurdistan (PUK) in 1975 (Dawoody, 2006). During the Iran/Iraq war in the seventies

and eighties, the Iraqi military forcibly evicted Kurds from their rural villages along the border to *mujamat* (collective settlements) heavily mining the border including villages. This was followed by the genocidal *Anfal* (The Spoils) campaigns of 1987–88, which resulted in further destruction, displacement and the laying of landmines in rural villages (Dawoody, 2006).

After the 1991 Gulf War and the failed Kurdish uprising, the US created a safe haven and no-fly zone with the Kurdish *peshmurga* (anti-government guerrillas, 'those who face death') securing a border within Iraq and facilitating the development of a de facto Kurdish State in northern Iraq, which excluded the Kirkuk and Sinjar area. Following the establishment of the no-fly zone, Western relief and development agencies contributed to rebuilding destroyed villages under the auspices of humanitarian programs. Between 1994 and 1998, civil war erupted resulting in two separate governments in Iraqi Kurdistan after 1994 with the KDP in Erbil and the PUK in Sulaimaniya (Gunter, 2008). In 2002, the two governments met for the first time since 1994 declaring that Iraqi Kurdistan would be a federal state in a post–Saddam Hussein Iraq.

### 1.10.2 Political Space

Compared to the rest of Iraq, since 2002 the Kurdish Region Government (KRG) has been characterised by democratic stability despite continuing to have two parallel government structures. The leader of the KDP is the current president of the KRG and the current president of Iraq is from the PUK. Thus the political space is one of reunification between the two Kurdish parties and the preferred model, from the Kurdish perspective, is one of ethnic bi-national Federal Iraq with a Kurdish and Arab State and a weak central government (Gunter, 2008). At the same time, since lifting of the sanctions, the Kurdish region has begun to be integrated into the wider Middle Eastern economic discourse, particularly with Turkey, its largest trading partner.

# 1.10.3 Cultural Space

The Kurds were a predominantly rural population, living in a regime of feudal conditions that encouraged people to remain in their place of birth, constraining local migration from the village to the city. This cultural space in Kurdish Iraq has been

affected by Saddam Hussein's authoritarian regime and its policies of ethnic cleansing and efforts to redistribute agricultural lands, which displaced huge numbers of the population (Gunter, 2008; Hassanpour & Mojab, 2005; Romano, 2005). The repeated process of relocation and resettlement has fragmented the social and cultural fabric of local spaces with the loss of patronage perpetuated by the relocation to collective settlements which made the population direct clients of the government rather than tribal middlemen (D. King, 2005) Nevertheless, the society remains essentially collectivist in nature, very patrilineal and patrilocal with strong connections to its patrilineal ancestors and concepts of patronage and clientelism connected to identity as ethnicity. Strong attachment to place of birth and land also remain and is ingrained in Kurdish oral and written traditions (D. King, 2005). While the majority of the population classify themselves as Kurds, there is much heterogeneity including rural and urban populations, as well as differences based on kinship and ethno-linguistic and religious identities.

#### 1.10.4 Economic Space

Prior to the Iran/Iraq War, Iraq was considered one of the most developed countries in the Middle East based on indicators of human well-being such as infant mortality, school enrolment, family food consumption, wage levels and rates of employment. The economic environment has, until recently, been characterised by a command economy and hegemonic control by the state over both public and private spaces with oil rents forming the foundation of the political and monetised economy. In the nineties the Kurdish Region suffered economically under a double embargo, one imposed by the Iraqi government, and the other on Iraq as a whole by the international community (Gunter, 2008). Since 2003, sanctions have been lifted and the trend is towards a free-market economy, reflecting the global and regional discourse.

The agriculture sector is an important contributor to the economy along with the oil sector and extractive industries, and is key to poverty reduction and economic stability (RTI International, 2008). Despite its fertile land the sector is characterised by low productivity due to decades of conflict, international sanctions and years of isolation. In 2007 for example, only 35% of the region's food was produced domestically (RTI International, 2008). Low incomes, inadequate infrastructure and

landmines, are all barriers to people moving back to their villages and resuming farming.

# 1.10.5 Social Space

Erbil the capital, and Sulaimaniya and Chamchamal are large modern towns with brick and cement buildings and modern facilities. Rural villages are generally small and not all inhabitants have returned. Those who are returning to their village are generally impoverished and have been unable to prosper in cities (iMMA, 2006). Ongoing uncertainty and the lack of services in the villages mean many returnees continue to have other family members living in the towns. Others who have generally settled successfully in urban areas have returned to reclaim their land, but are not resident in the village, generally renting out their land and/or hiring shepherds to tend their livestock. Village houses are generally one level, made of clay or brick. Some may have running water and latrines while others use communal facilities. Many villages still lack regular access to potable water, latrines, electricity and other basic services. Most villages have traces of war, including abandoned buildings and fields.

# 1.11 Chapter Summary

The purpose of this chapter was to introduce the research question, objectives, methods and research sites. To help situate the research, the chapter provided an overview of development, poverty and available policy instruments and mine action. The discussion showed that the population in each of the research sites suffered violent armed conflict. The conflict and the recovery process were also shaped by global, regional and national socio-economic, political and cultural contextual factors. The discussion has shown that both the Lao PDR and Kurdish Iraq are in a process of transition and these transitions are also influenced by the broader context.

The remainder of this dissertation is structured as follows. Chapter 2 contextualises the research in more detail by exploring the evolution of MA, its governance and financing structures and explaining the work of MA in the sites of inquiry. It also demonstrates the need for the research question.

Chapter 3 describes the research design and process. Chapter 4 outlines the development and validation of the livelihood asset scale. Chapters 5, 6 and 7 present

the findings of the qualitative and quantitative surveys in Phase 1, Phase 2 and Phase 3 respectively. Chapter 8 synthesises the findings and Chapter 9 draws conclusions from the data analysis, makes recommendations for future practice in the field and highlights areas requiring further research.

# **CHAPTER 2**

# **Contextualising the Research: The Mine Action Sector**

The overall purpose of this chapter is to further contextualise the research. It begins by discussing violent conflict, landmines, unexploded ordnance (UXO) and other explosive remnants of war (ERW), contamination and mine action (MA) from a global perspective. Mine action does not operate within a vacuum; rather it is implemented within and influenced by, the broader institutional structures in which it is embedded. For this reason the discussion also includes a brief consideration of the structures governing MA and financing mechanisms. Following the introduction to MA as a sector, the chapter introduces national MA programs in the sites of inquiry. This review contributed to developing the research question, objectives and an appropriate conceptual framework for this research.

Mine action consists of five main components: 1) landmine/UXO clearance (often known as 'demining') and survey; 2) stockpile destruction; 3) mine risk education; 4) survivor and victim assistance; and 5) advocacy (UN, 2003). This research project focuses on the first of these components.

# 2.1 Violent Conflict, Poverty, Post-Conflict Landmine, Unexploded Ordnance and Other Explosive Remnants of War Contamination

Violent conflict is a multidimensional phenomenon resulting from and leading to, a variety of cultural, political, social, economic, religious and psychological processes and dynamics (Bird, 2007; Duffield, 2001; Justino, 2006; Justino, 2008; Nigel, 2009). In the Cold War, fear of a nuclear war prevented any direct military confrontation between Eastern and Western power blocs. However, towards the end of the Cold War, the US supported several insurgencies in communist Third World countries. The war in the Lao PDR is an example of a proxy war between Eastern and Western power blocs. These post-Cold War conflicts were frequently waged at the community level, characterised by a blurring of the distinction between combatant and civilian and often resulted in substantial civilian mortality and morbidity (Duffield, 2001; Justino, 2006; Justino, 2008; Nigel, 2009).

At the national level armed conflict can cost a country a large proportion of its potential national income. Indirect costs include the effects of violence on local institutions especially local markets, employment, insurance and credit as well as affecting social networks, political institutions and governance (Duffield, 2001; Justino, 2006; Justino, 2008). Health-related effects on civilian populations include exposure to infectious disease, morbidity arising from malnutrition and fatal and non-fatal injury which often results in long-term disability and psychological and psychosocial trauma (Waldman & Kruk, 2011). Civilian injuries also pose a significant cost to the national economy in terms of loss of productive labour, physical rehabilitation and prosthetic costs (Andersson et al., 1995; Bilukha, Brennan, & Woodruff, 2003; Walsh & Walsh, 2003). For individual households the loss of productive assets and displacement can be particularly severe for the poor and hard to reverse (Bird, 2007; Duffield, 2001; Justino, 2006; Justino, 2008; Nigel, 2009).

In armed conflict it is estimated that up to 30% of modern munitions fail to detonate on impact leaving these explosives in the ground, potentially for decades, projecting the war on to future generations (Bolton, 2010). These explosive contaminants block access to livelihood assets and health producing services such as potable water, sanitation, land, roads, markets, food security and public services. Their presence also discourages social development projects in areas where there is often the most need (Bolton, 2010; Rutherford, 2011; Waldman & Kruk, 2011). Injuries from explosive remnants of conflict also place an enormous burden on individuals, households, and communities (Andersson et al., 1995; Bilukha et al., 2003; Walsh & Walsh, 2003). Typically landmine casualties require longer stays in hospital, require more blood transfusions and more operations than patients with other injuries (Walsh & Walsh, 2003). Psychological trauma is significantly higher in those injured by landmines compared with the general population and constitutes a risk factor for poorer mental health and social functioning outcomes (Lopes Cardozo, Talley, Burton, & Crawford, 2004).

#### 2.2 The Evolution of Mine Action

In the aftermath of the Second World War, Europe was left with extensive landmine and UXO contamination. Clearance of these explosive remnants of the conflict was funded and led by nation states. During the Cold War most of the countries affected by conflict were low-income states with limited capacity to undertake large-scale clearance. State-led demining was limited mainly to strategic areas undertaken by the military with informal deminers clearing areas for individual household use (Bolton, 2010). In Lao PDR there was some small-scale clearance funded by the Soviet Union and the United States (US), ostensibly for humanitarian purposes but also for strategic military purposes. However, there was no large-scale state or international-funded clean up (Bolton, 2010).

The end of the Cold War provided the conditions to place landmine and UXO contamination within a humanitarian discourse. This, and recognition that contemporary wars have generally been waged in weak states lacking the fiscal and human resources to undertake large-scale clearance, contributed to the development of MA (Bolton, 2010). The first MA program is generally recognised to have been undertaken in Afghanistan in 1988. The next major MA initiative was in Kuwait after the 1991 Gulf War which also saw the emergence of commercial companies with military expertise competing for contracts (Bolton, 2010). In 1992 a program was initiated in Cambodia with other programs established in northern Iraq, Mozambique, Lao PDR and Angola. Mine action is defined as being:

... not just about demining; it is also about people and societies, and how they are affected by landmine contamination. The objective of mine action is to reduce the risk from landmines to a level where people can live safely; in which social, economic and health development can occur free from the constraints imposed by landmine contamination (UN, 2003, p. 20).

Initially demining was undertaken by military demining units. Since the early nineties Western commercial companies, international non-government organisations (INGOs) such as MAG and/or national demining capacities have been responsible for most humanitarian demining (Eaton, Horwood, & Niland, 1997; Maslen, 2004). Viewed by many as a quasi-military problem requiring specialised analysis, the end of the Cold War meant NGOs were able to access ex-military personnel trained in mine warfare. Partly because of its links with the military the sector has often worked in isolation from other humanitarian and development actors (Eaton, 2003; Horwood, 2003a; Maslen, 2004).

Since its inception there have been structural changes in MA and its rationale but the technical process of area demining has seen little change (Bolton, 2010). Most programs rely on manual demining methods with a deminer using a prodder and/or a trowel, slowly prodding and excavating the ground, working along a predetermined lane. Mines which are found are then removed, defused or destroyed in situ. This process is time-consuming and expensive (Wolf, 2001).

# 2.2.1 The Humanitarian Discourse

Initially, the term 'Humanitarian Mine Action' was used to refer to the clearance of landmines and UXO in relief or emergency scenarios. In these contexts MA was undergirded by the humanitarian principles of neutrality, impartiality and universalism and the humanitarian imperative to save lives (Bolton, 2010; Horwood, 2003b). Mine action was justifiable simply because it was doing something good. Critiques of humanitarianism and principles of neutrality and impartiality however led to a shift in emphasis from humanitarian action being a purely lifesaving intervention to one which incorporates broader notions of human development and avoiding harm (Fox, 2001). Contemporary humanitarianism is also goal-orientated aiming to promote livelihoods, peace, justice, rights and human development (Fox, 2001). Actions are assessed on the assumed consequences in relation to wider developmental aims making humanitarian aid conditional and essentially political with the saving of life no longer the over-riding concern (Duffield, 2001; Fox, 2001; Slim, 1997).

While MA has shifted from a purely humanitarian perspective it has not pursued a rights-based approach (Horwood, 2003b). Affected households and communities are rarely considered as rights-holders and often participate in MA processes only through information giving and involvement in which sites should be prioritised for clearance. Rarely does the MA literature address issues of power relations and inequalities. This is partly due to challenges in measuring fulfilment of rights and obligations, but also due to the perceived perception that landmines, UXO and ERW are a neutral, technical issue which requires a technical intervention.

#### 2.2.2 The Public Health Discourse

Mine action has sometimes been framed within a public health discourse particularly in relation to mine risk education and victim assistance. Nevertheless surveillance is rarely integrated into national health systems nor are other epidemiological tools systematically applied (Durham & Ali, 2008). Preventative educational programs have focussed primarily on knowledge transfer with less discussion about strategies to develop personal skills or strengthen community action as envisaged in the Ottawa Charter for health promotion (WHO, 1986).

Rarely has the public health discourse which stresses the need to provide the highest society-wide health benefit with available funds, been applied to clearance (Wolf, 2001). However, a form of triage to contaminated areas is applied through a prioritisation process usually based on criteria related to injuries and blockage to livelihood assets (GICHD, 2009; Wolf, 2001). Given the resource intensive nature of manual demining which remains the gold standard, MA resources tend to be concentrated on only a fraction of the affected population. For example, in Lao PDR there has been a MA program since 1996 but it still only covers nine of the 18 contaminated provinces almost four decades after the cessation of hostilities (NRA, 2010). This means that people are frequently forced to work on land which is contaminated in order to provide for their household's basic needs (Bottomley, 2003a; Durham & Ali, 2008).

#### 2.2.3 The Safety and Technical Expertise Discourse

The underlying humanitarian ideals of MA and the concern for public welfare has contributed to a sector discourse of safety, risk elimination and technical expertise. The emphasis on risk elimination has contributed to each task being treated as a total mined area requiring 100% clearance. Clearance for civilian purposes is undertaken according to strict international, national and organisational standards, reinforced in international treaties and donor strategies and with quality prioritised over cost, speed and breadth (Bolton, 2010; Wolf, 2001). These processes make clearance expensive and time consuming, requiring high levels of technical expertise and technologies. It also limits local initiative and adaptation and it can be years before even high priority areas are cleared (Bottomley, 2003a, 2003b; Wolf, 2001). It is also not always necessary as some areas, such as roads, are rarely 100% mined (Wolf,

2001). Further, in reality, rarely is 100% clearance achieved. Contaminants for example may be deeper than the depth of the land cleared.

Attempts to shift the discourse from one of zero risk in prioritised sites to a level of acceptable residual risk through aggregating threat levels have had limited success. This is mainly due to a lack of consensus within the sector of what constitutes an acceptable residual risk. It is here that the technical and safety discourse intersects most frequently with the moral humanitarian discourse. The appeal of zero risk is attractive to the MA sector and post-clearance development partners both in terms of moral obligations and accountability should someone be injured on 'cleared' land (Wolf, 2001). Research suggests that local communities are less risk averse. For example, studies have shown that people who engage in behaviours which are considered high-risk are aware of the possible risks, often taking deliberate steps to minimise the risk (Bottomley, 2003a, 2003b; Durham & Ali, 2008; Moyes, 2004; Moyes & Vannachack, 2005). Such strategies are often regarded by the expert MA community as reckless and rarely have efforts been made to build on local coping mechanisms or provide local communities with the skills, tools and knowledge required to minimise the risk (Bottomley, 2003a; Durham & Ali, 2008; Moyes, 2004; Moyes & Vannachack, 2005). Paradoxically, the emphasis on safety and technical expertise can promote unsafe behaviour as affected communities are left to develop indigenous solutions with no technical input (Bottomley, 2003a; Durham & Ali, 2008).

#### 2.2.4 The Development Discourse

The recognition that landmines, UXO and ERW often remain long after a country has transitioned from an emergency situation, led to programs being implemented in countries further along the post-conflict and development continuum, such as Lao PDR. This, alongside the general shift in humanitarian aid to developmental relief, led to the more generic term 'mine action' (UN, 1998). The nature of contemporary armed conflict, where violence occurs often at the local community level, with weapons such as landmines used not only as a tactical means of combat but also against civilians, explains the link between explosive remnants of conflict and the promotion of an enabling post-war environment.

The 1999 Bad Honnef Guidelines (German Initiative to Ban Landmines [GIBL], 1999) signalled the movement of MA from a humanitarian to a development discourse. The guidelines called for MA initiatives to be underpinned by the principles of participation (of the people affected by landmines), coherence (with other reconstruction and development programmes), and solidarity (as well as autonomy for affected communities). More recently the development discourse has been framed within contemporary mainstream development. This emphasises economic growth and poverty reduction, achieved by strengthening an individual's economic activity (Green & Hulme, 2005; Prowse, 2010). In MA the general assumption is that once demined, land will be returned to productive economic use in order to improve livelihoods. This is generally understood to mean focussing demining activities on where the most socio-economic benefits will be achieved. In practical terms, this has often meant MA working more with downstream development agencies, a strategy also aligned with donor strategies (AusAID, 2006; DfID, 2010), and framing its work within the livelihoods approach (Bottomley & Phuong, 2010; GICHD, 2005; Goslin, 2003) and the achievement of the MDGs<sup>3</sup> (Harpviken & Isaksen, 2004; Van Der Linden, 2006).

Linking MA with development requires a re-focussing on the way in which MA inputs are prioritised. This is leading to a greater focus on developing task identification and prioritisation systems based on a combination of perceived threat to life and livelihoods (Goslin, 2003; Horwood, 2003b). To assess the likely impact of demining on livelihoods, the livelihoods framework is becoming a common analytical tool (Bottomley & Phuong, 2010; Goslin, 2003). The rationale for this is that explosive war debris blocks access to livelihood assets (human, social, physical, financial and natural), and by removing the debris, land users will regain or have increased access to livelihood assets.

# 2.3 Task Identification and Prioritisation

Mining action surveys have been the main method to record the location and scale of hazardous areas. However, the surveys have become an assessment of the social and economic impact and are now being used to identify and triage areas for clearance.

<sup>&</sup>lt;sup>3</sup> Particularly MDG 1: poverty reduction; MDG 7: environmental sustainability; and MDG 8: global partnerships for development.

Initially, in the nineties, three levels of survey were referred to: Level 1, which was a general assessment of the landmine and ERW hazard, Level 2 (technical survey) and Level 3 (post-clearance survey). More recently surveys have been categorised as general or technical. Level 3 surveys have become essentially post-clearance documentation and delineated the perimeter of the area cleared. The focus of the early Level 1 surveys was on the nature and size of the hazardous areas and included data collection on variables such as dimensions, soil, ground cover, type and age of mines and other ordnance in addition to some logistical information regarding access and facilities in the nearby community. The intent was to inform programming and resource allocation based on the technical nature of the contamination (Eaton, 2003). Information on the way in which communities were affected by the contamination was rarely collected as the implicit assumption was that all areas were of equal issue and could be resolved only by clearance.

Recognition that clearance was time-consuming and that many communities would have to wait years before their communities were free from landmine/ERW contamination, led to an increased awareness of the need to prioritise on additional criteria. This led to the use of surveys which included the socio-economic impact of contamination. An early example of this is the Handicap International Survey in Lao PDR, which led to the prioritisation of nine out of the seventeen contaminated provinces for clearance operations. These early efforts contributed to calls for global landmine surveys to be undertaken through national Landmine Impact Surveys (LIS) (Eaton, 2003).

The LIS, sometimes known as the Composite Indicator Approach, aims to provide an inventory of affected communities in order to provide a platform for the planning and prioritisation of interventions and to establish baseline data for measuring overall performance of MA programs nationally and globally (Eaton, 2003). It is a formal and structured survey approach, regulated by the UN. Communities are given a Mine Impact Score (MIS) of high, medium or low impact based on two binary variables: 1) type of threat (landmine/UXO); and 2) economic blockage, for example, crop land, pasture, water points and a non-binary victim variable (Eaton, 2003). The LIS weights injuries above economic blockages but nevertheless, signalled an important shift in the focus of MA. Instead of determining priorities principally on contamination characteristics, the emphasis was placed on

socio-economic impact. It moved the discourse from one of risk elimination to one of an acceptable level of risk associated with planned land use. While it uses participatory data gathering techniques, community perceptions of acceptable levels of risk are not sought.<sup>4</sup>

The LIS, with its focus on identifying and removing blockages caused by landmines/ERW contamination is implicitly informed by the expectation that the land, once cleared will be converted to other assets. A criticism of the LIS has been that its community focus prevents it capturing broader economic priorities such as national transport corridors, power supply and water systems. Also, it does not allow for prioritisation of identified areas to be selected and compiled into a work program.

While broad priorities are set by the LIS, often as in the case in Lao PDR and the Kurdish Region of Iraq, not-for-profit operators funded by institutional donors work under the direction of the national authority but are given a large degree of autonomy in identifying specific sites (Bolton, 2010). Operators usually employ their own survey teams to gather information from a range of sources including military records, visual clues, injury records and information from communities and other key informants. Often community liaison teams lead this process. Community liaison was initially developed to improve communications between affected communities and deminers. It is now recognised as a 'strategic principle' which "enables communities to be informed when a demining activity is planned to take place, the nature and duration of the task and the exact location of the areas that have been marked or cleared" (UNICEF & GICHD, 2005, p. 8).

Community liaison has three distinct phases: 1) pre-clearance, 2) during clearance and 3) post-clearance (Durham, 2006; GICHD, 2005). The intent is to engage communities throughout the MA process (Durham, 2006; GICHD, 2005). It may also help to identify other community needs and develop strategic partnerships with other organisations. The objective of these partnerships is for the partner to provide post-clearance inputs such school rehabilitation, water points and access roads (Durham, 2006).

Prioritisation of one site over another involves value judgements and is informed by the prevailing rationale for MA. If framed within a purely humanitarian

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<sup>&</sup>lt;sup>4</sup> The variables used in the analysis to determine socio-economic impact are predefined by the survey and community concerns not necessarily represented in the final analysis (Skara, 2003).

discourse priority is likely to be given where clearance is expected to have the most impact on the humanitarian imperative of saving lives. A contemporary humanitarian perspective would focus not only on saving lives but also covering broader impacts. Framed within a public health discourse, resources would be directed to where it is anticipated they will have the greatest impact on the population as a whole. Within an economic development narrative the focus is on livelihood assets and likely economic outcomes.

Typically, there are three stages of task prioritisation as countries transition from conflict to development (GICHD, 2005). Stage 1 is primarily about risk reduction and re-opening key infrastructure. Such tasks are generally identifiable, likely to have immediate impact and are typically informed by the humanitarian discourse. In stage 2, the risk of exposure has generally been reduced and demining activities focus on local infrastructure, often in support of a downstream development actor. In stage 3, the emphasis is on longer-term development objectives. Selected tasks in stages 2 and 3 are likely to have minimal threat reduction objectives and be framed more within the narrative of economic development. Lao PDR and the Kurdish Region of Iraq can be characterised as being in stages 2 and 3 with a focus on longer-term socio-economic objectives.

In stages 2 and 3 the primary premise is that explosive remnants of conflict inhibit efficient land use. The other premise is that affected households have neither the skills nor the resources to remove this contaminant. To address this need a fully subsidised clearance service is provided based on the expectation that it will act as an incentive to turn the reclaimed land into a productive asset, enhancing livelihoods. As with other incentive based programs it is assumed that while the primary benefit is realised directly by the transfer, the recipient will use the transfer (i.e. decontaminated land) to facilitate access to other assets. To expedite this process MA operators often work in support of other NGO development programs. This is bringing in a myriad of players to the decision-making process with operators working in consultation with local government, non-state actors, international agencies, communities and/or development partners. It is the complexity of prioritisation and the tasks undertaken that are crucial in any consideration of outcomes and poverty alleviation in particular. The need for prioritisation also raises questions about who has the power to defuse the threat, where, when, for whom and

for what purpose, making MA inherently political. Contextual organisational constraints play a role in task prioritisation. These include capacity, equipment and funds (Millard, Harpviken, & Kjellman, 2002). Natural and physical constraints are also crucial in demining operations as a lack of communication infrastructure can preclude operations due to difficulties of evacuating a casualty in the case of an accident. Political or security concerns can also pose contextual constraints.

Once tasks are approved the service provider undertakes the clearance as stipulated in the work plan and the land is returned to the end-user. The end-user may be an individual household, a geographical community, for example a village, or a development partner. The development partner and MA service provider may be contracted by the same donor or the development partner may sub-contract the MA provider or the two partners may have completely different donors but have a formal or informal agreement to work together.

It is important that people who are eligible for the program are aware of the clearance service, know how to access it, are aware of service provider expectations or any conditionality and potential benefits or costs of accepting the incentive (Funnell & Rogers, 2011). This is usually the role of community liaison or mine risk education teams who are often the first contact affected communities have with MA operators (Durham, 2006; GICHD, 2005). To build trust and to assist people to interpret and engage with the information, multiple visits by program staff are usually needed (Keller, 2006). Effective prioritisation also requires an understanding of the development outcomes, how they are valued, who benefits and which factors enable or inhibit positive livelihood impact (Millard, 2000). However, to date, while there are well-defined quality assurance processes and output measures of the amount of land cleared, the number of items removed, rendered safe and/or destroyed and the number of beneficiaries, there is a gap in understanding about what benefits accrue, for whom and in what contexts (GICHD, 2007). It is partly this lacuna that led to the development of this research project.

# 2.4 Measures of Impact

There are a few pre-intervention tools available for assessing the impact of ERW (GICHD, 2005). The most frequently applied is the LIS discussed above. At the community level participatory pre-intervention studies may be undertaken by

individual operators with the aim of engaging the local population in the prioritisation process. Information collected from such studies contains rich data and may serve as a baseline at the community level (Goslin, 2003; Mikkelsen, 2005; Roughly, 2005). To date there have been few published community studies and they have not been systematically applied in evaluation (White, 2007).

The LIS changed the way in which landmine/ERW contamination was conceptualised and how tasks were prioritised. However, its potential use for assessing post-clearance impact at the national and global level has not been realised. Further, while the survey includes procedures for sampling unsuspected communities for false negatives, it does not collect substantive information on non-affected communities. This makes it difficult to put the impact of landmine contamination in perspective with other issues of reconstruction and development. The longer a country is post-conflict, the more critical the inclusion of other substantive data sets because communities will have adapted to the contamination (Benini, 2002, 2003). However, the LIS was important in framing the focus on socio-economic impacts and casting MA into the discourse of economic development. This shift contributed to a growth in economic approaches to measuring impact.

Economic approaches, including cost-benefit analysis and estimates of the value of statistical life, are the most common methods of assessing the potential impact of clearance and are the most developed within the sector. However, such approaches are often based on untested assumptions of market values and trends, and that reclaimed land will be turned into capital. They do not always favour the poor. Some infrastructure projects which are perceived to offer attractive returns, often fail to benefit marginalised groups or promote equity (Horwood, 2003b). Further, economic valuations tend to simplify aspects of development, do not distinguish between real human needs and economic preferences and fail to consider the well-being of further generations (Julnes, 2012).

Findings of cost-benefit analysis have been mixed. In Cambodia (Harris, 2000) and Mozambique (Harris & Elliot, 2001) reported clearance had a very high negative net present value. However, Paterson (2001) has argued that including productivity increases, the long-term value of land and sale value would result in a positive net present value for Cambodia. In Afghanistan it was reported to have a positive net present value due to increased agricultural output, saved transport time and running

costs, saved human casualties and the saved costs of supporting refugees and displaced persons (Harris, 2002). Clearance of land mines, which re-opens existing infrastructure such as transport corridors, is likely to have a high return (Paterson, 2001). Paterson argued that other well-conceived projects such as irrigation, access roads and potable water will also yield high returns. He also suggested that demining agricultural land will have a positive net present value if the infrastructure is in place to ensure producers have access to markets (Paterson, 2001). An evaluation in Lao PDR based on assumed productivity and costs in the poorest districts estimated that returning unused contaminated land to agricultural use would result in an economic return on investment (Griffin, Keeley, & Sayyasouk, 2008). The evaluation calculated productive value using the market value of the crops (including cattle and goats) that the land could produce (Griffin et al., 2008). However, some caution is required, as productivity, using current methods, is likely to be lower than estimated. Further, the calculation includes livestock, yet the presence of UXO does not prevent livestock production (World Bank, 2006). Cost utility analysis (CUA) using a multidimensional index which can reflect improvements in quantity and quality of life such as the disability-adjusted life years (DALY),<sup>5</sup> have rarely been used.

Additional to the methods outlined above, practitioners are piloting a number of new initiatives in order to gain an improved understanding of the impact of explosive remnants of conflict and demining. In Sri Lanka for example, a monitoring system is being piloted which includes measures of mental health, post-traumatic stress disorder and somatisation, functional disability, general distress, quality of life, social capital, productivity and financial resources, risk behaviour and attitudes towards mines/UXO (GICHD, 2011). In Cambodia, Lao PDR and Sudan different approaches are being piloted informed by livelihoods approaches (GICHD, 2011). To date these pilots have been small scale and are primarily used either to gather baseline data, or to assess post-clearance land use, rather than to evaluate longer-term impacts or the contexts in which outcomes are derived and sustained.

<sup>&</sup>lt;sup>5</sup> A metric used to summarise disease burden. The DALY is the sum of premature mortality (years of life lost—YLL) and disability (years of life lived with a disability—YLD).

#### 2.5 Evaluations of Mine Action Programs

Most available evaluations of MA are not peer reviewed and have generally been commissioned by those with strategic management responsibility to inform decision-making about future programming. Most use mainly qualitative data and look primarily at processes and outputs and may include immediate post-clearance land use. Evaluations of MA programs in Yemen (GICHD, 2006), Sudan, Ethiopia, and Jordan (NORAD, 2009), and a review of SIDA's global MA program (Harpviken, Millard, Kjellman, & Strand, 2001), all highlight the importance of effective and inclusive program communication in securing outcomes. In Yemen for example women particularly "remain unaware, or unconvinced, that areas have been cleared" (GICHD, 2006, p. iv).

A study in Lao PDR reported that where there was limited community liaison there were misconceptions related to the area cleared, depth of clearance and appropriate land use (Durham, 2008). These evaluations pay some attention to immediate post-clearance land use but rarely to longer term sustained use or changes in access to livelihood assets. One of the most comprehensive post-clearance evaluations was undertaken in Yemen and used a livelihoods framework to analyse access to, and use of, assets and the external environment influencing these assets following landmine clearance (GICHD, 2006). The evaluation found that clearance was very effective in eliminating the risk of exposure to landmines. However, this did not mean that people were universally confident in the quality of the clearance, due either to misunderstandings about the areas cleared or due to a belief that landmines remained at depths lower than the standard clearance depth of 20 cm (GICHD, 2006, p. 16).

The type of post-clearance land use was dependent largely on the type of land cleared. However, the financial value was difficult to assess as people were reluctant to disclose the exact number of livestock they owned. Where mines were cleared from good quality, irrigated cropland and where there was market access, land was often quickly returned to productive use and converted to financial assets (GICHD, 2006). Contextual constraints in post-clearance land use in Yemen and Lao PDR have been found to be related to household fragility and limited access to assets, especially equipment, seeds, finance and crucially in Lao PDR, labour (GICHD, 2006; MAG Lao, 2008). Following this overview of the evolution of MA and the

ways in which tasks are prioritised, a brief overview of the global governance and funding environment is provided, which explains how governance and financing interact with MA operators and influence the ways in which demining is undertaken.

#### 2.6 Global Governance

Mine action takes place within the human-security-civil society space inhabited by multi-lateral agencies, NGOs, commercial companies and civil society (Bolton, 2010). At high and middle management levels in particular, the MA sector is staffed primarily by international experts. This and the introduction of public and private service providers and increased partnerships with development agencies, makes governance a global, multi-layered and multi-actor issue, or a form of networked governance (Duffield & Waddell, 2006) or what Castells (2010) called a networked society. Thus while the State is a crucial player, it is not the sole decision—maker in MA public policy.

Based on the literature reviewed for this research, Figure 1, using the McClintock (1990) framework summarises the broad policy context for MA within the human-security-civil society sphere. The values, in the first row of Figure 1 are based on humanitarian principles. These values have informed international and national policy instruments, which in turn inform program planning and activities. The main legal instruments that guide MA are: 1) International Humanitarian Law, 2) the Convention on Certain Conventional Weapons; 3) the Anti-Personnel Mine Ban Convention; and 4) the Convention on Cluster Munitions.

In terms of how MA is organised and funded, the Anti-Personnel Mine Ban Convention and the Convention on Cluster Munitions are the most important. For example, Article 5 of the Anti-Personnel Mine Ban Convention stipulates that State Parties must destroy all anti-personnel mines in their jurisdiction within 10 years of the Convention coming into force. Article 6 outlines that in order to fulfil the Convention's obligations each State has the right to request and receive assistance from other State Parties. The Convention on Cluster Munitions, which came into force on 1<sup>st</sup> August 2010, also obliges States with cluster munitions to remove all such items within 10 years of ratifying the Convention with a possibility of an extension of up to five years (Landmine and Cluster Munition Monitor, 2010).

	Risk reduction for civilian populations (Horwood, C, 2003b)	Promotion of post- conflict stability and equitable human development	Do no harm	Universality, neutrality,	Accountability (GIBL, 1999)	
Agenda setting		(Horwood, C, 2003b)		impartiality (Horwood, C, 2003b)	(GIDE, 1777)	
Agenda setting			Supported by			
	International Humanitarian Law	The Convention on Certain Conventional Weapons (CCW 1980)	The Anti-Personnel Mine Ban Convention (AP Mine Ban Convention 1997)	International Standards (UN, 2003)	Convention on Cluster Munitions (CCM, 2008)	
Agenda setting	Which guide (GICHD, 2005)					
	Ratification of international National policy instruments Funding mechanisms  Mine Action Programs National Standards  Which inform (GICHD, 2005)					
Norms and standards	Working in partnership	Raising awareness of landmine/ ERW/UXO threat	Identifying and prioritising risks and resources	Understanding impact of landmine/ ERW/UXO contamination	Conducting research, survey, assessments	
	Which guide programs with these characteristics (GICHD, 2005)					
	Targeted to communities at risk exposure to landmines/ ERW/U	XO reduction and so economic impact	ocio- MA	and	ked to national goals priorities	
Action	And with these activities (UN, 2003, GICHD, 2005)  Mine risk education/ Survey, marking, Victim/survivor Advocacy Stockpile				Stockpile	
	community liaison	prioritisation, clearance	support	•	destruction	
	Which support (UN, 2003, GICHD, 2005) Post-conflict recovery and national, community and household objectives					

Figure 1: Broad Policy Context for Mine Action (modified from McClintock Framework, 1990)

Article 7 of the Convention requires the State Parties to report the estimated size of affected areas; the size of the area cleared and disaggregated clearance statistics for each type of unexploded submunitions cleared and destroyed. By declaring all items be removed from a State's jurisdiction, these treaties take a maximalist position of landmine/cluster munitions-free states, although for many donors this is seen as an aspiration rather than an achievable reality, and many donors, particularly high power states, such as the US, which try to limit the regulation of landmines and cluster munitions, refer to 'impact free' rather than 'landmine free' (Bolton, 2010).

In the late 1990s, the UN MA Service (UNMAS) was established to provide initial coordination of MA activities prior to coordination being transferred to national governments supported by the UN Development Programme (UNDP) (UN, 2003). This usually means coordination being handed over to a specially established national authority, usually supported by UNDP and with responsibility for providing policy direction; planning, managing and coordinating the national MA program; developing national standards; monitoring, including quality assurance and post-clearance assessment; and accrediting MA operators within the country (Harpviken et al., 2001).

Throughout the late eighties and early nineties the predominant narrative was humanitarian. In the nineties and the beginning of the millennium MA programs were also influenced by livelihood approaches which had gained prominence in donor relief and development discourse (Scoones, 2009). More recently the predominance of neo-liberal politics has shifted the focus to macro-level economic development and a decline in the promotion of the livelihoods approach (Prowse, 2010; Scoones, 2009). The focus on economics and quantifiable outcomes at the macro-level is also evident in the MDGs and the commercial contracting out of demining to achieve strategic donor priorities. Reflecting the broader donor policy context DfID states MA can "play an important role in movement toward the achievement of the MDGs" (DfID, 2010, p. 9).

The strategy also signals a shift towards the neo-liberal economic agenda and a dilution of livelihoods and rights based approaches. The first of the three objectives of DfID's MA strategy for example, is "to release mine affected land which will

make a measurable contribution to the socio-economic development of mine affected communities" (DfID, 2010, p. 8).

The DfID also proposes using standard human development and economic indicators at the macro and micro-level to assess change (DfID, 2010). The AusAID strategy reflects similar concerns with MA being linked to the MDGs, development and poverty reduction (AusAID, 2006).

There has been considerable effort to standardise the sector resulting in International MA Standards (IMAS), formally adopted by the UN in April 1999 and reviewed every three years. These standards prescribe all aspects of MA. These International Standards inform national standards which guide individual organisational standard operating procedures. Thus, while there may be some differences to take into account country and organisational strategies, global programs are implemented along similar principles. Donor contracts usually stipulate that contractors work in accordance with IMAS and national standards as does the Convention on Cluster Munitions. This includes the non-technical survey standards which is the collection of data about hazardous areas without any technical intervention and as such relates to task prioritisation.

# 2.7 Global Financing of Mine Action

Issues of governance and MA policy and how operators work cannot be separated from how programs are financed with different funding channels likely to result in different outcomes for different beneficiary groups (Bolton, 2010). Most post-conflict and developing countries operate within severe fiscal constraints and typically MA is financed primarily through international aid. At one end of the funding mechanisms and the organising governance is what Bolton (2010) calls the 'Strategic-Commercial Complex'. Typically, this involves states with considerable political power contracting out demining to commercial entities, often to private security companies, to meet strategic objectives. At the other end of the continuum is the 'Human Security-Civil Society Complex'. This complex is shaped by humanitarian norms with middle power states, multi-lateral funding agencies and civil society actors, such as NGOs forming partnerships to undertake demining activities, mainly at the community level with the intent of social betterment (Bolton, 2010). Most of the work undertaken in the sites of inquiry for this research can be

placed under the 'Human Security-Civil Society Complex' with services provided without cost to the end-user.

Within the 'Human Security-Civil Society Complex' most donor models of financing are based on beliefs about market efficacy. This financing model makes aid inherently political, tied to donor strategic objectives and reduces the space for advocacy, placing donors as the main customer (Duffield & Waddell, 2006). In this competitive environment, MA NGOs, while not driven by profit margins, do have materialistic interests as well as human ones, and in order to maintain or increase their market share, it is incumbent upon them to deliver the outcomes the donors expect. In MA this is leading to increased prioritisation based on economic objectives.

Having considered the evolution of MA and briefly examined the issue of governance and financing, the chapter now turns to the national MA environment with regards to Lao PDR and Iraq. The following section begins by outlining the nature of the conflict in Lao PDR, the resultant UXO contamination and MA. The discussion then moves to the Kurdish Iraq Region.

# 2.7.1 Lao PDR: Landmines, Unexploded Ordnance and Explosive Remnants of War Contamination

There is no reliable estimate available for the extent of UXO in Lao PDR making it unclear exactly how much land is contaminated or how much has been cleared. However, it is estimated that up to 30% of aerial munitions dropped on the country failed to work as intended leaving these former war zones as de-facto minefields. The bombing was not restricted to military targets and villages were frequently bombed with most of the contamination in rural areas (Handicap International, 1997). Remoteness, the lack of other real or perceived livelihood options and government policies which largely kept people in rural areas meant people were forced to farm contaminated land. In the early post-war years injuries were high. However, since 1992 injury levels have stabilised to about 300 per annum (NRA, 2009). A recent nationwide survey recorded 50,136 UXO-related casualties between 1964 and 2008 (NRA, 2010).

The sites in Phase 1 of this research are located along the eastern border of Khammouane province in Boulapha, Ngommalat and Mahaxay Districts. During the War, Route 12 which passes through each of the districts, acted as a supply line to

the Ho Chi Minh Trail. As a result the area was severely bombed (see map in Appendix 1). In Phase 3, two of the sites – Nong District and Paksong District – are located along the eastern border of the southern provinces of Savanakhet and Champassack, respectively. Both these sites were also heavily bombed due to their proximity to the Ho Chi Minh Trail. The other site was the Pek District in the northern province of Xieng Khouang. This province was the scene of destructive bombing campaigns and intense ground battles, especially around the strategic site of the Plain of Jars and the district town was virtually destroyed (see map in Appendix 3).

#### 2.7.2 Mine Action in the Lao PDR

In the aftermath of the war the new Lao government had limited capacity to undertake a large-scale UXO clearance program. Clearance was generally ad-hoc, undertaken on the periphery of development projects by local deminers and with some assistance from Lao, Vietnamese and Soviet Union military experts (Bolton, 2010). Cold War politics prevented any large-scale international demining program (Bolton, 2010). It was not until 1992 that MAG began working in Lao PDR and in 1996, with international support, a national MA body, UXO Lao, was established to undertake a survey, marking, clearing and educating about the risk in the nine most contaminated provinces. In 2004 under pressure to increase the pace of UXO clearance Lao PDR opened the market to other for and not-for-profit providers allowing NGOs, such as MAG to establish their own operations. As part of this reform the NRA was established with the responsibility for strategic planning, coordination and accreditation of MA organisations. All operations are subject to IMAS and national standards. In common with global policies the emphasis of clearance is on longer-term development objectives and post-clearance land use. According to the National Standards, for example, "area clearance is only to be considered when land is to be used within 6 months of clearance being completed" (NRA, 2009, p. 7, Chapter 8).

Lao PDR is not party to the Mine Ban Treaty but is Party to International Humanitarian Law and the Convention on Certain Conventional Weapons although it has not ratified Protocol V on ERW. It is a signatory to the Convention on Cluster Munitions and was the first in Asia to ratify the Convention. At the First States Party

Meeting for the Convention on Cluster Munitions in November 2010 in Vientiane, the Lao Government announced MDG 9 (Figure 2). Interestingly, while MDG 9 refers to reducing the number of casualties as a result of UXO incidents it does not specifically link MA to poverty reduction or development, although it is perhaps implicit in Target 9a.

# Millennium Development Goal 9

Reduce the impact of UXO in Lao PDR in accordance with the National Strategic Plan for the UXO sector "The Safe Path Forward II".

**Target 9a:** Ensure the complete clearance of UXO from priority/high value agricultural land by 2020

9.1 Number of hectares released from UXO contamination

**Target 9b:** Reduce substantially the number of casualties as a result of UXO incidents

9.2 Number of casualties reported as a result of UXO incidents

**Target 9c:** Ensure that the medical and rehabilitation needs of all UXO survivors are met in line with treaty obligations under the Convention on Cluster Munitions

9.3 Provision of proper assistance to UXO survivors

Figure 2: Millennium Development Goal 9, Lao PDR

# 2.7.3 Kurdish Autonomous Region of Iraq: Landmines, Unexploded Ordnance and Explosive Remnants of War Contamination

Much of the contamination in the Kurdish Autonomous Region of Iraq consists of landmines laid during the Iran/Iraq war (1980-1988), and the simultaneous 'Anfal' campaign in 1988 (Gunter, 2008). The failed Kurdish uprising after the first Gulf War led to further contamination and involuntary displacement. Cluster munition remnants have also been found from cluster strikes by coalition forces in 1991 in support of a Kurdish uprising against the government (Landmine Monitor, 2010). The result is extensive landmine/ERW contamination making the Kurdish Region of Iraq one of the most heavily mine-contaminated regions in the world with 1,026 communities reporting contamination (iMMA, 2006, p. 16). The pattern of the conflict means mainly rural areas are affected, particularly pasture (fixed and migratory), rain-fed and irrigated cropland, and scrubland used for collecting firewood as well as water points.

# 2.7.4 Mine Action in the Kurdish Region of Iraq

Mine action in the Kurdish Region of Iraq began soon after the establishment of the no fly zone following the Kurdish uprising after the first Gulf War. Political conflict between the Kurdistan Democratic Party (KDP) and Patriotic Union of Kurdistan (PUK) resulted in parallel autonomous administrations. This is also reflected in the MA organisational structure where there are two regulatory authorities: the Iraqi Kurdistan MA Authority (IKMAA) and the General Directorate of MA (GDMA). Each of these has similar responsibilities and includes strategic planning, coordination and accreditation in the areas under their jurisdiction. As elsewhere, the program works under IMAS and National Standards and has followed the general trajectory from being a primarily humanitarian program to one focussed on longer-term socio-economic development objectives.

The Republic of Iraq acceded to the Convention on the Prohibition of the Use, Stockpiling, Production, and Transfer of Anti-Personnel Mines and On Their Destruction on 15 August 2007. Iraq is a signatory to the Convention on Cluster Munitions but has not ratified the Treaty (Landmine and Cluster Munition Monitor, 2010). Table 1 summarises the main characteristic of MA in each site of inquiry.

*Table 1: Characteristics of Mine Action in Each Site of Inquiry* 

	Site 1 MAG Lao PDR	Site 2 MAG Kurdish Iraq	Site 3 NRA, Lao PDR
Organisational type	International NGO	International NGO	Government project
Funding	Donor funded through competitive process	Donor funded through competitive process	Multi-lateral through UNDP
Staffing	International management	International management	National with international technical experts

	Site 1 MAG Lao PDR	Site 2 MAG Kurdish Iraq	Site 3 NRA, Lao PDR
Objective	Mainly driven by donor strategic objectives, mainly economic development	Mainly driven by donor strategic objectives, mainly economic development, support safe return of displaced populations	Mainly driven by government priorities, focus on agricultural land and local infrastructure, focus on increasing productivity
Target population	Rural, poor and likely to have most economic impact. Partner priorities	Rural, displaced populations, likely to have most economic impact.	Rural, level of contamination and local government priorities

# 2.8 Chapter Summary

Armed conflict can result in significant costs and loss of productivity at the macro and micro-levels. Post-conflict, the continued presence of explosive remnants of conflict poses a barrier to recovery and development and cause loss of life. Mine Action evolved after the Cold War in response to the humanitarian imperative to save lives and the recognition that development in many post-conflict states was constrained by continued landmine and other explosive remnants of conflict contamination. This contamination is frequently in rural areas and prevents investment and limits safe access to land and other health producing assets. As MA has evolved, it has been informed by a number of different perspectives. There are two different, but not competing narratives that dominate contemporary MA. One is of safety and technical expertise, the other is framed within the discourse of economic development. This has focussed attention on how land is prioritised for clearance and how the transfer of cleared land is converted to economic outcomes.

Funded through international donors and implemented by a range of national and international players, governance of MA is global, multi-layered and multi-factored. This chapter has provided the context for the research. Chapter 3 outlines the research design and methods.

# **CHAPTER 3**

# Research Methodology

This chapter outlines the evaluation research methodology used for this research which is informed by realist evaluation frameworks (Kazi, 2003; Mark, Henry, & Julnes, 2000; Pawson, 2006; Pawson & Tilley, 1997). Realist research strategies belong to the family of theory-driven evaluation (Funnell & Rogers, 2011). In contrast to most approaches to evaluation, realist evaluation does not attempt to place a value on outcomes. Instead, realist evaluators attempt to explain what makes a program work and in what context certain outcomes are observed (Kazi, 2003; Mark et al., 2000; Pawson, 2006; Pawson & Tilley, 1997). The overall evaluative research strategy uses a mixed method, multiple case study design to address the overarching research question:

Who benefits from demining activities and in what ways does removal of explosive remnants of conflict affect household livelihoods, and in what contexts?

The livelihood approach (Chambers & Conway, 1992) provided the conceptual framework. The main objectives proposed to address the research question were to:

- 1. Qualitatively, and as far as possible within the research process, quantitatively, document the outcomes of demining on household livelihoods from the perspective of program recipient households in the sites of inquiry.
- Qualitatively identify the context (household, community, organisation, policy, broader socio-economic) and processes by which benefits are accrued and sustained.
- 3. To develop and validate an appropriate and workable livelihood asset scale to assess households' self-reported changes in access to livelihood assets resulting from demining on household livelihoods.

Theoretical considerations, the literature and stakeholder consultation with MAG, sector experts and discussions with my research supervisors, informed the

design. The outcome suggested a qualitatively-driven mixed methods survey to address the three objectives. A common way to assess the outcomes of a program is to measure the variables of interest pre- and post-program implementation (Donaldson & Gooler, 2003; Pawson & Tilley, 1997; H. White, 2009). However, a limitation of this is it is not possible to assess attribution. Another approach is an analysis of the counterfactual, for example by comparing a group with and without the intervention.

A review of program documentation revealed a lack of baseline data against which to measure change. For this reason a quasi-experimental pre and post-program design was not possible. In such cases, theory-driven approaches, such as a realist approach, provide a good solution (Donaldson & Gooler, 2003; Pawson & Tilley, 1997; Simons, 2009; H. White, 2009).

An exploratory, sequential, mixed methods approach was determined to be the most appropriate in developing the livelihood asset scale. This design, where a qualitative component precedes a quantitative component is a common approach to employ in instrument development design, especially where little is known about the phenomena of interest (Creswell, 2009; Creswell & Plano Clark, 2007; Greene, Caracelli, & Graham, 1989; Onwuegbuzie, Bustamante, & Nelson, 2010; Teddlie & Tashakkori, 2009). The initial intent was to develop and validate the scale in the first site of inquiry and then to cross validate using the second site. Due to shortcomings in the initial design, lessons learned in the field and the evolving nature of field research in developing country settings, a third site was selected to further develop and validate the scale. This change was approved by the Curtin University Human Research Ethics Committee. In each of the three sites of inquiry, due to time and financial constraints, the three objectives were addressed concurrently.

The research examined three separate but inter-related cases:

- 1. Mines Advisory Group (MAG) Lao
- 2. MAG Iraq
- 3. The national Lao PDR UXO program, coordinated by the National Regulatory Authority (NRA)

This chapter begins by providing an overview of the research and details: arriving at the research question, the research paradigm used, the underpinning theoretical perspective, the professional context of the researcher, the co-researchers,

translation mechanisms and ethical considerations of the study. The chapter then outlines the methods for the cross sectional survey including the sample, sampling method, data collection and analysis. This is followed by details of the scale development and evaluation processes in each of the three sites of inquiry.

# 3.1 Arriving at the Research Question

One of the main reasons I decided upon the research question was professional interest. As a field practitioner and country manager of mine action (MA) programs for over eight years, I realised we did not really know who benefited from MA, in what ways and in what contexts. This suggested it was a relevant question. Nevertheless, relevance alone is insufficient justification for spending public money on research or asking already time poor communities to participate in research. Additionally, it was important to check that the question is researchable, feasible and ethical. After questions of researchability and feasibility were satisfied, as a researcher, I had to consider the complex question of 'is it ethical?'

Ethics from a regulatory framework, usually states five main criteria for ethical research (Mertens, 2010b):

- Autonomy/self-determination (includes confidentiality and informed consent)
- 2. Non-malfeasance (do no harm)
- 3. Benefice (doing good)
- 4. Justice
- 5. Positive contribution to knowledge

This research follows these principles. But is informed consent a western construct? And to what extent do participants in a hierarchical, one Party State such as Lao PDR where researchers are obliged to go through local authorities really feel they have the right to refuse without retribution? What are the issues of real or perceived power when researchers with privileges of ethnicity, class, education and language go into a village and speak to subsistence farmers or the 'poor'? How does providing the email address and phone number of a person in an Australian university, on an informed consent form protect people with no English and limited education and modern communication technologies? These were questions which also needed to be considered.

The purpose of the research is to be a cause for good, not harm. It aims to develop an improved understanding of how benefits from demining are accrued in order to maximise benefits for communities and donors, inform program policy and contribute to a more equal society. As one of MAG's program staff explained:

The discussion about impact is crucial for mine action organisations certainly in development scenarios, because more and more donors want to know what the real impact of the numbers being spent is. It is true that it is expensive, so I think we have to be sure that we are giving the best value for money, so any contribution to this discussion and any way to help find the potential solution to maximise long term impact is all very important and very pertinent because right now we're still learning and we're still developing the capacity to understand in a sense what is long term impact anyway. What does it mean and how can we work with donors and authorities to actually help it take place? (MSP 02, research site 1, staff)

However, who determines which benefits are valued and which are not? What outcomes may warrant a statement of 'good' or 'bad'? A challenge in evaluation of programs designed to promote social betterment is that there is a lack of consensus of an agreed definition of what constitutes a good society or public value (Julnes, 2012). A further complication when evaluating social interventions is the diversity of stakeholders. For example, in this research, stakeholders include the program recipients, program staff, local government, donors, their constituents, downstream development partners and academics. This raises questions of how to assess benefits, for whom, against what standards and for whose purpose? Determining if the research was ethical therefore was not as simple as the ethical regulatory checklist makes it appear. In addition to the regulatory checklist, the principles of the American Evaluation Association and the Australasian Evaluation Society were also helpful (American Evaluation Association, 2009; Australasian Evaluation Society, 2002). These include principles of cultural competence, systematic inquiry, integrity, respect for people and taking into account a diversity of interests and values related to the general and public welfare.

The other ethical dilemma was one of ownership and intellectual property rights. In cross-cultural research co-researchers are crucial to the success of research

projects (Liamputtong, 2010). While there was a Memorandum of Understanding with each of the host agencies, it is also important to recognise the contribution of co-researchers in research (Liamputtong, 2010). Another dilemma was that I had worked in the MA sector for a number of years and knew many of the key stakeholders in Lao PDR. I had recently completed a contract with MAG Lao, had previously worked for UXO Lao, the national clearance operator, and in my role as the MAG Lao Country Program Manager, had raised funding for, and supported both UXO Lao and the NRA. While I had not previously worked in the MAG Iraq program, I had regularly met with the program managers at various MAG meetings. My field research was also funded mainly by MAG and the NRA. These factors provided me with entry to the field and gave me an understanding of the research context. This provided me with a good understanding of MA, its history, theoretical debates and the policy context. Such understandings are crucial in case study research (Simons, 2009; Stake, 2005, 2006). At the same time, I knew that my experience could potentially bias the findings if I did not remain open to contradictory findings or findings which were not consistent with the theory that demined land acts as an incentive for households to accrue livelihood assets and to contribute to economic growth.

In addition, question choice was informed by my work as a practitioner and I intentionally set out to understand how and in what ways MA contributed to household livelihoods. In doing so I acknowledge that there are likely to be many other priorities for post-conflict communities which were not explored in this research and that the focus on MA may overstate its importance to communities.

After examining the ethical criteria and satisfying myself that, notwithstanding these complex issues and dilemmas, the research fulfilled the criteria, I also engaged in on-going reflection and consultation with colleagues and co-researchers throughout the research.

# 3.2 Research Paradigm

Having reviewed the literature, arrived at the research question and considered some of the ethical issues, the next step was a consideration of the theoretical aspects of the research design. This is important because what a researcher chooses to focus on, how the research is undertaken, analysed and represented is determined by a

philosophical stance including assumptions, beliefs and values. These then inform the interpretation and justification of the knowledge claims (Denzin, Lincoln, & Smith, 2010; Guba & Lincoln, 1989, 1994; Patton, 2002). This includes addressing the axiological, ontological, the epistemological and theoretical positions of the study. Thus in considering the research design the first question to address was axiological, relating to values and ethics that guide behaviour and as discussed above, are underpinned by three basic principles: respect, benefice and justice (Mertens, 2010b).

The ontological question relates to assumptions about reality and relates to the positivist/relativist debate. That is, whether one believes social reality is external to the individual with reality imposed on the individual from without and is 'out there' to be discovered, or whether reality is the product of individual consciousness (L. Cohen & Manion, 1994; Crotty, 1998). It is important for researchers to be explicit as it informs the way in which they approach the research. From a positivist perspective, an objective, single truth can be discovered as definable and quantifiable; social facts exist in the form of a single universal, general law (Crotty, 1998). From a relativist or constructionist perspective, meaning is constructed, thus there can be multiple realities and knowledge is subjective and cannot be subsumed with numerical classification (L. Cohen & Manion, 1994; Crotty, 1998; Guba & Lincoln, 1994).

Epistemology is about the nature of knowledge and truth and reflects a researcher's ontological perspective and the terms are sometimes used interchangeably (L. Cohen & Manion, 1994; Crotty, 1998). From one perspective, humans react in a deterministic manner to situations in the external environment; humans and their experiences are products of their environment. The other perspective places humans as the creator of the environment which they inhabit. From a positivist stance, researchers are objective, independent observers; the social world can be scientifically measured to generate a valid picture of meaningful social reality. Most people recognise that no research is completely value free and post-positivism while recognising the principle of objectivity, accepts that observation is informed by values and theory. The key is to conduct rigorous research with quantitative methods and randomised experimental methodologies. Claims of truth remain tentative and unqualified, no scientific proposition can ever be accepted as

being definitely true. A scientific truth is not something that is true, but something scientists have not yet demonstrated to be false (Crotty, 1998).

However, from a non-positivist stance, knowledge is personal, subjective and unique (L. Cohen & Manion, 1994; Crotty, 1998; Guba & Lincoln, 1994). Researchers working from this position tend to use inductive, deductive and qualitative methods with a greater engagement with their subjects (Crotty, 1998). Meaning is constructed not discovered, thus there may be multiple constructions even when it is the same phenomenon under consideration, as interpretations will be influenced by culture. The researcher is subjective and not independent of the research. The aim is to uncover the individual's understanding of the social world they live in, and the beliefs and attitudes they hold, to interpret reality and social interaction within a given community or set of communities.

These different worldviews can be placed at two ends of a continuum covering diverse viewpoints. Between these two perspectives realism can be seen as providing a 'middle ground'. Realism posits that there is a reality, which exists independently of the researcher and can be described. The researcher and their thoughts are part of reality with the researcher a dependent observer. While there is a physical reality, which exists independently of our cognition, we can only describe it due to our position as a dependent observer. Knowledge is a social construct but aims to explain a physical reality.

Realism recognises that the world is an open system of structures, mechanisms and contexts. The real exists regardless of our understanding, consisting of objects, their structures and powers. Reality is structured, stratified, and differentiated (Sayer, 2000). It consists of intransitive (unchanging entities and objects and mechanisms) and transitive (theoretical, fallible, open to challenge) dimensions (Sayer, 2000). Embedded within human action is a range of social processes. Actions make sense because of the range of assumptions about the social norms they contain. Causal powers reside in social relations, not relationships between discrete events.

A realist researcher aims to identify the mechanisms and structures that lie within and trigger observables (Pawson & Tilley, 1997). According to Astbury and Leeuw (2010), the mechanisms are:

- 1. Usually hidden
- 2. Sensitive to context
- 3. Generate outcomes

Understanding causal pathways to outcomes is critical in understanding how programs work, as outcomes may not simply be a result of policy design and program implementation (Pawson, 2006; H. White, 2009). It means analysing three inter-related aspects of a social policy intervention: what it achieves, which process or mechanism generates this effect, and under what contextual conditions it is successful (Mark et al., 2000; Pawson, 2006; Pawson & Tilley, 1997). Context is not the same as locality. Contextually significant factors may include interpersonal and social relationships, economic status, organisational culture and professionalism, resource availability, human resources and competing priorities and influences (Pawson, Greenhalgh, Harvey, & Walshe, 2005). These contextual factors suggest that certain participants will have different outcomes and that specific institutional processes are likely to be more effective than others (Pawson, 2006; Pawson & Tilley, 1997). A program's legislative, political and historical context also contributes to observed outcomes (Patton, 2012). Further, context is dynamic and helps explain why some outcomes are sustainable and others are not. From a realist perspective the researcher's role is not to make value statements about program outcomes but to show in which context certain outcomes are observed (Pawson, 2006; Pawson & Tilley, 1997).

While some researchers equate particular methods with the worldview, epistemology does not dictate the method of data collection or analyses (Bergman, 2011; Crotty, 1998; Onwuegbuzie & Leech, 2005). It is the worldview that determines how researchers undertake, analyse and represent research. Thus while at the philosophical level, commensurability between positivist and post-positivist worldviews may not be possible, methods can be mixed. Recognition of this has led to an increasing use of mixed method research (Bergman, 2011; Botha, 2011).

In addition to considering the theoretical position, researchers have to consider their position in the research (Mertens, 2010a).

I worked in MA between 2001 and 2008, when I left to start this research. During this time I worked for both the national UXO agency and MAG Lao. As program manager of MAG, I also worked closely with the NRA from its inception. Thus while I was an 'outsider', I also had 'insider' knowledge of how MA and particularly the Lao programs worked. This was useful in that as an 'insider-outsider' I had knowledge that an 'outsider' would not know. Knowing what was possible, I was also able to apply a critical lens to what we were discovering. The relationship I had with the organisations, ex work colleagues and the villages where the research took place also makes me more personally attached to the findings. 'Insider' knowledge and relationships also enabled me to quickly develop empathy with staff and program recipients and was crucial in allowing me entry to the programs and sites of inquiry. At the same time however, the fact that I no longer worked for these organisations, in other words my 'outsider' relationship, meant I was not tied by loyalty to the program or having to justify findings to donors.

#### 3.3 Ethics

Curtin University Human Research Ethics Committee approved the study in terms of compliance to regulatory ethics in November 2008. The process of developing the research question and design began in December 2007 in discussion with MAG and the NRA who both provided support. In Phase 3 of the research, a separate proposal was developed with the NRA and discussed with MAG. In the Kurdistan region of Iraq, the Kurdistan Regional Government's Internal Security Bureau provided approval.

It was agreed that the individual organisations would have ownership of direct outputs of each phase. I maintain ownership of my interpretation of the data and the livelihood asset scale. I have full access to all data and I am able to use it for the purpose of this dissertation and future academic work. Each organisation can use the livelihood impact asset scale for not-for-profit purposes with the author credited. Coresearchers were also provided by each organisation and acted as cultural brokers to help ensure cultural appropriateness. While working on this research, the coresearchers and enumerators were paid their usual salary by the relevant agency. In Phase 3 (the NRA, Lao PDR), the enumerators were not employed full-time by the NRA, but were contracted specifically for this project using NRA funds.

### 3.3.1 Anonymity and Confidentiality

Anonymity and confidentiality of participants were protected by the use of coding and strict security measures, which included storing documents and recordings in a locked cupboard and ensuring respondents could not be linked back to the clearance database. Nevertheless, during the interviews, other family members or in the case of the Lao PDR, the village head may have been present. While it could be argued that to an extent this compromised confidentiality it would have been culturally inappropriate for us to have asked these additional people to leave.

# 3.3.2 Informed Consent

Prior to data collection all participants were provided information regarding the study and all gave informed consent (Appendix 4). Participants were informed that participation in the research would not result in any personal benefits nor would current or future services be withdrawn as a result of the study. Additionally, every effort was made to avoid raising expectations. The right to withdraw at any time without retribution was emphasised. Minors under 18 years of age were excluded from the research.

Additional to allowing the respondent to contact the University if they had concerns, a more culturally appropriate and more feasible option was also provided. This was partly to address concerns raised earlier about the western nature of concepts such as informed consent, which from a western worldview often requires the signing of a form, but which may be interpreted differently in other political and cultural contexts and may clarify there is no obligation to participate (Liamputtong, 2010). In centralised regimes the western rationale for informed consent may not be understood and may in fact cause concern and affect well-being. Perhaps tellingly, the only sites where there were non-respondents or where the enumerators had to visit households more than once, was in non-poor areas. This is likely to be partly because of other work commitments, but possibly because they felt more able to refuse. Throughout the process the researcher ensured that the MAG Directorate, program staff and relevant national authorities were fully informed of the study progress. The researcher and her team also followed MAG's Code of Conduct (Appendix 5).

Another safeguard included the establishment of local reference groups, providing some oversight (Liamputtong, 2010). This alongside openly discussing issues related to the study with co-researchers and other stakeholders provided a level of transparency.

# 3.4 Research Assumptions and Framework

The assumption of this research is that individuals are central to the understanding of social processes. Nevertheless, it is possible to identify certain constructs, which underpin the social world. The world is an open system within which underlying structures, powers and mechanisms constitute reality and generate events. These may be experienced differently. Another assumption is that social programs are not simply a coordinated set of actions resulting in a linear progression of outputs, outcomes and impacts. Rather, programs are dynamic, implemented within complex, multi-layered environments, interacting with a rich network of relationships, causal associations and underlying mechanisms. Despite this, it is possible to produce information that is both relevant to the specific interventions and generalisable using a theory-based approach to evaluative research (Patton, 2002; Pawson & Tilley, 1997; Weiss, 1998).

The research assumes that the purpose of evaluative research is to make a contribution to issues of social justice. Part of the work of the researcher is to uncover untruths, beliefs and social constructions that perpetuate the status quo by looking at how the broader organisational, socio-economic and policy environment contribute to injustices (Mertens, 2010b). The researcher is a 'learner', documenting individual and group experiences as a lens through which to view the program and its impact on people's lives. At the same time, mindful of Dewey's warning that while our experience seems to be fresh, naïve empirical material it is "already overlaid and saturated with the products of the reflection of past generations and by-gone ages and that these past reflections are likely to distort and confuse unless detected" (1929 publ. 1960., p. 34).

Table 2, adapted from Guba and Lincoln (1994), Crotty (1998) and Mertens (2010b) provides a summary of the research framework.

Table 2: Summary of the Research Framework

Theoretical Aspects	Summary of Research Framework		
Axiology	Respect for cultural norms and diversity (Mertens, 2010a) Promotion of human rights and social justice (Mertens, 2010a)		
Ontology	Structures, powers and mechanisms constitute reality and generate events. There may be many causes of an event and an event may have many consequences. Social action has real consequences which may be experienced differently (multiple realities) depending on cultural, social, economic, gender, political and other values. Privilege influences what is determined real with consequences of accepting one version of reality over another. (Mertens, 2010)		
Epistemology	Interactive link between researcher, co-researcher, participants, need to address issues of power, developing a trusting relationship crucial. Our experience and understandings are filtered through our experiences, language and values. (Mertens, 2010)		
Theoretical perspective/ Foundational element	Program theory – programs are theories incarnate and operate in contexts. Contexts make a difference to outcomes. The task of the evaluator is to identify the mechanisms which cause or contribute to outcomes (Pawson, 2006) – always being alert to how program processes and power relations within the context influence outcomes. (Mertens, 2010) Livelihoods approach – people have access to a range of assets which they use to make livelihood decisions (Ellis, 2000). Access to these assets is mediated by institutions and social relations (van Dijk, 2011).		
Methodology	Realist informed (Pawson & Tilley, 1997, Pawson, 2006)		
Design framework	Case study approach using realist evaluation framework identify underlying mechanisms and contexts which who combined with program resources, produce outcomes (Koenig 2009)  Mixed methods to accommodate diversity (Mertens, 2010 Privileging of qualitative methods in order to better understan how programs are experienced by consumers (Creswell et al 2006)		
Methods	Cross sectional survey Individual interviews Group interviews Rasch analysis (Rasch, 1960) Questionnaire Scale		

# 3.5 Theoretical Perspective: Livelihoods Approach

The study draws on the livelihoods approach, a common conceptual framework in development studies, development economics, conflict, health, agriculture and gaining prominence in MA (Bottomley & Phuong, 2010; Goslin, 2003). Livelihoods are characterised by five livelihood 'assets' (natural, physical, human, financial and social capital), the activities, and access to these (mediated by institutions and social relations) that together determine the living gained by the individual or household (Ellis, 2000, p. 10). Livelihood assets are frequently described and categorised as follows (Ellis, 2000):

- 1. Human (knowledge, ability to work and good health)
- 2. Natural resource stocks
- 3. Financial (savings, credit, remittances, pensions)
- 4. Social resources and networks
- 5. Physical (basic infrastructure such as roads and communication networks)

Apart from being a common analytical tool in development and one gaining in popularity in MA, other reasons for selecting the livelihoods approach included its recognition of:

- 1. Diversity of communities (Carney, 2008)
- 2. An individual agency but constrained by context and social relations (Cleaver, 2005; Sen, 1999; van Dijk, 2011)
- Access to livelihood assets being different from availability access is determined by context and social relations (Cleaver, 2005; Sen, 1999; van Dijk, 2011)
- 4. Livelihood outcomes and changes in access to livelihood outcomes often being non-linear and dependent on context (Orr & Orr, 2002)

In order to address the research objectives, the five assets of the livelihoods approach were based on the literature and in discussion with sector experts as outlined in Table 3.

Table 3: Operationalisation of Livelihood Assets for This Research

Asset	Operational Definition	
Human	Quality of human labour available e.g. health, food security and diversity, ability to access education/send children to school regularly, time available to spend on income generating activities, feeling positive, knowledge and skills, sufficient food, sense of safety	
Social	Social networks, fulfil social and cultural obligations, participation in social life and gather information	
Financial	Ability to purchase basic goods and services for household members, savings and investment, access to credit	
Physical	Access to basic infrastructure e.g. schools, clinic, access road, market, potable water	
Natural	Access to forest, farm land and natural water sources	

# 3.6 Research Design Framework

# 3.6.1 A Case Study Approach

The research uses a realist framework within a multiple case study approach (Koenig, 2009). The approach was employed because:

- 1. It recognises program recipients as active actors
- 2. It recognises the importance of context in mediating outcomes
- 3. The parameters of each of the three programs included in this inquiry constitute a case

There are three different but interrelated cases: MAG Lao, MAG Iraq and the national Lao PDR UXO program. The cases share common characteristics because each case belongs to a collection of cases (MA programs) or a quintain (Stake, 2006). The aim is to understand the single case in order to understand the quintain (Stake, 2006).

### 3.6.2 Mixed Methods

Given the cross-disciplinary nature of and diversity of livelihoods, the range of stakeholders and the research question, a mixed method design was selected for the cross-sectional survey. Due to the exploratory nature of the research and the

particular constraints in administering a quantitative instrument in resource poor contexts priority was given to the qualitative data in interpreting the findings of the survey (Creswell et al., 2006). A qualitatively driven precede-proceed design is particularly valuable in this research as it allows focus on the complexities of context, experience, and meanings of the ways in which participants interact with the MA program (Greene, 2007; Hesse-Biber, 2010; Simons, 2009). A qualitatively driven mixed methods design is also well-suited to a case study approach as it can be oriented toward engagement with experiences and complexities of context at multiple levels (Simons, 2009). It is also commensurable with the realist approach to evaluation and livelihoods approaches.

Instrument development provided the rationale for mixing methods in addressing the third objective. Reasons for selecting mixed methods to address this objective were:

- To identify changes in access to livelihoods and participant terms used to describe them in order to write scale items
- 2. To ensure breadth of scale items based on participants' experiences
- 3. To enhance instrument fidelity

# 3.6.3 Overview of Theoretical Perspectives in Mixing Methods

Mixed methods involve combining quantitative and qualitative methods in one design. In recent years this method has gained greater prominence in research and evaluation (Chen, 1997; Creswell, 2009; Donaldson, 2009; Donaldson & Gooler, 2003; Funnell & Rogers, 2011; Greene & Caracelli, 1997; Mertens, 2010b; Patton, 2008; Pawson & Tilley, 1997). With this increased prominence mixed method design is developing a discourse of its own with distinct research designs and its own nomenclature (Creswell, 2009; Teddlie & Tashakkori, 2009).

Creswell and Plano Clark (2007) provide the following definition for mixed methods:

As a methodology it involves philosophical assumptions that guide the direction of the collection and analysis of the data and the mixture of quantitative and qualitative approaches in many phases in the research process. As a method, it focuses on collecting, analysing, and mixing both qualitative and quantitative data in a single study or series of studies. Its

central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone (Creswell and Plano Clark, 2007, p. 5).

Different typologies have been proposed for mixed methods depending on 1) the level of mixing; 2) the time orientation, for example if the different components are undertaken sequentially or concurrently; and 3) the emphasis of approaches, that is whether each approach is weighted equally or one is weighted more than the other (Leech & Onwuegbuzie, 2009). Commonly cited design rationales are based on Greene, Caracelli and Graham's (1989) review of 57 mixed method evaluation studies. This identified five comprehensive design types or reasons for mixed-method evaluations (Greene et al., 1989):

- 1. Triangulation
- 2. Complementarity
- 3. Development
- 4. Initiation
- 5. Expansion

In this research the rationale for using mixed methods in the cross-sectional survey is complementarity. The rationale for mixing in developing and evaluating the quantitative survey instrument, that is the access to livelihood assets scale, is development.

Sampling in mixed methods is still in its infancy without a well-defined and widely accepted sampling typology (Teddlie & Tashakkori, 2009). There is general consensus that it involves combining of traditional purposive and random sampling strategies used in qualitative and quantitative methods (Collins, Onwuegbuzie, & Jiao, 2007; Creswell, 2009; Onwuegbuzie & Collins, 2007; Teddlie & Yu, 2007). Sampling may be concurrent or sequential depending on the overall research design. Often samples are either identical or parallel. In an identical sample, the members are the same in each phase. In a parallel sample, the samples for each component are different, but from the same underlying population. This research used a parallel sample to avoid respondent over-burden.

Data analysis in mixed methods may also use different strategies but often traditional analytic approaches are used for each component and the analysis merged (Creswell & Plano Clark, 2007; Greene & Caracelli, 1997; Onwuegbuzie & Johnson,

2006; Teddlie & Tashakkori, 2009). While different techniques may be used in data analysis some form of integration of the different data sets is required in order to define research as mixed methods (Creswell, 2009; Teddlie & Tashakkori, 2009).

# 3.7 Reference Groups

Prior to commencing the research, two reference groups were established. The first group was composed of five representatives from different MA organisations, two of whom worked in the Lao PDR and three who worked outside. One of these individuals had experience in Kurdish Iraq and each of them had at least five years international MA experience. This group provided feedback related to overall research design, conceptual framework and questionnaire items from a global or 'etic' (outsider) perspective. Communication with this group was through email, Skype and face to face meetings.

In Phase 1 of the research the second group consisted of 16 people from the site of inquiry, working in MA, providing an 'emic' (insider) perspective (Onwuegbuzie, Bustamante, & Nelson, 2010). This group provided practical feedback on the feasibility of the research design in the site of inquiry. During Phase 1, the researcher met with this group once a month, with five meetings in total. In Phase 2 of the research the group was smaller, consisting of six local people from the site of inquiry. The researcher met with this group three times in one month. In Phase 3 of the research an oversight committee was established by the NRA, comprising of one individual from a MA NGO, two from development NGOs working in Lao PDR, one person from the NRA and three people from different government departments who were also part of the NRA board. Unfortunately, convening this group proved difficult with only two meetings being held over several months.

Preliminary pilot findings were initially written and shared with co-researchers at each site. Additionally, these preliminary findings were presented in a workshop to MAG staff in Manchester and Bangkok, in an international MA workshop in Vientiane and to district staff in Vientiane.

### 3.8 Co-Researchers

In each phase, the relevant agency (MAG or the NRA) provided a national staff member with experience in community based research, as a co-researcher. To reduce power differentials between the researched and the researchers, it was a criterion that the co-researchers and enumerators were as far as feasible, from the area and had experience of living in contaminated environments.

The co-researcher at the first site was male, recruited from a village with UXO contamination within the district being researched. At the second site the co-researcher was Kurdish and had personal experience of the 'Anfal' genocide campaign during which, with her family, she had fled to Iran. She had also experienced the forced relocation of her family to one of the collective towns.

The third researcher was recruited from Vientiane the capital of Lao PDR. He was from a farming family in a contaminated village in the Pek district. The second youngest of ten children, with other family members he had routinely managed the UXO threat while undertaking routine farm work. He was also from a relatively privileged background, having completed Diploma level education in Vientiane and could speak English. Throughout Phase 3, the NRA employed him as a research technician for this project and I worked particularly closely with him over a period of 12 months in the design, analysis and presentation of Phase 3. During this 12 month period I travelled between Lao PDR and Australia. When I was in Australia we maintained contact through email and Skype. While I was in Australia he undertook numerous jobs including contracting the enumerators for the quantitative phase, translating documents, liaising with the NRA and local government officials to secure permission for the study, arranging the necessary paperwork to enable meetings and the research to take place, translating documents and checking translated transcripts with the recorded versions.

In both the Lao PDR and Kurdish Iraq, the language of the village is simple and straightforward. Being very familiar with the context when interviewing respondents the co-researchers and I were able to use appropriate language and forms of address reducing any perceived power distance. For example in Lao PDR the register for forms of address in the village setting is based on kinship terms, age and sex, and the co-researchers generally addressed respondents as 'aunt' or 'uncle'.

# 3.8.1 Working with Co-Researchers

In all instances the co-researcher and I worked closely together in the implementation and analysis stage of the study. Working with a local researcher or

'insider' who shares the same language as the participants is generally accepted as enhancing credibility (Irvine, Roberts, & Bradbury-Jones, 2008; Liamputtong, 2010; Mertens, 2010a). However, the success of research can depend on the quality of the relationship between the insider and the outsider. Issues of power exist in the micropolitics between the researcher and the co-researcher and can present challenges in developing effective relationships (Mertens, 2010b). Further, insider/outsider status is dynamic and can perhaps be more accurately placed on a continuum rather than being seen as a binary distinction (Gair, 2012; Liamputtong, 2010).

The intent was to work as collaborators in a spirit of mutual learning setting out to understand the impacts of MA and learning about the research. However, working from this perspective can blur the boundaries of who has authority. Working as a 'collearner' in effect invites others to engage with the research on an equal footing, while at the same time recognising that each is the holder of different knowledge, with different responsibilities as both parties learn about 1) impacts of MA and 2) process of this research. However, there were inequalities in the relationship and the extent to which co-researchers could effect change in the research design was in fact limited. While I had discussed and shared the research with colleagues in Lao PDR and Kurdish Iraq, the co-researchers were identified later, and had little input into the study design.

Further, particularly in Lao PDR where through the process of colonisation and the implicit discourse of donors which generally characterises Lao PDR as in need of 'being developed' and having low human capacity, cast me as an Anglo-Saxon, western educated, English speaking PhD candidate in an 'expert' role. This is despite being an 'outsider' and a student. This perspective can further shape the space for engagement and equal participation. The unstated assumption is that international researchers bring research methods, which the local researcher needs to learn (Chilisa, 2005). A danger in this is that both the insider and the outsider become to believe this version of reality, perpetuating the status quo. Therefore, working from a position of privilege can be a learning disability (Mertens, 2010b). The box below from my reflective journal illustrates some of the strategies I used to minimise the effects of this.

I had to be constantly alert to either myself or the co-researchers believing that as an outsider from the west and the lead researcher, I was the 'expert'. I had to make sure I admitted when I did not know something, asking co-researchers to explain things to me. I took time to explain the rationale of the research, its boundaries and reasons for their involvement, and the need to engage in mutually respectful dialogue, actively seeking input and validating and incorporating suggestions where possible. I also engaged with them in genuine learning tasks where we learnt from and with each other. For example, in finalising the clusters for the quantitative component in Lao PDR, the co-researcher and I sat with a description in English and Lao, reading and checking understanding together. The co-researchers and I also undertook the initial analysis of the data together engaging in a collaborative process of knowledge generation.

While there is a tendency to cast the western educated researcher as an 'expert', there is also a tendency for outsiders to cast their co-researchers, who share a common language and culture with the evaluation participants, as insiders of the community under research, assuming they have more cultural knowledge than they do (Liamputtong, 2010). These insiders that is, people who share a common language and culture with the evaluation participants (Irvine et al., 2008) are to an extent also outsiders (Banks, 1998; Liamputtong, 2010). For example, the coresearchers while from the community under research were also to an extent, outsiders. Their social status, position within the host organisation and education also gave them privileges which could place them in more powerful positions than the research respondents. To an extent they have also assimilated aspects of outsider cultures and are what Banks (1998) has called 'indigenous outsiders'. Recognising that power relations existed between the 'insider' or the 'indigenous outsider' and the research was important. This sometimes meant questioning the views of the coresearcher, for example, shifting agriculture, which they tended to cast in the development discourse of the government as ('traditional' peasant' 'damaging').

Language can also perpetuate the distinction between those who know and have privileged academic knowledge. For example, words such as 'predictor variables', 'outcome variables', 'items', 'credible evidence', 'validity' and so forth

do not necessarily translate easily. Taking time to explain these terms and conventions was time consuming but necessary in trying to maintain a reasonably equitable space for engagement. Spaces of power exist in a dynamic relationship to one another (Gaventa, 2006). Thus, the insider can also hold (often unstated) power. For instance, the insider can act as a gatekeeper to respondents, determining whom the outsider will meet, when and where and decide what information is credible or appropriate for international consumption. For example, the co-researchers contacted and arranged all the interviews with local government staff. Additionally, in all the inquiry sites during the quantitative component of this research, if the enumerators had any difficulties, their first point of contact was the co-researcher. For instance, in site three, twice the quantitative enumerators arrived to find a village included in the sample no longer existed due to recent administrative changes in the district. This is not uncommon in Lao PDR, and in this case we had contingency plans. However, it demonstrates the need for careful planning and agreement on management of such situations.

During a district level workshop in Vientiane we decided that rather than work through the translations, the co-researcher would present the findings and facilitate the workshop as he was familiar with the research and would quickly gain rapport with the participants. While we planned and discussed the workshop together and collaborated before and during the workshop, I found myself performing the photocopying while the co-researcher gave the presentation; it was a little disconcerting within the context of higher degree research where the Western researcher became an 'indigenous outsider'.

Further, the power is not one-way; respondents are not passive beings. Respondents have shared their experiences, editing as they felt appropriate for the understanding of the social context. For example, when a farmer in Lao PDR speaks of the advantages of paddy (wet-rice) farming over shifting or swidden agriculture, attention needs to be given to the respondent's social context, ethnicity and position, and the broader government policy of reducing shifting agriculture. In interviews, people will generally try and present themselves in a way in which they wish the interviewer to see them, which shapes what is or is not included. An advantage of this is that respondents can exercise individual agency and choice.

### 3.9 Legitimation/Validity

The research used concepts and strategies from the quantitative and qualitative research traditions to ensure rigour in each phase (Creswell & Plano Clark, 2007; Dellinger & Leech, 2007). At each stage etic and emic perspectives were also combined (Onwuegbuzie et al., 2010). For example, the literature review and consultations with the reference groups helped identify the livelihood approach as a structure for the research and data analysis. Emerging findings were discussed with to key stakeholders to check for understanding. Triangulation of the qualitative data was achieved by using different methods (program documentation review, interviews and participant observation) and interviewing sector experts, program and district staff and program beneficiaries.

In terms of the quantitative data, the assets of the livelihood scale were based on the literature and discussions with key stakeholders, enhancing content validity. Observation and qualitative data informed the development of the scale addressing the relevance and breadth (Onwuegbuzie et al., 2010). The questionnaire and scale were also checked with the reference group. Additionally, items were modified and evaluated based on qualitative and quantitative evidence. Reliability estimates were obtained for the scale at each site (Pallant, 2007). Finally, field notes, a reflective journal, interview transcriptions, contact forms, codebook for recording variables and changes to variables in the analysis and documented data analysis provide a research trail. Rigour has also been enhanced by using different sampling units in each phase, with a larger, randomly selected sample in the quantitative phase.

### 3.10 Changes to the Research Design

A lack of funding for the MAG Iraq program at the time of the research led to several changes. The most important change was a reduction in time in the field to only one month, which reduced the number of qualitative interviews. The lack of funding also reduced the amount of time that the researcher spent in the field due to MAG standard operating procedures, because each time the researcher went into the field two security guards were required to accompany her. An impact of this was that of the five household program recipients interviewed and only one was female-headed. This was particularly limiting in terms of interviewing program recipients. Another

major change to the project design was the inclusion of a third phase in Lao PDR. This was to enable further development of the livelihood asset scale (Objective 3) based on lessons learnt in Phases 1 and 2.

#### 3.11 Qualitative: Interviews

# 3.11.1 Sampling and Participant Recruitment

**Program recipients:** The household as the locus of livelihood generation provided the unit of analysis. The functional definition used for a household was a group of people living and eating together in the same house as a family. While using the household as the unit of analysis has some limitations, as it ignores intrahousehold dynamics, the household remains an important unit when looking at livelihoods and is consistent with a livelihoods approach.

Purposive sampling was used with respondents identified in discussion with key informants, including staff and local authorities. The aim was to reach data 'saturation', that is data collection is terminated when no new information is forthcoming (Patton, 2002). To an extent, qualitative data collection was also determined by resource availability. For example, in the second case study in Kurdish Iraq, due to time restrictions, the sample was limited to five participants. Table 4 shows the final sample for each phase.

Table 4: Final Qualitative Sample Size for Each Phase

Sex	Phase 1	Phase 2	Phase 3
Men	11 Individual 9 Group interviews ( <i>n</i> = 54)	3	15
Women	5 Individual 9 Group interviews (n = 50)	2	7
Total	104	5	22

**Program staff:** Program staff and staff of partner agencies were also interviewed as part of the qualitative component (Site 1; N = 15, Site 2; N = 6, Site 3; N = 22).

#### 3.11.2 Data Collection

The researcher and co-researcher interviewed program recipients in their village generally in their house sitting on the veranda floor or under a tree. Staff and local official interviews usually took place in the participants' workplace. Each interview took approximately 1.5 hours to complete and was in the interviewees' preferred language. The researcher and co-researcher used an interview guide based on the livelihood approach with key issues listed as a reminder although participants could introduce and explore any relevant topics (Minichiello, Aroni, & Hay, 2008; Patton, 2002). This helped to keep the conversation focussed while allowing the interviewee a measure of power and control over the interview direction (Patton, 2002). Input from the co-researchers helped ensure cultural and linguistic appropriateness. Interviews were recursive using a conversational model, treating each person and situation as unique. The role of the researcher and co-researcher was to work with the interviewee to establish meaning (Minichiello et al., 2008; Patton, 2002). Interviews were recorded, transcribed and checked against interview notes. The question guide is presented in Appendix 6.

**Group interviews:** Group interviews were included in the first case only to assist in developing the quantitative instrument and refine the interview guide. Each group interview consisted of interviews with homogenous, single sex groups of program recipients.

**Individual interviews:** Individual interviews were undertaken with key informants using a semi-structured question guide. These allowed a more in-depth exploration of issues and were invaluable in checking and refining context, mechanism and outcome configurations. Where the preferred language was not English, the co-researcher facilitated the interview with the researcher.

**Participant observation:** The researcher was also a participant observer, observing, recording and making notes of the villages, post-clearance land use, respondents' living conditions, and language and how the programs worked. Together with the interviews, this improved the researcher's understanding of the context of cases and the lives of program recipients.

### 3.11.3 Data Analysis

Two stages of analysis were used for the qualitative data, guided by the livelihoods approach.

**Stage 1 - Rapid Analysis:** Initial codes, based on the livelihoods framework, were developed prior to data collection and related to the livelihood assets. The main objective was to identify items for the livelihood scale under the assets of the livelihood framework. While the preliminary qualitative analysis used a pre-decided framework, this did not exclude the possibility of new themes emerging (Miles & Huberman, 1994; Patton, 2002).

In Lao PDR the initial coding of interviews and data display tools was completed with the co-researcher. In Kurdish Iraq due to time constraints the co-researcher did not assist with the data analysis, although the researcher communicated with her several times via email for clarification. Additionally, the rapid analysis started to explore possible context, mechanism and outcome configurations. Throughout the process flow charts were developed to display the data and represent emerging program theories. As a means of peer review these were also distributed to the reference groups and presented at two regional sector workshops.

Stage 2 - Thematic Analysis: On return to Australia a more in-depth thematic analysis was performed. This is a commonly used qualitative method to identify, report, and analyse data (Patton, 2002, 2008). Starting with codes developed in the rapid analysis, units of text across the data were sorted into themes (Miles & Huberman, 1994; Patton, 2002). Themes were considered significant where there was consistency across and within study participants and/or where they deepened understanding (Patton, 2002). Descriptive codes were used for factual data such as the sex of respondent (Richards & Morse, 2007). Throughout this process causal diagrams and logic frameworks with explanatory notes to illustrate understanding were drafted and updated as understanding grew. A summary report was also written for each case. The reports and transcripts were re-read several times and the case and cross case analysis worksheets provided by Stake (2006) were also used. Throughout the analysis process notes and memos were written in the margins of the transcripts, thus using an inductive approach.

#### 3.11.4 Translation

Interviews were recorded in the respondents' preferred language facilitated by the researcher and co-researchers. This often required negotiation of meaning between the co-researchers and the respondent and between co-researcher and researcher (Hennink, 2008). Translation was not only the translation of words but also of the contextual information needed to construct meaning. During the interview process this was often difficult and time consuming as the co-researchers actively sought words to convey meaning in English. Often the more subtle meanings and nuances only came through later in discussions and joint analysis of the transcripts.

Interviews were transcribed in the language of the interview and then translated into English. However, some meaning was lost in the process. Almost inevitably the translators have made editorial decisions. For example, in the Lao interviews the researcher often heard the respondents saying *sabaai*. *Sabaai* in Lao equates to wellbeing. Achieving well-being or being *sabaai* depends on a number of factors including cleanliness, spiritual and physical balance, a regard for that which is natural, having strong familial and social connection and participating in cultural practices and can be used in many contexts (Lundberg, 2008). In the transcripts, the translator translated *sabaai* in these different ways depending on context and the translator's interpretation of the meaning of *sabaai*. In Iraq the researcher did not notice these subtleties due to a lack of familiarity of the language. Thus while the intent was to transcribe interviews verbatim, in practice this was often not possible.

During each interview and after receiving and reading each transcript, the researcher completed a 'summary contact sheet' summarising the main points and any questions arising from the data (Miles & Huberman, 1994). Questions arising from the transcripts were also discussed with the co-researcher, sometimes leading to the co-researcher reviewing the initial recording to check the accuracy. It was not possible to record and translate the group interviews verbatim. This was partly due to the translation issues described above. Additionally, the quality of recording was not always sufficiently clear for the transcribers to capture every word. The group interviews therefore are summaries of the discussion.

### 3.12 Quantitative: Questionnaire and Scale Administration

### **3.12.1** *Sampling*

In each research site, the sampling employed a parallel design. This was chosen to reduce the burden by asking some respondents to respond to both the qualitative and quantitative components. At the same time the respondents are from the same population group and are likely to use similar language and less likely to confound the comparison between each data set (Creswell & Plano Clark, 2007).

The sample size in each phase was selected using two stage probability proportional to size (PPS), meaning each household in the population of interest had an approximately equal probability of selection (Kaiser, Woodruff, Bilukha, Spiegel, & Salama, 2006; Teddlie & Tashakkori, 2009; Toole, 2004). All villages within selected districts were extracted from the relevant program (i.e. MAG Lao, MAG Iraq or NRA) database into an excel spread sheet with the population of each village included against each village listed. Clusters were ordered by their district before taking the systematic PPS sample to reduce the chance of villages being located within one district (Toole, 2004).

Thirty villages were selected. The sampling size was determined with the intent of measuring prevalence with +/- 10% points of the population and with a 95% confidence level. *N* was then multiplied by a 'design effect' of two allowing accurate estimates of the sampling error given the sampling design (Burns, 1996; de Vaus, 1995; Kaiser et al., 2006). The village was used as the primary sampling unit, the household as the elementary unit and the individual (Head of Household and Spouse of the Head of Household) as the final unit. Individual households were selected using systematic random sampling (Toole, 2004). Figure 3 shows the sampling design and Table 5 shows the final sample size in each research site.

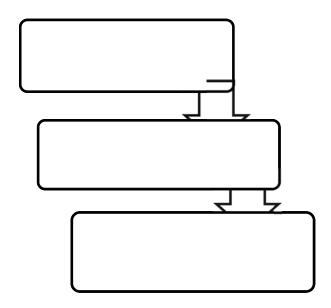


Figure 3: Sampling Design for the Quantitative Component (modified from Toole, 2004)

Table 5: Final Quantitative Sample in Each Phase

Sex	Site 1 MAG Lao	Site 2 MAG Iraq	Site 3 NRA
Men	268	233	573
Women	223	219	421
Actual Total	491	452 <sup>a</sup>	994 <sup>b</sup>
Planned Total	491	492	1241°

<sup>&</sup>lt;sup>a</sup>The planned total of 492 was not reached due to households having left the village

# 3.12.2 Enumerator Training and Supervision

In the first two sites the enumerators were local to the sites and the researcher and co-researcher provided two day supervisor and enumerator training, followed by field testing. The teams worked in pairs of one male and one female enumerator supported by a supervisor. In the third site enumerators were from Vientiane and were given five days training as they were less familiar with the context.

<sup>&</sup>lt;sup>b</sup>The planned total was reached but 247 participants were excluded as they stated they could not remember UXO clearance in their village. These participants were from different villages in Pek and Paksong Districts.

#### 3.12.3 Data Collection

The questionnaire and scale were administered in the local language in face-to-face interviews thus avoiding exclusion of respondents due to illiteracy. The scale in Phases 1 and 2 contained 15 items related to the livelihood assets as operationalised in Table 3 (p. 63). In Phase 3 the scale was further developed and included four subscales under the livelihood asset classes of human, social, physical and finance. The intent was to include natural assets, but there were too few items and those that were incorporated into the scale had insufficient variability to be included. In Phase 3, the livelihood scale was first administered and evaluated in Nong district (N = 214). Concurrently qualitative data was collected. This qualitative data and the statistical evaluation were used to make minor revisions to the livelihood scale. Following this, the scale was administered in the two additional districts of Pek and Paksong (N = 780). Development of this scale is described under 'Scale Development and Validation' further in this Chapter. In addition to the scale, the instrument included items related to gender, age, education, livelihood strategies, type, area and pre/post-clearance land use.

To identify any differential impact with respect to outcomes based on socio-economic status a wealth index was constructed. Measures of socio-economic status based on monetary information, such as income or consumption expenditure were considered in constructing the index but discarded given the setting. Income information for example, can fail to capture the fact that the rural poor people may have income in kind, such as crops which are traded. As producers and consumers, rural households may not differentiate between the two making it hard to disentangle accounts (Falkingham & Namazie, 2002). Measuring income can be difficult for self or transitory labour work due to accounting issues and seasonal variations. In rural areas not fully integrated into markets, consumption measures can also be challenging to collect. An alternative approach is an asset based index<sup>6</sup> using variables that capture living standards, such as household ownership of durable assets, infrastructure and housing characteristics (material of walls, roofing, floor and access to water and sanitation) (Chuma & Molyneux, 2009; Vyas & Kumaranayake,

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<sup>&</sup>lt;sup>6</sup> An index is different from a scale. An index consists of cause indicators which are believed to be caused by some underlying construct (e.g., poverty). The term *index* is used when there are a set of items which determine the level of the construct (DeVellis, 2003).

2006). Ownership of durable assets however does not always capture the quality of assets (Falkingham & Namazie, 2002). Other indicators of wealth can include the years of education of the household head and access to social or socio-political capital, such as membership of village committees or government structures.

Initially a wide range of assets were considered for inclusion in the wealth index. These included the level of education of the household head, access to sociopolitical assets and the number of months of secure rice (questions 2.8, 2.9, 2.15 in Phases 1 and 2, Appendix 7) but resource constraints, research purpose, context, a decision to focus on developing the livelihood asset scale and in consultation with the reference groups it was decided to use a short set of commonly used indicators (questions 2.10, 2.11, 2.13, 2.17 in Phases 1 and 2, Appendix 7 and 3.8, 3.9, 3.10, 3.11. 3.13 in Phase3, Appendix 8). These items were based on accepted indicators of housing materials (walls, roofing and floor) and access to water and sanitation using accepted context-specific groupings for water and sanitation (Sricharoena & Buchenriederb, 2005). This was appropriate as at both sites most households had limited durable assets and had rudimentary sanitation facilities and housing material. As with other types of asset indices, these indicators are not exact measures of wealth, but provide a good indicator of relative wealth and living standards.

### 3.12.4 Translation

For each site the quantitative questionnaire and scale were translated into the relevant language by two independent native speakers. Each translation was compared with the other and with the English version, discrepancies were discussed and a consensus reached, and the two versions were synthesised into one. A second language review was undertaken with the local reference group to ensure that the language and terms were localised and appropriate for the target population. The final instrument was back translated into English, one by a native English speaker with Lao as a second language. The final Kurdish version was translated by a native Kurdish speaker from the research site with a post-graduate degree from Australia. These translators were asked to provide a translation of what each item said, not an interpretation in order to capture literal meaning (Eremenco, Cella, & Arnold, 2005).

Despite these processes, it was difficult to obtain a consensus on which words to use so that the same questions could be asked of all respondents. There were also some discrepancies in the back-translated versions. This is also likely to be due to the differences in language at the local level, where people have less education. Finalising the local language version involved moving back and forth between the qualitative data and the local reference group with an on-going process of translation until consensus were reached.

The training of enumerators emphasised the need to ask each question as written. However, during the administration of the instrument the unnatural dialogue structure of the questionnaire in predominantly oral societies meant that the interviews often developed into a more natural conversational style with a negotiation of meaning. In Phase 3 there were two additional challenges. As questions had been adapted to use local terms and ways of speaking, this was not always easy for the enumerators. For example, one question asks respondents, 'Kee yuu sai?" (Where do you shit?). At the start of the survey, enumerators tended to prefer to ask the more polite 'Chow pai hangman yuu sai?' (Where do you go to the toilet?). Another example is 'huen', a word borrowed from Thai that means 'house' to make a distinction between the Lao 'baan' which means 'village' or 'house'. While often used in the city it is unusual to hear 'huen' in rural Lao PDR. Another issue in Phase 3 was that not all respondents spoke Lao. In these cases local translators were recruited and trained. As these local languages are not codified or written, and the Lao speaking enumerators could not understand the local dialect, ensuring standardisation was problematic. To help address this, the researcher, coresearcher and the supervisors met every evening to discuss any language issues which had arisen with their team. In addition, throughout each day, the researcher and co-researcher moved between teams, monitoring and addressing any issues the enumerators or translators experienced.

These measures helped to minimise the potential effect of not asking standardised questions. Nevertheless, in quantitative studies language is seen as essentially neutral with the aim to write items which will reduce bias (Hennink, 2008). This also includes a focus on semantic equivalence. The purpose of language is to capture responses; language itself is not of interest in the construction of meaning. Conversely, in qualitative work, language is crucial in the creation of

meaning and central to developing understanding (Hennink, 2008). In many of the interviews meaning was co-constructed between the interviewer and the interviewee.

### 3.12.5 Data Analysis

IBM SPSS 19 was used for descriptive and inferential statistics. After cleaning and checking the data the responses on the wealth index were aggregated to differentiate socio-economic levels. A common method is to apply principal component analysis (PCA) and then group households into pre-determined categories, such as very poor, poor or not poor or quintiles, reflecting different socio-economic status levels (Vyas & Kumaranayake, 2006). This was the method followed in this research.

Principle component analysis describes the variation of a set of multivariate data in terms of a set of uncorrelated linear combinations of variables (questions 2.10, 2.11. 2.1, 2.13, 2.17 in Phases 1 and 2, Appendix 7 and 3.8, 3.9, 3.10, 3.11. 3.13 in Phase 3, Appendix 8). Each consecutive linear combination is derived to explain as much as possible of the variation in the data, while being uncorrelated with other linear combinations (Chuma & Molyneux, 2009; Vyas & Kumaranayake, 2006). Using the factor scores from the first principal component, socio-economic categorisation was obtained by ranking, then classifying households within the distribution into various groupings. The cut offs are the classification of the lowest 40% of households into 'poor', the highest 20% as 'not poor' and the rest as the 'middle' group (Vyas & Kumaranayake, 2006). Thus the derived indices are relative measures of socio-economic status. This means in each research site they rank household wealth between households within the site and are not measures of absolute poverty (Sricharoena & Buchenriederb, 2005).

The outcome variables were derived from the livelihood asset scale and subscales (human, social, physical, finance). The categorical data was converted into interval data when entered into RUMM2030 for Rasch measurement (Pallant, 2007). Cases who had missed or answered 'not applicable' to more than two items on a scale were excluded from the analysis of that scale. Prior to undertaking any tests the underlying assumptions were checked and appropriate parametric and non-parametric tests were selected. Where normality tests (Kolmogorov-Smirnov and Shapiro-Wilk tests) showed a significant *p* value (>.05), the Normal Q-Q plot and Detrended Normal Plot were inspected to inform decision making as to whether to

use parametric or non-parametric tests, as tests for normality can be sensitive to samples over 200 (Pallant, 2007; Tabachnick & Fidell, 2007). Where the tests and/or the Normal Q-Q plot and Detrended Normal Plot suggested normality, parametric tests were used if all other assumptions were met (Tabachnick & Fidell, 2007). Where there was little difference between the trimmed mean and the mean, outliers were retained (Pallant, 2007).

After checking assumptions, regression analysis was used to identify which of these demographics and other independent variables were significantly associated with the questionnaire score. Results are reported as regression coefficients, their 95% confidence intervals and *p*-values. A *p*-value < .05 was taken to indicate a statistically significant association. The clustered nature of the data was taken into account during analysis using the bootstrapping technique in IBM SPSS 19, based on 1,000 samples. Weighted average scores were not calculated due to the use of PPS (Kaiser et al., 2006). The primary objective of the analysis was to identify any correlations between demographic and other descriptive variables with the final score (obtained from the livelihood scale). Non-parametric correlation coefficients (Spearman *rho*) were used to assess the relationship between the four sub-scales.

### 3.12.6 Limitations

A limitation of the quantitative questionnaire and livelihood asset scale in the context of resource-poor rural populations was the ability of the enumerators to select appropriate responses given the forced choice format. A forced-choice format was used for ease but when asked for example, about agricultural yields, respondents rarely talked in terms of standard measurements such as kilograms or tons, but about bags or sacks. These may vary in size depending on location. Ideally, the variables should also be resilient to seasonal trends. In this context where most respondents have very low education levels and livelihoods are evolving to integrate a cash economy with few accurate records, there is the potential for recall bias due to seasonal variations (Lindenburg, 2002). Further, in this more structured context, respondents were reluctant to share information about land, yields, income, expenditure and debt. This might be partly due to the more formal nature of a structured questionnaire, as well as to low education levels, the seasonal nature of cash income and an unwillingness to be too specific about income.

# 3.13 Chapter Summary

In summary, the research design is a mixed methods cross-sectional survey across three different but inter-related cases. The outcome measure was derived from the livelihood asset scale which was developed and validated concurrent to the survey. Chapter 4 describes scale development and validation theory before outlining how the scale was developed and validated in each phase of this research.

# **CHAPTER 4**

# **Scale Development and Validation**

This chapter addresses the third objective. It begins by outlining two of the main theoretical perspectives related to scale development that informed this research; classical measurement theory (CMT) and Rasch measurement. This chapter also describes the validation methods used in this research. Aspects of CMT were used in the first two research sites, and due to the limitations of CMT, Rasch measurement was used in the third site of inquiry. Following standard protocols (Pallant & Tennant, 2007) where a scale is used as part of a survey instrument, the results of the validity testing are also presented.

#### 4.1 Scale Definition

A scale consists of multiple items that measure one concept or an aspect of people for example access to social assets or subjective well-being. Responses are typically averaged across a set of item responses, providing a more valid measure than a single question and allowing more rigorous statistical analysis (Bowling, 2002). The use of scales is particularly pertinent when unlike demographic characteristics and/or objective measures (such as the number of calories of food consumed). In such cases the researcher cannot directly observe or measure the constructs of interest which in this research is changes in access to livelihood assets. The magnitude of these 'latent variables' cannot be quantified directly so a researcher needs to estimate the variables from scores on a scale designed to measure the construct (de Vaus, 1995; DeVellis, 2003; Ferguson, Tandon, Gakidou, & Murray, 2002; Streiner & Norman, 2008).

The availability of livelihood assets for example the presence of a school is something that can be directly observed. However, access to livelihood assets cannot be directly measured. This is because access is socially constructed, based not just on the availability of assets, but also the subjective ability to access them (Ellis, 2000; Kanbur & Shaffer, 2007; Prowse, 2010; van Dijk, 2011). While a village may have a school for example, whether a child can attend the school is determined by social

constructs around class, gender, ethnicity, language, values, beliefs, aspirations and so forth. This theoretical understanding of the access dimension of assets is critical and has resulted in increased access in measuring access in order to link theoretical advances to the design and evaluation of programs (Webb et al., 2006). If a researcher wishes to measure access to different classes of assets a different measurement than a direct observation is required. Concepts such as access to assets are typically referred to in the literature as latent traits (DeVellis, 2003; Hobart & Cano, 2009).

A scale conceptualises the construct or latent trait of interest for example, access to social assets, as a quantitative variable. It reflects that the construct of interest can have a range of values from 'less' to 'more' (Bowling, 2002; Burns, 1996; de Vaus, 1995; DeVellis, 2003; Streiner & Norman, 2008). Scale items map out this idea with responses to the scale and are seen as indicators of the measure of the trait of interest. Each scale item represents a mark on a ruler defining a transitional point where a person moves from one point to another, for example, from 1 to 2 and so on (Hobart & Cano, 2009). Psychometric testing is used to evaluate the extent to which quantitative conceptualisation has been successfully (DeVellis, 2003, Hobart & Cano, 2009, Streiner & Norman, 2008)

### 4.2 Theoretical Perspectives of Scale Development

#### 4.2.1 Classical Measurement Theory

Classical measurement theory (CMT) assumes the latent variable (for example, well-being) is the cause of an individual's response to scale items. Responses to the individual scale items are used to infer the 'true score' of the individual on the construct of interest, as if it had been possible to measure the attribute directly. The true score is the person's real, unobservable score. However, this is unobservable due to the error score. Classical measurement theory asserts that the observed score is the sum of the true score and the error score and that the relationship between the true score and the error score is additive (DeVellis, 2003; Hobart & Cano, 2009).

The assumption of a causal relationship between the latent variable and the scale designed to measure it has a number of empirical implications which are fundamental to CMT. First, the assumption that the latent variable 'causes' responses to a scale item means that these two components should be correlated, that is, the

'true score' (on the latent variable, for example access to social assets) and the item value, for example each item or question which is used to measure the latent variable, should correlate (DeVellis, 2003). However, as the true score cannot be directly measured, it is not possible to compute a correlation between the hypothetical true score and the observed item score (DeVellis, 2003; Hobart & Cano, 2009).

The theory assumes that when there are a number of items in the scale, all tapping the same underlying latent variable, the correlation between the true score and the observed score can be estimated. Information about the correlation between each of the scale items makes it possible to infer (using statistical assumptions) the degree to which the set of items is related to the underlying latent variable. This relationship between scale items and the latent variable forms the basis for understanding the reliability of a scale (DeVellis, 2003; Streiner & Norman, 2008). Typically, CMT uses factor analytical techniques to identify the underlying dimensions of a data set and reliability statistics such as Cronbach's coefficient alpha (DeVellis, 2003).

For several decades, CMT was the principal method used to develop scales. Nevertheless, it has a number of inherent difficulties. For example, the true score and the error score cannot be determined – they are theoretical variables (Hobart & Cano, 2009). This is because of the associated measurement error – the error score, thus the true score is a theoretical value. Further, as assumptions cannot be tested, the model can be widely applied with the possibility of inadequate conclusions (Hobart & Cano, 2009). Additionally, scale items with sequential ordered response categories provide ordinal level data; CMT however, assumes that the 'distance' between response categories is consistent within and across items. For example, CMT assumes that the distance between 'not at all' and 'a little' is the same as the distance between 'quite a bit' and 'extremely'. It assumes the data is interval data and parametric tests can be used. However, this assumption cannot be tested in CMT (Hobart & Cano, 2009; Pallant & Tennant, 2007). Further, although ordinal score and intervalised measurement may be highly correlated, it does not mean that ordinal scores approximate interval measures (Hobart & Cano, 2009; Pallant & Tennant, 2007). Additionally, as results are sample dependent the adequacy of items is evaluated based only on the sample in which they are explored (Hobart & Cano,

2009). The management of missing observations is also problematic and can severely reduce the sample size. While imputation methods, (that is, where missing data are assigned a value), can be used to replace missing observations, such methods are based on assumptions that cannot be tested (for example, how a person would have answered a survey question), and assume that all items have the same level of difficulty (Hobart & Cano, 2009; Parr, et al., 2007).

#### 4.2.2 Rasch Measurement

Another theoretical perspective which addresses some of the limitations of CMT is the Rasch measurement (Rasch, 1960). Rasch measurement is part of the relatively recent item response theory family of methods (DeVellis, 2003; Hobart & Cano, 2009; Pallant & Tennant, 2007; Streiner & Norman, 2008). It is based on mathematical models which explain the observed rating scale data using a probabilistic form of Guttman scaling; a deterministic pattern that expects a strict hierarchical ordering of items (Guttman, 1950). These methods can be used with dichotomous (Rasch, 1960) and polytomous response categories (Andrich, 1978).

The model assumes that the probability of a given respondent affirming an item is a logistic function of the relative distance between the item location and the respondent location on a linear scale. That is, the probability that a person will affirm an item is a logistic function of the difference between the person's level of the trait or construct being measured and the level of the trait or construct being expressed by the item and only a function of that difference (Hobart & Cano, 2009; Pallant & Tennant, 2007). It is useful when measures of asset availability alone are inadequate and should be augmented by measures of the "access" dimension of assets availability (Frongillo & Nanama, 2006). As with concepts such as anxiety and quality of life, access cannot be measured or observed directly. These subjective or experiential concepts which cannot be observed are typically referred to in the rating scale literature as latent traits. In Bangladesh, Rasch measurement was used to validate a scale measuring the construct of access to food insecurity (Frongillo & Nanama, 2006). Rasch takes into consideration, which items were answered positively and which ones were answered negatively. It uses the difficulty and discrimination parameters of the items when estimating trait levels. Persons with the same summed score but different response patterns may have different Rasch

estimated latent scores. One person may answer more of the highly discriminating and difficult items and receive a higher latent score than one who answers the same number of items with low discrimination or difficulty. Fitting data to the Rasch model places both item and person parameter estimates on the same log-odds units (logit) scale, giving the linear transformation of the raw score. Statistics indicating fit to the model assess the extent to which the observed data match that expected by the model rather than models being developed to match the data (Hobart & Cano, 2009; Pallant & Tennant, 2007).

The Rasch model provides a sophisticated approach to addressing several key methodological aspects associated with scale development and construct validation. Data collected from questionnaires, which include items for a new scale that are intended to be summated into an overall score, are tested against the expectations of the measurement model. Rasch can be used to assess a number of methodological issues in scale validations such as category ordering (Do the response categories work as expected?) and item bias or differential item functioning (DIF) (Do items share the same meaning across different groups?) (Pallant & Tennant, 2007). Ideally, demographic characteristics should not affect the response, which should be affected only by the latent variable, the level of change and measurement error. Where such factors do affect the response, even after controlling the score of the variable being measured, an item is said to have DIF (Pallant & Tennant, 2007). Another important concept is unidimensionality, which addresses the question of 'Do the items address the same underlying latent trait? (DeVellis, 2003; Streiner & Norman, 2008). The Rasch model assumes unidimensionality, but this can be further tested through factor analytic techniques (Pallant & Tennant, 2007).

Other advantages of Rasch measurement include the ability to produce more stable estimates of person and item properties when there are a small number of respondents or when extremely non-representative samples are used. In addition, it can be used when the population distribution over the underlying trait is heavily skewed. Further, where the data fits the model, a linear transformation of the raw ordinal score is obtained, thus allowing (assuming other assumptions are met) the use of parametric approaches. It also provides a method for missing items or 'not applicable' data to be handled scientifically, rather than on the basis of assumption by computing an estimate from available data and the mathematical model (Bond &

Fox, 2007; Hobart & Cano, 2009). Where there is a misfit between the model and the data, the data is examined to understand the misfit. For example, where a response pattern across items is inconsistent, the case is considered a misfit and the cause would be explored qualitatively.

In this research, Cronbach's coefficient alpha was used in Phases 1 and 2 to assess internal consistency. Factor analysis was considered to explore unidimensionality but, given the categorical nature of the data, was discarded. Given the advantages of Rasch measurement over CMT, Rasch measurement was selected for Phase 3. Subsequently, Rasch fit statistics were generated for the scale data from Phases 1 and 2.

### 4.2.3 Validity

In the context of scale evaluation, validity refers to whether the instrument measures what it is supposed to measure (Bowling, 2002; de Vaus, 1995; Streiner & Norman, 2008). Within the scale development literature, there are three main types of validity.

Content validity: Content validity refers to the adequacy with which a measure or scale has been sampled from the intended universe of content (Gable & Wolf, 1993). This is largely determined by clearly defining and operationalising the construct of interest and is judged on qualitative grounds, for example by an expert reference group (de Vaus, 1995; Gable & Wolf, 1993). In each case, content validity was sought through the reference groups, from the mine action (MA) literature and the qualitative data obtained from participants. These sources of data were privileged over the broader livelihoods literature as the intent was to develop a livelihood asset scale specifically for MA programs. This means the scales have good face validity in the context of mine action programs, but may not be as valid in other contexts (DeVellis, 2003).

Construct validity: Construct validation involves testing a scale, not against one single criterion, but in terms of a range of results. It cannot be proven, but is an on-going process of demonstrating that the scale performs in a way that is consistent with its conceptual definition. In CMT evidence to support unidimensionality usually comes from factor analysis. Factor analysis derives a mathematical model based on variables in the set form of coherent subsets that are relatively independent of one another (Field, 2009). Variables that are correlated with one another but are largely

independent of other sets of variables are combined into factors which relate to the same underlying construct (Field, 2009).

In Rasch measurement unidimensionality is assumed if the data fits the Rasch model (Pallant & Tennant, 2007). Further evidence to support construct validity can be derived from inspection of the category ordering (if the category responses of an item work as expected), item bias, DIF and principal component analysis (Bond & Fox, 2007; DeVellis, 2003; Hobart & Cano, 2009; Pallant & Tennant, 2007). Principal component analysis is concerned with linear components of the original variables and how a particular variable contributes to that component (Field, 2009).

While still in its nascent stages the literature also provides examples of mixing psychometric testing and qualitative data to evaluate scales to strengthen validity (Coates, Wilde, Webb, Rogers, & Houser, 2006; Frongillo & Nanama, 2006; Onwuegbuzie et al., 2010; Reeve et al., 2011; Willis & Miller, 2011). For example, Coates et al. (2006) used Rasch measurement and qualitative data to evaluate a food insecurity scale for Bangladesh. Reeve et al. (2011) used psychometric testing and qualitative analysis to evaluate the 'Everyday Discrimination' scale.

In this research evidence to support construct validity was obtained from Rasch measurement. Following Pallant and Tennant (2007), fit of data to the Rasch model was deemed acceptable if the following criteria were fulfilled: 1) both total chi-square probability and individual item chi-square probability non-significant (5% alpha with Bonferroni correction), to show non-deviation from model expectations; 2) individual item fit residual was within  $\pm 2.5$  (represents 99% confidence limits to account for multiple testing; 3) Standard Deviation (SD) of both item fit residual and person fit residual were approaching 1; and 4) unidimensionality supported by an independent t-test examining the difference between two sets of person estimates on a person by person basis.

Rasch measurement was selected over more traditional psychometric methods from CMT for several reasons. First, the data violated the assumption of the normally distributed error variance required by traditional methods. Second, the data was categorical breaking an assumption of factor analysis that the set of items are measuring a single continuous latent variable. Third, in Phase 3, due to the nature of livelihoods, for some items respondents selected the 'not applicable' option. Rasch measurement was considered advantageous in this case as it allows for the 'not applicable' option

to be handled scientifically (Pallant & Tennant, 2007). The ability to test for DIF was also important, as the intent was to use the livelihood asset scale across different ethno-linguistic groups. Finally, the ability to convert the data to interval data allowed the use of the more rigorous parametric tools in testing associations and comparing mean scores between groups.

Criterion-related validity: Criterion-related validity (also known as predictive validity) is a concern with the relationship that exists between scale scores and some specified, measurable criterion. This type of validity is typically used to assess scales which are to be utilised in an applied setting to predict some future behaviour (for example, success at university). It is often difficult however to choose an appropriate criterion. For many constructs, such as access to livelihood assets, criteria suitable for measuring scales are not available (P. Kline, 1993). In this instance other forms of validation evidence testing may be more appropriate, for example, construct validity.

It was not possible to test for criterion-related validity, because there was no previously validated tool to evaluate self-reported access to assets. In this research, the use of qualitative data in all stages of the scale development helped ensure instrument fidelity and overcome the lack of a validated tool.

#### 4.2.4 Reliability

Psychometrically the term reliability has two different meanings referring to:

- 1. The scale's internal consistency
- 2. Its stability over time (test-retest reliability or temporal stability)

Internal consistency is concerned with the homogeneity of the items that make up the scale. It is not the same as dimensionality, that is, if all the items are tapping into the same latent trait (Field, 2009). In CMT Cronbach's coefficient alpha ( $\alpha$ ) is the most commonly used index of internal consistency in terms of the item variances and covariances derived from a single occasion of measurement. Alpha ( $\alpha$ ) can range from 0 to 1, with higher values indicating higher levels of internal consistency and are dependent on both the average correlation among the items and also the number of items included in the scale (de Vaus, 1995; DeVellis, 2003; Kline, 1993). DeVellis (2003) suggested the following interpretation of alpha ( $\alpha$ ) values shown in Figure 4. The interpretation in Figure 4 is commonly quoted and is considered appropriate for

cognitive tests such as .8 - .9 for intelligence tests while .70 is generally acceptable for ability tests (Kline, 1999). Where there is diversity in the constructs being measured, values below .07 can be expected (Kline, 1999). Caution is also needed in interpreting alpha ( $\alpha$ ) as the value depends on the number of items in the scale (Field, 2009). Alpha ( $\alpha$ ) increases based on the number of items in scale so where there are a large number of items a large alpha ( $\alpha$ ) value may be observed even if the scale lacks internal consistency.

Alpha value	Interpretation
< .60	Unacceptable
.60 – .65	Undesirable
.65 – .70	Minimally acceptable
.70 – .80	Respectable
.80 – .90	Very good
> .90	Shortening the scale should be considered

Figure 4: Interpretation of Cronbach's Coefficient Alpha (a) Based on DeVellis (2003)

However, Cronbach's coefficient alpha ( $\alpha$ ) is not robust against missing data or 'not applicable' responses. Using Cronbach's coefficient alpha ( $\alpha$ ) could substantially reduce the sample size, as any cases that responded 'not applicable' to one item on the scale would be excluded from the analysis. Internal consistency in Rasch measurement is assessed based on the Person Separation Index (PSI). The PSI value is interpreted in the same way as Cronbach's coefficient alpha ( $\alpha$ ) in Figure 4 (Hobart & Cano, 2009; Pallant & Tennant, 2007). In Phases 1 and 2 Cronbach's coefficient alpha ( $\alpha$ ) was used to assess internal consistency. In Phase 3 Rasch measurement was used and subsequently Rasch analysis was undertaken on the scaled data obtained in Phases 1 and 2.

A scale's stability over time refers to the consistency of subjects' scores on repeated administrations of the instrument. Following the test/retest in Phases 1 and 2, given the categorical nature of the data, a Cohen's kappa ( $\kappa$ ) coefficient

measurement of agreement was used to evaluate temporal reliability with weighted kappa ( $\kappa$ ) used for the scaled questions. A kappa ( $\kappa$ ) measurement of agreement value of .60 - .79 was taken as substantial agreement and .40 to .60 as moderate agreement (Landis & Koch, 1997). In Phases 2 and 3, temporal reliability was not tested due to the lessons learned in the pilot. Temporal reliability should be tested once the scale has been tested for construct validity with a large sample.

Rasch measurement assumes unidimensionality but this was further tested through several additional procedures (Hobart & Cano, 2009; Pallant & Tennant, 2007). First, the researcher looked for evidence of local dependency. That is, where an answer to one question leads to the answer of another. Where a high residual correlation ( $\geq$  .3) was observed between a pair of items the items were noted as possibly being dependent. The next step was to run PCA on the residuals to identify two subsets of items which showed the most difference to one another on the first component. Following this, person estimates (location values) were generated for each of these sets of items. Paired t-tests were then used to see whether the number of people whose scores from set 1 and set 2 were statistically significant at p < .05%. Where more than 5% of cases were statistically significant, confidence intervals were calculated.

#### 4.3 Methods in Scale Development in the Research

Scale development and evaluation proceeded in three phases as outlined below. Sampling and data collection procedures were the same as detailed under the quantitative data collection processes in Chapter 3.

#### 4.3.1 Research Site 1: MAG Lao

In the initial phase of the livelihood asset scale development, the intent was to generate and pilot candidate items (possible items for inclusion in the scale). A sequential mixed methods design was used with the qualitative component preceding the quantitative component design and with candidate items generated from the qualitative data (Creswell, 2009; Onwuegbuzie et al., 2010). This is a typical design in this phase of scale development whereby one method (the qualitative described in part 1) informs the development of another method, and helps ensure content

validity, appropriate wording of items and improves instrument fidelity (Creswell, 2009; Onwuegbuzie et al., 2010).

# 4.3.2 Item Generation and Response Format

The livelihood assets were operationalised based on the literature and in consultation with the reference group (Table 3, p. 84). The qualitative data was then analysed as outlined in Chapter 3. From this analysis items were written for each of the five classes of livelihood assets (human, social, environment, physical, finance, natural). Where there was uncertainty as to where to place an item, the researcher referred back to Table 3, p. 84.

The items were reviewed by the international and local reference groups including the MAG Iraq program and checked with the MA literature, blending etic and emic perspectives and contributing to face validity (Creswell, 2009; Onwuegbuzie et al., 2010). This gave the items high face validity. The reference groups were asked for feedback to see what extent they felt the items were:

- 1. Related to the relevant livelihoods assets
- 2. Covered the range of likely changes to livelihood assets following MA
- 3. Appropriately worded for the target population
- 4. Comprehensible to the target population

The focus was the impact of MA programs which means that some areas discussed in the livelihoods literature, but not seen in the qualitative data or MA literature were excluded. For example access to producer goods and house condition, quality of land and membership of village or local government structures were excluded. Further, people spoke about their general health status and whether they were 'bor saibaii' (poor health) or 'saibaii' (healthy) but not in terms of specific morbidity and mortality indicators. For this reason an item was included about overall health compared to specific indicators. Similarly based on the qualitative interviews and discussions with the expert reference groups initially an item under finance included 'having the means and inclination to save and keep possessions'. In addition some of the questions such as 6.1 (How many children in your household are enrolled in school?), may not capture access. Children are often enrolled in school but unable to attend. In Phase 3, this item was reworded. The language was

checked with a small group with similar characteristics to the target group and with the local reference group for appropriateness.

The questions for the questionnaire were ordered based on the language used by program recipients in the qualitative data. Positively and negatively worded items were included to help ensure both low and high levels of the latent variable were tapped (Bowling, 2002, DeVellis, 2003). A total of 33 items were included. Each item had a five-point response format (*much better than before, better than before, the same, worse than before, a lot worse than before*).

## 4.4 Scale Validation and Reliability Testing

#### 4.4.1 Qualitative

Where items had high 'not applicable' response rates, low variance or indicated misfit to the model, the qualitative data was used to inform decision-making particularly in Phase 3. This was an iterative process, which moved between the qualitative/quantitative data.

## 4.4.2 Quantitative

All data was cleaned and entered first into IBM SPSS 19. In total, 5% of the questionnaires were independently checked for quality control purposes. Data cleaning followed standard protocols proposed by Pallant (2007). First each individual item was inspected to make sure there were no invalid values. In Phase 3 the purpose was also to identify any items with 10 - 20% 'not applicable' response rates and to examine the pattern and spread of responses across the response categories. Where approximately more than 10 - 20% of responses had 'not applicable', the item was highlighted for further exploration in the qualitative data. Cases who missed or responded 'not applicable' to two or more items in the search sub-scale were excluded from the analysis.

In Phase 1 temporal reliability was tested using Cohen's  $\kappa$  (kappa). The results are in Table 6. Based on the temporal reliability testing the initial 28-item scale was reduced to 15 items and the initial five point Likert scale was collapsed into three categories. Cronbach's coefficient alpha ( $\alpha$ ) was used to evaluate internal consistency (.60 in Phase 1, .77 in Phase 2). In the second site one item (how much do you worry about a member of your household having a landmine/UXO injury)

was removed from the analysis due to lack of variance. Subsequently, scale data for Phases 1 and 2 were entered into RUMM2030 and analysed (Andrich, Lyne, Sheridan, & Luo, 2010).

In Phase 3, Rasch analysis was used from the outset using RUMM2030 (Andrich et al., 2010). Cases with more than two items missing in the scale were deleted. Rasch measurement excludes cases with extreme scores. Rasch analysis followed established protocols (Pallant & Tennant, 2007). The partial credit model was used, the default in RUMM2030, supported by significant likelihood ratio tests for all scales. The fit to the model was determined by assessing at the level of statistical significance indicated by the item-trait interaction statistic reported as a chi-square. A significant chi-square was taken to suggest the hierarchical ordering of items varied across the trait, compromising the property of invariance (Pallant & Tennant, 2007; Ramp, Khan, Misajon, & Pallant, 2009; Shea, Tennant, & Pallant, 2009). Bonferroni corrections were applied to the chi-squared p value by dividing the number of items by .05) (Pallant & Tennant, 2007). The two other fit statistics inspected were the individual and item person fit statistics and Bonferroni corrections applied to take account of multiple testing (Bland & Altman, 1995). Where there was a misfit to the model and a residual mean for persons of over 2.5, indicating a misfit, the case was deleted to see if overall fit improved.

The appropriateness of the response scale was assessed by inspection of items for 'disordered thresholds'. The threshold defines the boundary between the response categories. Ordered thresholds show that the probability of a response in that category is larger than of any other single category. Disordered thresholds suggest that respondents have difficulty in discriminating between categories. That is, an individual located between category boundaries will not give that category the greatest probability of being observed (Pallant & Tennant, 2007). Internal consistency was assessed based on the PSI. Items were also examined for DIF for ethnicity examined through response residuals and inspection of the *p* value with Bonferroni correction (Bland & Altman 1995).

#### 4.5 Results

#### 4.5.1 Phase 1: MAG Lao

**Pilot Testing.** In Phase 1 in the MAG Lao program, the scale was first piloted with a small group of respondents, with characteristics similar to the target population, to check the wording, then pre-tested (N = 30). Based on qualitative data from the enumerators further revisions were made and the scale piloted again (N = 50). After a ten day interval the scale was administered to the same sample to test for temporal reliability using Cohen's  $\kappa$  (kappa) coefficient measurement of agreement with weighted  $\kappa$  (kappa) used for the scaled questions. A  $\kappa$  (kappa) measurement of agreement value of .60-.79 was taken as substantial agreement and .40 to .60 as moderate agreement (Landis & Koch, 1997). In addition, percentage agreement was used to evaluate reliability with percentage agreement of  $\geq$  80% taken to be acceptable. As seen in Table 6, many items had a low  $\kappa$  (kappa) measurement of agreement and low percentage agreement and were discarded.

Table 6: Results of the Test-Retest for Temporal Reliability of the Livelihood Asset Scale used in the Pilot Test in Phase 1

Variable	% Agreement	Kappa value <sup>a</sup>	<i>p</i> -value
6.1 Number of children enrolled in school	80.0	.37	0.04
6.2 Number of children going to school	90.0	.05	0.59
6.3 Feel about the future <sup>b</sup>	63.2	-	-
6.4 Amount of rice (staple)	71.0	10	0.71
6.5 Amount of food	77.5	.00	0.50
6.6 Poor health	67.5	.03	0.57
6.7 Time to do other things	92.5	.00	-
6.8 Pride for household	91.6	.03	0.598
6.9 Afraid of children having UXO/mine accidents	72.5	.14	0.218
6.10 Afraid about you having UXO/mine	61.4	.34	0.956
6.11 Afraid about other adults having UXO/mine accidents	58.3	.25	0.87

Variable	% Agreement	Kappa value <sup>a</sup>	<i>p</i> -value
Social (After clearance)			
6.12 Able to participate in weddings, social events/feeling part of the community	89.4	05	0.63
6.13 Amount visit friends and relatives	75.0	.16	0.81
6.14 Ability to support your family/household	73.6	.15	0.83
6.15 Ability to share produce (e.g. fruit, veg) with villagers/friends	45.0	.10	0.67
6.16 Opportunity to know information about market prices, new ideas, new farming methods, etc.,	55.0	.09	0.68
6.14 Ability to support your family/household	82.5	.06	0.30
Physical (After clearance)			
6.18 Access to school <sup>b</sup>	65.6	-	-
6.19 Access to clean drinking water <sup>b</sup>	67.4	-	-
6.20 Access to the market	85.0	.43	0.01
6.21 Road access all year <sup>b</sup>	69.3	-	-
6.22 Access to phone, electricity	70.0	.34	0.06
Finance( After clearance)			
6.23 Amount of produce your household can sell	60.0	.05	0.59
6.24 Ability to save money or invest	75.0	.02	0.54
6.25 Ability to keep belongings (e.g. no/less need to sell your belongings to pay	92.5	.50	0.00
6.26 Amount (number of times) you need to collect scrap metal to pay for an emergency	71.6	.14	0.82
Environment (After clearance)			
6.27 Amount of water your household has for farming/vegetable/ fruit gardens	87.5	.06	0.66
6.28 Amount of safe grazing land for animals is	90.0	.05	0.59

<sup>&</sup>lt;sup>a</sup>Cohen's  $\kappa$  (Kappa) Coefficient Measurement of Agreement (Weighted  $\kappa$ ) <sup>b</sup>Not possible to calculate a kappa value due to lack of variance

Collapsing items into a three-point response scale improved the percentage agreement of some items. The Kappa agreement however is still very low compared to the percentage agreement and needs further investigation. Based on the temporal reliability testing 13 items were discarded. The final scale consisted of a three-point forced choice response format with 15-item scale (Appendix 7) using a three-format response option (the situation is 'worse than before', 'the same', or 'better than before') was then administered (N = 491). The final questionnaire and scale for research sites 1 and 2 is in Appendix 7.

Validity and reliability: As a number of items were deleted during the temporal reliability testing, there were insufficient items for the scale to be considered as consisting of sub-scales related to the asset classes. For this reason the scale was analysed as a livelihood asset scale. No items or cases from the 15-items scale were removed for having unacceptable response rates.

First the scale was assessed using Cronbach's coefficient alpha ( $\alpha$ ) = .60. Deleting items would not have resulted in an alpha ( $\alpha$ ) value of more than .60. However, given the items are fairly diverse, covering a range of livelihood asset classes a low alpha ( $\alpha$ ) is not unusual (Kline, 1999). Inspection of the correlation matrix (Table 8.1 Appendix 8) showed 6 items with correlations above r = .3. Nine items demonstrated correlations below r = .3. No items correlated above the .57 level illustrating a number of items were measuring something different. It is also important to note however, that responses tended to cluster around the positive end of the response categories resulting in low variance – an important factor in internal consistency analysis. The number of items with correlations below r = .3 also indicated inadequacy for factor analysis and lack of unidimensionality (Pallant, 2007). For this reason and given the data was categorical data factor analysis was not undertaken.

Subsequently the scale was entered into RUMM2030. The livelihood asset scale fit to the model expectations as indicated by a non-significant item trait interaction total chi-square (p = < 0.01. Bonferroni correction 0.05/15 = 0.003). This is shown in Table 7, analysis 1. Despite the fit to the model statistics, the residual mean value for items was -0.85 with a SD 1.54, suggesting possible presence of misfitting items. Inspection of the individual item fit statistics showed one item (6.11 access to electricity/phone) with a high fit residual value of 4.27 but with a non-

significant p value (p = 0.55). This is illustrated in Table 8.2 in Appendix 8. There was evidence of misfitting persons with fit residuals of > 2.5. Removal of misfitting persons (n = 4) resulted in fit to the model expectations as indicated by a non-significant item trait interaction total chi-square (p = 0.02) but the residual mean value for items was -0.08 with a SD 1.47 still suggesting possible presence of misfitting items (analysis 2, Table 7). This was confirmed by inspection of the individual item fit statistics which showed 6.11 with a high fit residual value of 4.03, p = 0.6. Item 6.11 did not indicate disordered thresholds. Deleting item 6.11 resulted in an improvement in the item fit residual SD value (1.03) but not the overall fit to the model (Table 7, analysis 3).

Items 6.1 and 6.2 and items 6.14 and 6.15 indicated local dependency (fit residual > .3) on the 15-item scale (Table 8.3, Appendix 8). Inspection of the items with local dependency for content validity suggested removing items 6.1 as children may be enrolled in school but not attending. Item 6.15 was deemed to have less content validity than item 6.14 in a UXO environment where typically it is possible to safely walk over sub-surface UXO. Item 6.1 was deleted from the 15-dimension scale. This still resulted in substantial misfit to the model (Table 7, analysis 4).

Item 6.11 still showed evidence of misfit after removing item 6.1 (residual fit value = 3.975, Table 8.4, Appendix 8). Item 6.2 also showed evidence of misfit to the 14-item scale (residual fit value = 2.78, Table 8.4, Appendix 8). In this 14-item scale, items 6.14 and 6.15 still indicated local dependency (Table 8.5, Appendix 8). Deleting item 6.11 from this 14-item scale did not improve overall fit to the model statistics (Table 7, analysis 5) and items 6.14 and 6.15 indicated local dependency. There was no evidence of misfitting persons.

Deleting items 6.1 and 6.15 from the 15-item scale did not improve overall fit to the model (Table 7, analysis 6). No items showed local dependency but item 6.11 still showed evidence of misfit (residual fit = 4.18). Removing items 6.1, 6.11 and 6.15 still did not improve overall fit (Table 7, analysis 7). Thus the 15-item scale was retained. Principal components analysis was used on the 15-items scale to determine the two most different subsets of items — those which loaded positively and those which loaded negatively on the first component. It began with a correlation matrix representing the relationship between variables (Field, 2009). The linear components of the matrix were calculated by determining the eigenvalues of the matrix and were

used to calculate eigenvectors that provided the loading of a particular variable on the first component (Field, 2009). These were used to determine the two-subsets with the biggest difference (subset 1 = items 6.12, 6.7, 6.8 and 6.4; subset 2 = 6.15, 6.14. 6.11 and 6.1). Paired t-tests were then used to check whether the person estimates derived from the two subsets differed significantly (Pallant & Tennant, 2007). Despite the item 6.11 indicating a high fit residual value of 4.27 and items 6.1 and 6.2 showing local dependency, the number of significant observations on the social scale was 3.43% and thus below the required 5%, indicating unidimensionality. One disordered threshold was detected (item 6.6), and there was no DIF for sex or ethnicity. Given overall fit to the model the category responses for item 6.6 were retained.

Table 7 summarises the fit to the model statistics after each analysis and revision. It demonstrates that the initial 15-point scale showed the best fit to the model, despite some misfit observed in item 6.11 also indicated by the item fit residual of 1.49. The PSI was reasonable. Subsequent revisions including deleting items indicating misfit or local dependency failed to fit the Rasch model indicated by the significant chi-square probability and the item fit residual above or below the 1.

Table 7: Fit to the Model Statistics for each Analysis and Revision of the Livelihood Asset Scale Phase 1

Analysis	Scale	Items	Item residual		Down word	refson residual	Chi-Square	Interaction	Person separation
			Value	SD	Value	SD	%	p	
1	Original 15 items	15	-0.85	1.54	-0.35	1.35	50(30)	$0.01^{a}$	.58
2	Delete misfitting persons ( <i>n</i> = 4)	15	-0.08	1.47	-0.32	1.31	47(30)	0.02	.59
3	Item 6.11 removed	14	-0.26	1.03	-0.34	-1.32	60(28)	0.000	.59
4	Item 6.1 removed	14	-0.02	0.71	-0.35	1.34	65(28)	0.000	.58
5	Items 6.1, 6.11 removed	13	-0.24	1.37	-0.38	1.35	69(26)	0.000	.58
6	Items 6.1, 6.15 removed	13	-0.02	2.10	-0.33	1.32	74(926	0.000	.57
7	Items 6.1, 6.11, 6.15 removed	12	-0.30	1.52	0.48	1.33	105(24)	0.000	.58

<sup>&</sup>lt;sup>a</sup> Bonferroni correction = .05/15 = .003

## 4.5.2 Phase 2: MAG Iraq

In Phase 2 the same 15-item scale was administered to participants (N = 452) in Kurdish Iraq and concurrent qualitative data was collected. The translated scale was first administered to a small group to check for language acceptability. It was then administered and re-administered (N = 30, respectively) after a ten day interval to the same sample to test for temporal reliability. All items except for item 6.3 had a good to moderate  $\kappa$  (kappa) or percentage agreement and were retained. Table 8 shows the test-retest results. Items 6.3 was slightly reworded and retained to be consistent with the scale administered in Phase 1.

Table 8: Results of the Test-Retest for Temporal Reliability of the Livelihood Asset Scale used in the Pilot Test in Phase 2, Research Site 2

Vari	able <sup>a</sup>	% Agreement	Kappa <sup>b</sup> value	<i>p</i> -value
6.1	Children in enrolled in school	73.08	.00	0.50
6.2	Children miss school due to poor heath	69.23	.05	0.66
6.3	Food variety	51.28	.00	0.47
6.4	Time	61.54	.22	0.07
6.5	Pride	70.51	.02	0.43
6.6	Worry children	87.18	.04	0.63
6.7	Participate, part of the community	67.11	.15	0.87
6.8	Visit friends	62.11	.06	0.69
6.9	Access district hospital	53.85	.20	0.90
6.10	Access market	58.97	.07	0.30
6.11	Access phone, electricity	91.67	.00	<0.000-
6.12	Ability to save money or invest	82.05	.35	< 0.000
6.13	Ability to keep belongings	92.31	.69	<.001
6.14	Water farming/vegetable/fruit gardens	75.64	.01	0.39
6.15	Safe grazing land for animals	81.58	.14	0.85

<sup>&</sup>lt;sup>a</sup>For full text refer to Appendix 7

The Kappa agreement is very low compared to the percentage agreement and needs further investigation.

Validity and reliability: In Phase 2, as in Phase 1, the scale was analysed as a livelihood asset scale. No cases were excluded for having unacceptable response rates. However, many respondents noted that while their access to electricity had improved, they did not attribute this to demining. Item 6.11 was therefore excluded from the analysis. Item 6.6 (The amount of fear or worry you feel about children in

<sup>&</sup>lt;sup>b</sup>Cohen's κ (Kappa) Coefficient Measurement of Agreement (Weighted κ)

your household having UXO/mine accidents) was excluded due to the lack of variance. Thus 13 items were included in the test for internal consistency. First the scale was assessed using Cronbach's coefficient alpha ( $\alpha$ ) = .79 for the 13 item scale. Inspection of the correlation matrix showed some items correlated with other items at the above r = .7 level indicating redundancy (Table 8.6, Appendix 8) (Pallant, 2007). Items 6.1 and 6.2 were the most highly correlated (r = .901) and similar in meaning which almost certainly explains the high level of correlation. Items 6.7 and 6.8 were the two items under the social scale and items 6.9 and 6.10 under the physical scale with high levels of correlation. This suggests that possibly only one item in each of these domains was required.

Subsequently the scale was entered into RUMM2030. The 13-item livelihood asset scale demonstrated a lack of fit to the model expectations as indicated by a significant item trait interaction total chi-square (p = <.001, Bonferroni correction = .05/13 = .003) as shown in Table 9, analysis 1. There was evidence of two misfitting persons but removing these two cases did not improve overall fit. Disordered thresholds were not observed. The residual mean value for items was -1.20 with a SD 2.70, suggesting the presence of misfitting items. Inspection of the individual item fit statistics showed one item (6.4 the time you have to do other things) having a high fit residual value of 2.73 (p = <.001). A number of items had high negative fit residuals indicating that these items overfit the model. The item fit statistics are shown in Table 8.7 in Appendix 8. After removing item 6.4 the scale still demonstrated a lack of fit to the model expectations as indicated by a significant item trait interaction total chi-square (p = <.001, Table 9, analysis 2). The residual mean value for items was -1.57 with a SD 3.20, suggested the presence of a misfitting item. Inspection of the item fit statistics revealed a fit residual of 3.42 for item 6.3. Its removal did not improve the overall fit to the model (Table 9, analysis 3). One disordered threshold was detected, and there was no DIF for sex or ethnicity.

Inspection of the 13 item scale correlation matrix indicated local dependency (fit residual  $\geq$  3) between several items indicating a high level of redundancy (Table 8.8, Appendix 8), violating the assumption of local independence of the Rasch model. The items which demonstrated local dependency were: Items 6.3 and 6.4, 6.5 and 6.7, 6.7 and 6.8, 6.9 and 6.10 and 6.4 and 6.15. Overall the scale demonstrated some internal consistency based on Cronbach's alpha ( $\alpha$ ) and the PSI, but lacks

unidimensionality demonstrated by poor fit to the model. As Feldt and Qualls (1996) point out even when the unidimensionality assumption is violated; it is very common situation to obtain a very high alpha reliability coefficient. Table 9 summarises the fit to the model statistics after each analysis and revision. It demonstrates that even after deleting items indicating misfit or local dependency the data failed to fit the Rasch model demonstrated by a significant chi-square probability and a high item fit residual. Based on the above no additional test for unidimensionality was undertaken.

Table 9: Fit to the Model Statistics for Livelihood Asset Scale, Phase 2

Analysis	Scale		Item residual	Person residual	Chi-Square Interaction	Person separation
			Value SD	Value SD	% p	
1	Whole scale	13	-1.20 2.70	-0.28 0.66	442(78) 0.000	.75
2	Item 6.4 removed	12	-1.28 2.78	-0.78 0.63	378(72) 0.000	.75
3	Items 6.3, 6.4 removed	11	-1.57 3.02	-0.30 0.60	344(55) 0.000	.75

#### 4.5.3 Phase 3: National Regulatory Authority, Lao PDR

Following an evaluation of the first two phases, an additional phase was added to the research design to allow further development of the scale based on the evaluation of Phase 1. In Phase 1 following pre-post testing with a small sample a number of items were discarded, reducing content validity. To achieve objective 3 therefore, Phase 3 was added to the research. In this phase additional items were included to the 15-item scale administered in Phases 1 and 2. These items came from the qualitative data collection in Phase 1 and were similar to the initial 28 items drafted in Phase 1.

The operationalisation of assets (Table 3, p. 63) was used to check which items were placed under which asset class. This was particularly helpful when the most appropriate asset class was not clear. For example, Item H2 in Appendix 8 ('How confident do you feel about your household's ability to meet its food needs?') was

placed on the human scale. Item P8 was categorised as a physical item as it was conceptualised as a physical infrastructure. Another example is item F10 (How has the number of traders coming to your village to buy your household's produce changed?). This was categorised under finance as this was reported as an important source of income for respondents and where traders came into the village they were also able to secure better prices for their produce. It could be considered an indirect indicator of improved road access and placed under the physical scale. The finance scale consisted of a number of items which made up the financial class of assets, rather than a direct question about access to cash income. This was asked in question 7.2 (How has your income changed per month since clearance and the new resource from the cleared land?'). Qualitative decisions were made regarding reasonable recall time. For example item H3 'How often in one month have adults in your household not been able to work (farm or sell labour) for two days or more because of illness?

In this revised scale a four-point response format was used with the additional option of 'not applicable' (N = 994). A four-point rather than a three-point or five-point scale was selected to prevent a clustering around the mean as observed in the first and second sites. Additionally, four point scales have been shown to be most effective in resource poor locations with low educational attainments (Samman, 2007). In discussion with enumerators in the pilot testing and with the co-researcher, given the forced-choice response format, the additional option of 'not applicable' was added to account for the diversity of livelihoods. Items which were not raised by respondents in the qualitative data, for example, items related to quality of land and membership of village or local government structures, were not included in the scale. The questionnaire and scale for Phase 3 is in Appendix 9.

In Phase 3, following field administration of the survey in the first district (Nong district), minor revisions were made based on the evaluation and feedback from the enumerators. Items were pre-coded, closed items with no double-barrelled questions, with each item consisting of a stem question and a series of response options. To obtain the Rasch measurement properties items should have equal discriminatory power across all items. That is, each item is equally related to the underlying trait being measured. Further, indicators are self-reported, subjective measures of change. This makes assigning weights problematic and inherently value laden as the worth placed on items is underpinned by individual and collective

values. All items therefore were considered equal indicators of the construct of interest. For each item, respondents were asked to rate how much impact or change the program intervention has had on (item under domain) the situation, from 'a lot worse than before' through to 'much improved'. Demographic questions and items related to landmine/ERW and UXO clearance were also included.

In Nong district where the scale was first tested, where items did not fit the model, and had high 'not applicable' responses or indicated local dependency, the items were retained with some revisions to the language to improve clarity. The exception was F9 and F11, which had very high 'non-applicable' rate (75% and 70%) and were exclude from the analysis. Subsequently where items had a 'not applicable' response rate of over 20%, they were reviewed qualitatively and quantitatively. Ten items seen in Table 10 (S3, P2, P8, F8, F9, F11, H1, H3, H5, H10) had a 'not applicable' response rate of over 20%. Table 10 shows whether these items were retained or excluded from the final solution and the basis for the decision. Frequency statistics suggested that the low response rate to P2 and H1 was due to the number of respondents without school-aged children. The final items included in the scale are in Appendix 11.

Table 10: Items Highlighted for Further Exploration in the Qualitative and Quantitative Data and the Basis for Inclusion or Exclusion

Scale	Item Description <sup>a</sup>	Included/ Excluded	Evidence to Support Decision
Social	S3 Share food with extended family members and friends when they required	Included	Not applicable to 24% of this sample but supported in qualitative data as common. Item did not demonstrate evidence of misfit to the Rasch model.
Physical	P2 Access to school	Included	Not applicable to 34.7% of this sample but strong support for inclusion from program and local district staff. Item did not demonstrate evidence of misfit to the Rasch model.

Scale	Item Description <sup>a</sup>	Included/ Excluded	<b>Evidence to Support Decision</b>
	P8 Access to irrigation	Excluded	Not applicable to 99% of this sample. Qualitative interviews with program staff highlighted there had been a specific project to support small-scale irrigation in ERW cleared areas in some of the villages included in the initial pilot. Livelihood experts also suggested the need for irrigation depends on location and livelihood system
Finance	F8 Access to livestock	Included	Not applicable to 34.7% of this sample but included based on qualitative data. Item did not demonstrate evidence of misfit to the Rasch model.
	F9 Selling possessions to cover an emergency	Excluded	Not applicable to 62% of this sample. Key informants indicate selling possession usually extreme coping strategy.
	F11 Borrowing money	Excluded	Not applicable to 64.6% of this sample. Key informants indicate rare in poorer households and may be both a distress and accumulative strategy. Not necessarily related to ERW.
Human	H1 School attendance	Included	Not applicable to 34.7% of this sample but strong support for inclusion from program and local district staff. Item did not demonstrate evidence of misfit to the Rasch model.
	H3 Unable to work for two days or more because of illness or tiredness	Excluded	Not applicable to 71% of this sample. Further supported in Nong district with local dependency observed with H5 (0.616) and little support in qualitative data
	H5 Able to hire other people to work; and time to do other (nonsubsistence) activities	Excluded	Not applicable to 39% of this sample, local dependency observed with H5 (fit residual = 0.616) in Nong district and with little support in qualitative data. Key informant interviews may be both a distress and accumulative strategy. Not necessarily related to ERW.
	H10 Concern for children having injuries	Excluded	Not applicable to 34.7% of this sample. Support for inclusion in qualitative data but indicated dependency with another item (fit residual 0.452) and removing H10 improved overall fit to Rasch model.

<sup>&</sup>lt;sup>a</sup>For full text refer to Appendix 9

## **Nong District**

**Social Scale:** The social asset scale demonstrated fit to the model expectations as indicated by a non-significant item trait interaction total chi-square (p = 0.007, Bonferroni adjustment = 0.007/5 = 0.001) (Table 11). There was no evidence of misfitting persons. The residual mean value for items was -1.17 with a SD 0.94, and did not suggest possible misfitting items, confirmed by the item fit residuals (Table 10.1, Appendix 10). To check for local dependency the person-tem correlation matrix was generated for the social sub-scale. Two items (S5 access to district and S6 access to market) indicated local dependency (0.61). This is shown in shown in Table 10.2 in Appendix 10. These items were marked for further exploration in Paksong and Pek districts, but were not deleted at this stage. No items showed misfit to the Rasch model. Evidence of disordered thresholds was observed for items S1, S2 and S7 indicating respondents had difficulty distinguishing between response options. Specifically, responses for the second category were inconsistent with those predicted by the model. At this stage the scoring was retained pending further testing in Paksong and Pek Districts. There was no DIF for sex or ethnicity.

Principal components analysis was the last step after all other diagnostic procedures had been completed and the fit to the model achieved. It provided a further confirmation of unidimensionality. It began with a correlation matrix representing the relationship between variables (Field, 2009). The linear components of the matrix were calculated by determining the eigenvalues of the matrix and were used to calculate eigenvectors that provided the loading of a particular variable on a particular factor (Field, 2009). The eigenvectors of each variable on the first component were used to determine the two-subsets with the biggest difference (Table 12). Paired t-tests were then used to check whether the person estimates derived from the two subsets differed significantly (Pallant & Tennant, 2007). Despite the two items (S5 and S6) showing local dependency the number of significant observations on the social scale was 5%, indicating unidimensionality supported by a non-significant total chi-square probability and item fit residual of almost 1. The SD of the There was no DIF for sex or ethnicity. Table 11 summarises the final solutions for the sub-scales in Nong District.

Table 11: Final Solutions for Livelihood Asset Sub-Scales, Nong District, Research Site 3

Scale	Items	Item residual		Item residual		Chi-Square	Chi-Square Interaction		Independent t-test %
		Value	SD	Value	SD	%	P		
Social	8	-1.17	0.94	2.11	1.54	49(28)	$0.007^{a}$	.69	4.44
Physical	7	-0.49	0.75	3.57	1.59	30(14)	0.007	.60	5.14 %, 95% CI 1.91-8.37
Finance	9	-0.14	0.52	2.17	1.42	27 (18)	0.073	.71	10%, CI 95% 6.98-13.02
Human	6	-0.20	0.46	-0.20	1.48	24(12)	0.017	.43	1.63

<sup>\*</sup>Bonferroni adjustment = 0.007/5 = 0.001

Table 12: The Loadings for the First Component of a Principal Component Analysis of the Item Residuals of the Social Scale Ordered to Show the Two Most Different Sub-sets

Subsets	Item <sup>a</sup>	PC1
Subset 1 <sup>b</sup>	S5 Go to the markets, local	0.90
	S6 Go to the district centre	0.88
	S2 Visit friends and relatives	-0.06
	S4 How much information	-0.31
Subset 2 <sup>b</sup>	S7 Part of village life	-0.40
	S3 How much food share villagers/ friends	-0.41
	S1 Social event	-0.53

<sup>&</sup>lt;sup>a</sup>For full text see Appendix 9

**Physical Scale:** The physical scale revealed fit to the model expectations as indicated by a non-significant item trait interaction total chi-square (p = 0.007,

<sup>&</sup>lt;sup>b</sup>Subsets of Items from which Locations were Derived for the Post-hoc t-test, Phase 3 Nong District

Bonferroni adjustment = 0.007/5 = 0.001) (Table 11). There was no evidence of misfitting persons. The residual mean value for items was -0.49 with a SD 0.75, and did not suggest possible misfitting items (Table 11). No local dependency of items was observed. This is shown in the person item correlation matrix in Table 10.4 in Appendix 10. No serious misfit was observed for persons. Four items showed disordered thresholds (P2, P3, P5, P7). At this stage in the development of the scale the response format was maintained. As a further test of unidimensionality factor loadings on the first component were used to determine the two subsets of items with the biggest difference. Paired *t*-tests were used to check whether person estimates derived from the two subsets differed significantly. Table 10.5 in Appendix 10 shows the two-sub sets used for the paired *t*-tests. The number of significant observations was 5.14% (95% *CI* 1.91-8.37), indicating dimensionality (Table 11).

Human Scale: The human assets scale demonstrated a good fit to the model but low PSI (Table 11). No individual items showed a misfit as indicated by there being no item fit residuals of > 2.5 as seen in Table 10.6 in Appendix 10 although the item fit residual was low SD = 0.46. No misfit was observed for persons. Inspection of the residual correlation matrix for evidence of local dependency (correlation residual ≥ 0.3) revealed two items on the human scale (H3 'Unable to work' and H5 'Able to hire other people to work') with high local dependency (0.61) shown in Table 10.7 in Appendix 10. At this stage in the testing these items (H3 and H5) were retained but slightly reworded for the Paksong and Pek districts. Only the first item produced an ordered threshold. The responses for the second category for the other items were inconsistent with that predicted by the model. At this stage the scoring was retained pending further testing in Paksong and Pek Districts. Paired t-tests were used to check whether person estimates derived from the two subsets differed significantly (Table 10.8, Appendix 10). The number of significant observations was 1.63% indicating dimensionality (Pallant & Tennant, 2007). There was no DIF for sex or ethnicity.

**Finance Scale:** The finance sub-scale showed a good fit to the model (Table 11) and no disordered thresholds. There were no misfitting persons. There were no misfitting items (fit residual = > 2.5) as seen in Table 10.9 in Appendix 10 but the individual item fit residual was low (SD = 0.52). Inspection of the correlation matrix Table 10.10 in Appendix 10 and factor loadings on the first component were used to

determine the two subsets of items with the greatest difference as shown in Table 10.11 in Appendix 10. Paired *t*-tests were used to check whether the person estimates derived from the two subsets differed significantly (Pallant & Tennant, 2007). The number of significant observations were 10%, but within the acceptable 95% *CI* (95% *CI* 6.98-13.02), indicating dimensionality (Pallant & Tennant, 2007). There was no DIF for sex or ethnicity. Table 11 shows that the finance, physical and human sub-scales aligned well with the Rasch model. The social scale showed poor fit to the model but indicated unidimensionality.

**Paksong and Pek Districts.** Items identified as potentially problematic in Nong were marked for further exploration and minor changes to wording were made before administration of the scale in the Paksong and Pek Districts.

**Social Scale:** Initial analysis of the eight item social scale revealed a good fit with the model as seen in Table 13. No misfit was observed for persons. No serious misfit was observed for items (fit residual +>2.5) in either district. This is shown in Table 10.12 in Appendix 10. As a result of the good fit to the model and no misfitting items all items were retained. Evidence of disordered thresholds was observed for items S4 and S8. Specifically, responses for the third and fourth categories were inconsistent with those predicted by the model, suggesting respondents had difficult discriminating between response options. Given the good fit to the model it was decided not to collapse categories. No items indicated local dependency (fit residual =>.3) as shown in Table 10.13 in Appendix 10. There was further support for the unidimensionality of the scale with independent t-tests, comparing person estimates from subtests identified using PCA of the residuals. The two most different subsets used to compare person estimates is in Table 10.14 in Appendix 10. The number of significant observations was less than 5% further providing evidence of unidimensionality. Given the above all items were retained.

Table 13: Final Solutions for Livelihood Asset Sub-Scales, Paksong and Pek Districts, Research Site 3

Scale	Items	Itom worldun	rem restaura	Dorson residual	r et son i estanat	Chi-Square Interaction		Person separation	Independent t-test %
		Value	SD	Value	SD	<b>%</b>	P		
Paksong									
Social	8	-0.15	0.94	-0.24	0.99	24(21)	0.441	.61	1.60
Physical	7	-0.12	0.84	-0.04	0.77	20(21)	0.490	.62	4.10
Finance	9	-0.55	0.93	-0.37	1.00	55(36)	0.17	.71	1.24
Human	9	-0.05	0.70	-0.23	0.70	27(18)	$0.07^{a}$	.47	6.94 95% CI 3.69-10.18
Pek									
Social	8	-0.79	1.30	-0.30	0.96	91(63)	0.01	.58	1.32
Physical	7	0.04	1.03	-0.16	0.80	49(38)	0.05	.54	1.92
Finance	9	-0.84	0.55	2.86	1.14	71(45)	$0.006^{a}$	.53	1
Human	9	-0.38	1.37	0.00	0.74	59(45)	0.07	.52	8.55% 95% CI 3.07-9.17

<sup>&</sup>lt;sup>a</sup>Bonferroni adjusted alpha value = 0.05/9 = 0.005

**Physical Scale:** The physical sub-scale showed a good fit to the model in both the Paksong and Pek Districts (Table 13) and five disordered thresholds in Paksong (P1, P2, P3, P5, P7). In the Pek district only one item (P6) did not have a disordered threshold. There were no misfitting persons or items or evidence of local dependency. Table 10.15 in Appendix 10 show the fit statistics for the items illustrating no misfitting items or local dependency as seen in the correlation matrix (Table 10.16, Appendix 10). For these reasons and good overall fit to the model, all items were retained. Factor loadings on the first component were used to determine the two subsets of items with the greatest difference. These two subsets are in Table 10.17 in Appendix 10. Paired *t*-tests were used to check whether person estimates

derived from the two subsets differed significantly. The number of significant observations were less than 5% but within the acceptable 95% *CI* (95% *CI* 6.98-13.02), indicating dimensionality (Table 13). There was no DIF for sex or ethnicity.

**Human Scale:** The human sub-scale in the Paksong District initially showed a poor fit to the model chi-square = (46 (20), p = 0.000; Bonferroni adjusted alpha level = 0.005 (0.05/10). One person showed a fit residual of 2.93 and was deleted. This improved the overall fit, but overall the model still does not fit the Rasch model, chi-square = (42(20), p = .002). Two items (H9 and H10) indicated local dependency (residual correlation = 0.446) as shown in Table 14. Deleting item H10 provided the best solution. The nine-item scale demonstrated good fit to the model in both districts (Table 13). Principal component analysis of the residuals of the remaining nine items and independent *t*-tests comparing person ability estimates on the two most contrasting item subsets supported unidimensionality. The two subsets used for the analysis are in Table 10.18 in Appendix 10. Table 10.19 in Appendix 10 shows the item fit residuals for the Paksong and Pek Districts for the nine-item scale showing no misfit to the model, thus all nine remaining items were retained. There was no DIF for the demographic variables of ethno-linguistic group and sex.

Table 14: Person-Item Correlation Matrix, Human Sub-Scale Showing Local Dependency Between H9 and H10, Phase 3 Paksong District

Item	H1	H2	H4	Н6	Н7	Н8	Н9	H10	H11	H12
H1	1									
H2	0.02	1								
H4	-0.08	-0.01	1							
Н6	0.09	-0.15	0.02	1						
H7	-0.29	-0.05	-0.12	-0.06	1					
H8	-0.18	-0.29	-0.12	-0.17	-0.01	1				
H9	-0.34	-0.32	-0.25	-0.32	-0.18	-0.02	1			
H10	-0.18	-0.10	-0.28	-0.27	-0.31	-0.09	$0.44^{a}$	1		
H11	-0.22	-0.29	-0.15	-0.20	-0.13	-0.04	0.13	-0.02	1	
H12	-0.01	-0.09	-0.24	-0.10	-0.21	-0.08	0.01	0.03	0.06	1

<sup>a</sup>Item shows local dependency (> .3)

**Finance Scale:** The finance sub-scale showed a good fit to the model (Table 13) and five disordered thresholds (F1, F5, F7, F, F9). There were no misfitting items. In Pek the *p* value was .006 but the Bonferroni adjusted alpha value was non-

significant (0.05/9 = 0.005). There was no evidence of extreme positive fit residuals. The residual mean value for items was -0.55, and a SD 0.93 in Paksong and did not suggest possible misfitting items. An inspection of the individual item fit statistics for Pek revealed no misfitting items as shown in Table 10.20 in Appendix 10. Inspection of the correlation matrices did not reveal any local dependency as shown in Table 10.21 in Appendix 10. For these reasons no items were deleted. A series of t-tests performed on the person estimates from two subsets of items identified from PCA analysis of the residuals of the two most different subsets (Table 10.22) revealed that only 1.24% in Paksong gave statistically significant t-values providing further support for unidimensionality. A PSI value of .71 indicated reasonable person reliability in the Paksong District. The PSI value of .53 in the Pek District was lower than expected. There was no DIF for sex or ethnicity. The final solutions for all the sub-scales in Paksong and Pek districts are in Table 13 and show good fit to the Rasch model evidenced by non-significant (5% alpha with Bonferroni correction) chi-square probability showing non-deviation from model expectations; 2) individual item fit residuals within the acceptable  $\pm 2.5$  range (representing 99% confidence limits to account for multiple testing; SD of item fit residuals approaching 1 although lower than expected in the finance sub-scale in Pek district (0.55); and with unidimensionality further supported by an independent t-tests examining the difference between two sets of person estimates on a person by person basis.

To examine whether all of the sub-scales were tapping into the same overall construct of livelihood, sub-scale analysis was undertaken using the Rasch model. This showed that the overall scale demonstrated a good fit to the Rasch model as shown in Table 15. This indicates that together the sub-scales provide a valid measure of access to livelihoods following landmine/UXO clearance as access to assets was conceptualised in this research. As this was a subset analysis with only four constructs, PCA and *t*-tests with the two subsets of items with the greatest difference on the first component was not possible.

Table 15: Fit-Statistics for Sub-scales on Livelihood Asset

Scale	Subsets	Item residual		Person residual		Chi-Square Interaction		Person	separation
		Value	SD	Value	SD	%	p		
Livelihood	4	0.22	0.71	-0.85	0.17	35(36)	0.048	.81	

## 4.6 Chapter Summary

This chapter has discussed theoretical perspectives in scale development and validation. It has outlined the processes undertaken to develop the scale in each of phases of this research. In Phase 1 the 15-item scale showed good fit to the Rasch model and indicated unidimensionality despite one item showing a fit residual value of more than the expected 2 value of 2.5. The Phase 2 the scale demonstrated reasonable internal consistency evidenced by the Cronbach's coefficient alpha ( $\alpha$ ) = .79 and a PSI value of .75. Nevertheless it demonstrated poor fit to the Rasch model and did not demonstrate unidimensionality. In Phase 3 the livelihood asset scale and its four sub-scales showed good fit to the Rasch model. The fact that the scale showed good fit to the model in Phases 1 and 3 is likely to be indicative of the qualitative research for the scale development undertaken in Lao PDR. Chapter 5 presents survey results from Phase 1.

## **CHAPTER 5**

**Survey Results: Phase 1** 

# 5.1 MAG Lao, Boulapha, Ngommalat and Mahaxay Districts, Khammouane Province

The purpose of this chapter is to present the reported household livelihood outcomes of landmine/unexploded ordnance (UXO) and other explosive remnants of war (ERW) clearance in Phase 1. To achieve this, the chapter uses using the qualitative data gathered through interviews and group meetings and the quantitative survey results. The findings are presented at a descriptive level with few comments. The chapter first provides an overview of the research site, including the mine action (MA) program, landmine/UXO and ERW contamination, poverty and development and expected outcome before presenting livelihood outcomes.

## 5.1.1 Overview: Poverty, Development and Livelihoods

The study site is very mountainous, especially along the Vietnamese border with most of the villages along or near the Xay Ban Fay River and Route 12 (see map in Appendix 1). Most of the population is of the Lao-Tai or Mon Khmer linguistic groups. In the quantitative survey 268 (54.6%) of the respondents were male and 223 (45.5%) were female. Most of the sample in the cross-sectional survey was of the Lao-Tai or Mon Khmer ethnic background and fell into two of the four official language groups. Quantitative survey respondent demographics are summarised in Table 16.

Table 16: Demographic Characteristics of the Survey Respondents, Research Site 1

D 11 111	N.T.	0./	95% CI	
Demographic variable	N	%	Lower	Upper
Gender ( $n=491$ , missing = 0)				
Female	268	54.5		
Male	223	45.5		
Ethnicity (n=486, missing = 5)				
Lao Tai	306	63	58.8	67.5
Mon Khmer	180	36	32.5	41.2
Livelihoods (n=491, missing = 0)				
Rice farmer	465	94.7	92.7	96.5
Livestock	6	1.2	0.4	2.2
Fishing	5	1	0.2	1.8
Unskilled labour	5	1	0.2	2.0
Skilled wage labour	1	0.2	0.0	0.6
Handicrafts	1.2		0.0	0.8
Small trade	3	0.6	0.0	1.4
Salaried	2	0.4	0.0	1.0
Vegetable gardening	1	0.2	0.0	0.6
Other	2	0.4	0.0	1.0
Wealth category				
Poorest	193	41.6	37.3	45.9
Middle	175	37.7	33.4	42.0
Wealthiest	96	20.7	17.0	24.4
Level of education				
No school	182	37.9	33.5	42.3
Primary	235	49	44.6	53.3
Some secondary level school	63	13.1	10.2	16.7
Number of months food insecure (n=482, missing = 9)				
>8	46	9.5	7.1	12.2
5-7	83	17.2	14.3	205
1-4	193	40	35.5	44.2
0	160	33.2	29.3	37.6

<sup>&</sup>lt;sup>a</sup>Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Prior to the war, people were mainly rice farmers with limited interaction outside of their immediate area, and most trade was based on a barter system. The population was low, fertility and mortality were high and land was plentiful. Until recently, the site was quite remote and economically marginal, although it is rapidly becoming more integrated. For example, when the researcher worked in the area in 2001, it took over two days from Vientiane to reach the district towns by four-wheel

drive, and many villages were another day's drive from the district centre. However, new roads and bridges have been constructed. Villagers talked about the access being one of the biggest changes in the last few years, noting before they had to walk for days to cover what is now a few hours journey to the nearest district town by vehicle. As one man explained:

Before if we needed to buy rice or other stuff, we had to walk to Ngommalat which took one day and one night. Now we have a new bridge so we do not need to worry about crossing the river in the rainy season, before we had to swim to cross that river (MLR 004, program recipient, research site 1).

Constructing these roads and bridges has generally required UXO clearance. Typically, main roads and economic corridors such as the one which links Thailand to the West and Vietnam to the East, crosscutting the site of inquiry, and intended to bring about economic integration and increased trade and mobility, were cleared by commercial companies. On the other hand, MAG Lao cleared smaller village access roads and bridges, such as the one mentioned by this respondent. A large-scale hydroelectric dam project in the neighbouring Nakai District has also brought many changes, including all weather access roads from the provincial capital of Thakek to the district town of Ngommalat. From the researcher's observation and discussions with respondents, improved access has contributed to rapid change and brought light industries into the area, alongside entrepreneurs, migrants and more opportunities for business and non-farm activities. This change has brought more consumables into the village and traders mainly from Vietnam and China. For example, it was not uncommon in the process of this research, to see mobile Vietnamese traders with motorbikes stacked with household items and other goods traversing the villages in the site of inquiry. This shift into a market economy has affected the levelling effect of communist post-conflict policies. Widening inequalities were apparent and with increasing distance from the district towns, villages had become visibly poorer. These changes and increased opportunities for urban and rural wage labour were also pulling some farmers or members of their households, away from agricultural livelihoods.

People lived in simple houses mainly made of bamboo or wood with thatch or zinc roofs. Most people did not have access to a toilet (communal or household) and

used the surrounding fields to defecate (N = 309, 62.2%, 95% CI = 58.7 - 67.4), and only 55 households (12.8%, 95% CI = 9.5-16) had access to a protected water source. All respondents lived in sedentary, non-migratory, villages. The average household size was six (95% CI = 5.77 - 6.16), and typically, male headed (90.7%, 95% CI = 88 - 93.4). Heads of households had generally low levels of education as shown in Table 16 and qualitative observation showed that often respondents preferred to provide their thumb print than write their name on the consent forms.

Within villages, many people were related and traditional kin-based livelihoods prevailed; yet within villages disparities were evident. For example, wealthier households had wooden rather than bamboo houses and physical assets such as small motorcycles, buffalos, and hand held walking tractors or generators. Nevertheless, most villagers in the research site maintained a subsistence lifestyle with some integration into the informal labour market and the cash economy. Rice farming relied on rain-fed lowland (often known as paddy) and upland farming with limited use of modern inputs. Glutinous rice was the main crop and food staple. From observation, the lowland rice was in bunded fields, meaning the soil is flooded for part of the crop season. Farmers explained how at the onset of the rains (usually May or June), the cropping season begins, and they prepared and sowed seeds for the seedling nursery, transplanting seedlings about one month later. Harvesting was usually during October and November. Upland rice grew as a rain-fed dry land crop and was usually only grown during the wet season.

Population growth and the government sponsored shift from swidden (upland, slash and burn methods) to wet-rice farming had reduced the scope for borrowing land or having land allocated to one's household through village governance processes, and many of the villagers talked about the shift from land abundance to land scarcity. Reduced fallow upland areas was also a common theme, and was reported to be contributing to increased incidence of pest, disease and weed problems, therefore requiring more labour, and diverting labour from other household activities. The de-classification of swidden fallows as part of the agricultural landscape and re- classification of fallows as forests was also reducing the amount of land available for swidden.

Both men and women reported undertaking farm work. Men tended to do the heavier work in the field such as ploughing, but women also helped with the time consuming and arduous opening of new land for cultivation. Household provisioning of basic needs such as water and fuel was reported as mainly the responsibility of women and children. Women and children accessed cash through engaging in small trade such as selling bamboo shoots, frogs, vegetables, handicrafts, cigarettes, sweets and soft drinks. In the dry season, men engaged in hunting or off-farm activities. Men, women and children all worked in the scrap metal industry, searching for scrap metal, which often included war scrap, using detectors purchased or rented from Vietnamese dealers.

Despite the extension of the market economy to these previously remote areas, outside of the district towns, few people had access to cash all year round; their purchasing patterns included bartering, for example of labour or products, as well as cash purchasing. Few villages had electricity, potable water or sanitation; usually the river provided the main source of water for a household's bathing, laundry and drinking water. For many, food insecurity, defined by villagers and local authorities alike as having insufficient rice, was chronic. Table 16 shows the number of months households reported being rice insecure on average in one year in the cross-sectional survey.

This is an explanation from one of the interviewees as to how their household managed their rice shortage:

Mostly we lack rice during the planting season, sometimes we send our wives to hunt for tubers [to replace rice], sometimes I go to sell labour and my wife works at the farm. We have to keep one [person] to work and one go to find food (GD 004, program recipient, research site 1)

Lack of rice was also reported as impeding access to cultural practices. In a group interview, many women agreed with this woman:

We want to have a temple in the village, but we're afraid we're not going to have rice for monks (GD\_005, program recipient, research site 1)

A number of cultural practices related to rice production are also still practiced:

Before we start to grow rice we have to ask permission with the other villagers from Pee Sang [the spirit that protects the rice field]. We bring a pig and pray. (MLR\_006, program recipient, research site 1)

For the subsistence farmer a lack of rice was reported as being important, not only because it was the diet staple, but also because of its socio-cultural significance. The rice-growing peasant for example was the hero of socialist Lao PDR, as seen in socialist era songs. Poverty was measured in the research site by access to rice and it was reported as central to many festivals and celebrations. In this way, rice, and particularly the glutinous rice which was grown in these villages, was intimately connected to village people's sense of identity, their place in the world and aspirations for a better life in which their practical needs were met by having sufficient food and their spiritual needs met by performing cultural obligations such as feeding monks.

Households with no land or insufficient land were reported as sometimes having 'borrowed' land from others for no payment or minimal payment, although the land was often of poor quality, and often included UXO contamination. Village heads allocated unclaimed land to needy families, but the exact process of this was not clear. Villagers spoke of local forms of social security, which channel food and assistance to those in need and helped keep very poor families just above subsistence level. While inadequate in preventing inequalities, it prevented the further marginalisation of poor individuals and households. For example, Kham, a widow, moved to the village where she was living during the survey after her husband died. She was allocated a small piece of land but it was UXO contaminated. Despite this she farmed it to ensure her survival. The land was cleared of UXO and while still in rice-deficit, she marginally increased her rice production and felt more confident using the land. She supplemented her livelihood by foraging for non-timber forest products and in times of need relied on the assistance and charity of her family, friends and neighbours.

Many people reported farming UXO contaminated land but complained that the presence of UXO reduced productivity as they had to dig and plough slowly and to insufficient depth. However, war scrap, which often included UXO, was also reported as a livelihood opportunity. One informant reported:

UXO is a resource, these bombs have become rare and people who have them keep them, and they joke and say it is their pension (MS0\_04, staff, research site 1).

While respondents reported being scared of farming contaminated land, they deliberately exposed themselves to live ordnance through scrap metal collection. This apparent contradiction is explained by scrap metal collection being a conscious activity and exposure was voluntary. Hitting items of UXO however, while farming, usually a cluster munition was involuntary exposure and more feared. The main reason for not using a detector on agricultural land was given as lack of time. Collecting scrap metal could also be a coping strategy. These quotes help to illustrate:

After I finish transplanting rice, I go looking for scrap metal to sell in order to get the money to buy rice for the period when we do not have enough – usually August until the end of November (MLR\_02 \_M, program recipient, research site 1).

My sons had UXO accidents and I spent about 3,500,000 kip (AUD350) treating my children. I looked for scrap metal to sell and used that money to treat my children (MLR\_02 \_M, program recipient, research site 1)

The second quote here highlights how a UXO accident can be a potentially catastrophic event for a household. With limited social protection mechanisms and limited engagement with the cash economy, the health costs of UXO injury were substantial. It was also common in the research site to see war scrap stockpiled and fashioned into useful household equipment such as pots, cutlery, buckets, belt-buckles and boats.

#### 5.1.2 Mine Action

MAG's work is governed by the International Mine Action Standards (IMAS), National Standards and its Standard Operating Procedures (SOP). In the site of inquiry, MAG used manual demining teams who worked with a metal detector following strict SOPS regarding the marking of clearance lanes, areas cleared, depth

to be cleared and safety procedures. MAG worked under the direction of the NRA, which provided broad policy guidance related to tasking and quality assurance testing. In the site of inquiry, MAG used a quota approach for clearance, in that it did not clear all the areas requested by the community, but cleared a set number of hectares (usually about four) per village. The intent of the quota approach was to provide clearance to as many villages as possible given the resources available, and to ensure that land cleared was prioritised based on need. It was financed mainly through institutional donor grants. This provided MAG considerable autonomy in determining specific sites, although increasingly they were asked for evidence of economic outcomes resulting from the clearance. In the site of inquiry, MAG also worked with development partners, either on a request based understanding, or MAG was contracted to provide specific support to a development partner.

International staff held the program's most senior operational and management positions. The clearance teams and the community liaison staff were from Lao and mainly from the communities where MAG worked. In addition, in each village, through its community liaison process, the program recruited local labour from each village, giving preference to people from the poorest households. This local labour was selected in consultation with the village at a village meeting. These people did not undertake any clearance activities, but helped with making markers and pickets and other non-technical work.

Information was collected on the type of clearance tasks and then grouped into three categories for analysis:

- 1. Agricultural land cleared for individual household use,
- 2. Community land (usually for community infrastructure projects, often with external support), and
- 3. Agricultural land cleared for individual household use and community land. This is where individual households have had land cleared for their personal use and also live in a village where clearance has been undertaken to release a household asset to which the individual household also has access.

Table 17 shows the breakdown of clearance tasks by category. It shows that most people reported receiving clearance for only community assets. Where land was

cleared for an individual household, in most cases the request was made by the household in the community liaison meetings (98.8%, 95% CI = 96.5 - 100). However, where land was cleared for a community asset, the request was generally perceived as being generated by the village authorities (76.7%, 95% CI = 72.9 - 80.7).

Table 17: Clearance by Type per Household, Research Site 1

			Bootstrap for Percent <sup>a</sup>		
			95% CI		
Clearance type $(N = 483, missing = 8)$	n	%	Lower	Upper	
Agriculture only	16	3.3	1.8	5.1	
Community only	387	78.8	74.9	82.3	
Agriculture & community	70	14.3	11.6	17.3	
Total	491	100			

<sup>&</sup>lt;sup>a</sup>Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

**Target Group and Priorities:** Broadly, task prioritisation was guided by national authority priorities, which were agricultural land and small scale, local infrastructure. In common with most contemporary programs, the focus of task prioritisation was socio-economic impact. Typically, this was in support of small scale development projects such as building or rehabilitation of weirs, wells, water systems, latrines, irrigation, vegetable and orchard plots, fish ponds, schools and access roads. This means that more community land was cleared than individual household agricultural plots. Communities were prioritised based on reported contamination and poverty (defined by the number of households' that were rice insecure for six months or more). Within these communities, agricultural land was considered a priority for the poorest households, determined with the community and on a quota basis, with a certain number of hectares cleared per village, usually for rice. Figure 5 shows the number of people who received clearance for agricultural land by wealth category broken into three groups (poorest, middle, wealthiest, refer to pg. 81) as scored on the wealth index. A chi-square test of independence was performed to examine the relationship between wealth category and land cleared for agriculture. The relation between these variables was not significant using chi-square (2, n = 410) = .55, p = .76, Cramer's V = .03). As shown in Figure 5, 44% of respondents who had agricultural land cleared were in the poorest wealth category, 38.1% in the middle wealth category compared to only 17.9% in the wealthiest category.

		Wealth Category	
Agricultural	Poorest	Middle	Wealthiest
land cleared (n	(n and %age of total)	(n and %age of total)	(n and %age of total)
= 165, 40.2% of total)	44.0% (n = 37)	38.1% (n = 32)	17.9% (n = 15)

Figure 5: Number of People who Received Clearance for Agricultural Land by Wealth Category as Scored on the Wealth Index

At the district level, the program had a lot of autonomy in selecting the specific tasks. Community liaison was the process through which tasks were identified, and recipients were informed about the clearance process. Staff, program documents and SOPs emphasise the role of the community liaison teams – the 'eyes and ears of MAG' – as being crucial in identifying clearance tasks. The importance of the community liaison teams and how they engage with communities was seen as an essential part of the prioritisation process and in achieving post-clearance socio-economic impact. The following quotes help to illustrate this:

Impact is how we engage with communities and authorities, because in a way we can't really separate the two in this kind of society, if we can engage with communities and the authorities in a way that develops trust, is positive and a productive relationship, then I think both ourselves and perhaps being in another partnership whether that be the authorities or a development partner, we can actually help communities to change the way they deal with their daily business if you like, or communicate with each other conditions for themselves, their children, their optimism, their relationship with the state. I think all these things can be affected by this so I think the way we engage and the way we manage that relationship is crucial (MSP 02, staff, research site 1).

The community liaison process was typically the first contact villagers had with the program. It followed three phases: pre-clearance; during clearance; and

post-clearance activities. Staff and program documents articulated the task identification procedures as a process of negotiation and importantly not a one off visit. Staff members of the community liaison teams were local and spoke the local language. They often reported visiting a village several times, varying the times of their visits, holding separate meetings for men and women as well as village household meetings and frequently staying overnight in the villages so that they could meet as many households as possible. As one key staff member explained:

I think simply going in and sitting down with, for example, the village head or another person in the village doesn't do it. We need to spend a bit more time with different groups of people within the village to try and ascertain if there is a feeling in the village that they want something done and that we might be able to help them do it. So I think this really is a process of discussion, there is always an element of history involved as well so we need to know how people have engaged with that community before etc. People in the background or a little bit about some of the senior people can be useful as well, but it is really about spending time and listening and a lot of our initial engagement I think should not be very formal, it should be about people going and sitting down and having a chat on the porch of someone's house or sitting under a mango tree or a yard in the temple or whatever, trying to get a feeling of what is going on in the community and trying to find out how they feel about us and us working with them (MSP 02, staff, research site 1).

The pre-clearance phase was part of the task prioritisation process. In this phase, the community liaison teams visited target villages, holding village meetings and visiting households to learn more about UXO contamination. Through this process, a consensus was reached with the village on the areas to prioritise for clearance. These areas were then mapped and the information fed back to the operations team, who used the information to develop a work plan. Subsequently, the community liaison teams returned to the village, both during and after the clearance process and were responsible for the return of the land to the end-user, including outlining the work undertaken by the clearance teams. The following quotes from staff and program recipients illustrate this:

We go back to visit the land when we return the land. We show the land owner the marking system and together we look at the areas that have been cleared and talk about the activities that the cleared land can be used for (MSO 02, staff, research site 1).

The people from the organisation came and took us to our land. They explained when we use the land we don't need to be careful when we work in the marked area, for example there are some concrete markings, the white means cleared or not a threat and the red means dangerous (MRL\_05, program recipient, research site 1).

The people who came from the project went with me to my field and showed me where had been cleared and the marking and measured the land 40 x 40 and explained the land could be used for planting rice and other crops (MR 004 FIN, program recipient, research site 1).

The expected outcomes of the community liaison process is that the poorest and neediest households are selected, that the process is understood by the community, that end-users are aware of the land which has been cleared, and are confident to use the land. The quantitative data suggests the spread between wealth categories for individual household plots was even. However, as data was only collected from people whose land was cleared, it is not possible to say that the poor were not targeted effectively. The quantitative data provides wealth categories relative across the sample. Observation and crosschecking with the district government records indicated that the poorest villages were the main target and that within those, many of the recipients were amongst the poorest.

Almost every respondent who had land cleared for household use reported the request being made by the household in the community liaison meetings. There was also a consensus among staff and recipients that the process and criteria of task selection were clear with people expressing confidence and understanding of the process. The following quotes help to exemplify this:

The first priority for the organisation is the poor households (MRL\_07, program recipient, research site 1).

The people from the organisation came and talked to us in a village meeting, they explained that the first priority is the people with UXO and not enough rice so we selected the families to be prioritised (MRL\_09, program recipient, research site 1).

We have UXO in our land but I am the village head, our family is not as poor as other families in this village so yes, while I would like my land cleared, first the people with not enough rice are the priority (MRL\_004\_MX, program recipient, research site 1).

All respondents in the quantitative and qualitative interviews were aware of the clearance activities in their village and demonstrated understanding of the process, and areas that had been cleared. Almost all people interviewed indicated a high level of confidence in the quality of the clearance, for example:

After the land was cleared, I felt confident to dig deeper (004\_1\_F, program recipient, research site 1).

We are more confident in clearing our fields as the UXO were removed and we can work in the field confidently (004\_M, program recipient, research site 1).

From my observations the villagers greeted the teams with enthusiasm and knew that MAG was the service provider in their area. Where land was cleared for an individual household, in most cases respondents reported that the request was made by the household in the community liaison meetings. However, where land was cleared for a community asset, respondents generally viewed the request as being generated by the village authorities. In practice a downstream development partner normally generated the request to the clearance agency; although before the request was activated, the development partner worked with the local authorities and with the community to gain approval for the project. In such cases the development partner provided other resources for the project, such as building material, equipment, seeds and sometimes training:

They provided the metal net and a lot of things. The villagers also participated to help each other to carry the stone, to put down a long net etc., to make the dam. It took about two months (008\_FGD\_M, program recipient, research site 1).

The quota approach, the drive for post-clearance socio-economic impact, and the National Standards, meant the focus was on land likely to be used and to have an economic impact as demonstrated in project documents and interviews with program staff. As one explained:

[we ask about] their land and what they plan to do after the next planting season, if they have land, but they don't plan to use it, we cannot clear it for them (MSP\_01, staff, research site 1).

While the focus was primarily on the likely socio-economic benefits, there was a consensus among staff and recipients, that the target population were poor or vulnerable households, generally characterised as chronically rice insecure. The quote below captures common descriptions of identifying clearance sites:

That's [identifying households] basically a process of elimination and discussion so the communities are involved in the process themselves of identifying who they consider to be the neediest in that particular community. So it's to do with rice, ownership of land, opportunities for those families. There may be other issues involved that makes a family more vulnerable like disability for example, so it is not really about us deciding, it's a discussion and then we come to a conclusion with the community about who is the most needy and then we talk about the support we can give in terms of clearance (MSP 02, staff, research site 1).

There were however some potential contradictions in targeting the poor. As one respondent succinctly explained, trying to maximise economic benefits could lead to a prioritisation of the not poor over the poor:

... poor households lack productive land. The good quality land belongs to the not poor; so the concept of clearance focusing on the poor, and effective land use, can be contradictory because the poor lack labour, capital and equipment. A focus on effective post-clearance land use leads to a focus on people who have the potential to use the land the most effectively [the not poor)] (ID\_0\_3, program staff, research site 1).

Ultimately however final decisions on task prioritisation were made by the technical operational staff based on information gathered by the community liaison teams tempered by resources, funding contracts, access and compliance with National Standards. This meant:

[there is] dare I say it some operational expediency, especially during the wet season. You know there's a restriction of what areas we can access due to flooding, due to bad roads or whatever, sometimes we clear lands that wouldn't necessarily be the best use of resources to be frank and as I said, for operational expediency (MSO 03, staff, research site 1).

A universal feeling was demand outstrips supply. For example 41.8% of respondents who had had some of their land cleared, were still using additional land which they knew was UXO contaminated (N = 174, 41.8%, 95% CI = 37 - 46.9). Table 18 shows how agricultural contaminated land was being used. It is interesting that just over half of the respondents (N = 95, 54.6%, 95% CI = 54.1 - 61.5) reported using the land for paddy, which was more likely to expose people to UXO than gardening or swidden as farmers needed to dig deeper.

Table 18: Use of Agricultural Contaminated Land, Phase 1

			95% CI <sup>a</sup>	
Post clearance land use	n	%	Lower	Upper
Upland rice farming	57	32.8	25.9	39.7
Paddy	95	54.6	54.1	61.5
Garden	20	11.5	6.9	16.7
Missing	2			
Total	174			

<sup>&</sup>lt;sup>a</sup>Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

The qualitative data also supports the finding that contaminated land is often used for farming, "It's not unusual for us to clear a field which is already being used but we know that it is contaminated" (MSP 02, staff, research site 1).

The qualitative data suggests that in such cases people tended to plant their rice at shallower depths than is ideal. The pace of the clearance response meant villagers developed strategies to mitigate the threat, although program and sector key informants largely frowned upon these strategies and it remains a contentious issue. However, the villagers rationally defended their strategies. As the following typical quotes illustrate:

When we find UXO we need to move them, otherwise the following year we won't know where they are (MSR\_05, recipient, research site 1).

Before clearance, I saw a lot of bombs in my land but I had no choice except to farm the land, so I dug carefully even though there were lots bombs but I needed to farm here, yes, I felt afraid, and during the clearance yes, they found a lot of bombs (MSR 04 1, recipient, research site 1).

As seen earlier, the practice of using contaminated land was a pragmatic response to livelihood needs and a high degree of familiarity with working in a UXO contaminated environment. In addition, unlike landmines, UXO are rarely pressure activated, although if hit, for example by a hoe or disturbed, they may explode. This was especially true of the small cluster munitions hidden just below the ground.

### 5.1.3 Post-Clearance Land Use

Most of the agricultural land that had been cleared was being cultivated by respondents at the time of the survey for paddy, lowland rice or fruit and vegetable gardens. Post-clearance agricultural land use was often reported as being similar to pre-clearance. For example, of the agricultural areas cleared for individual household use, 85.4% (N = 70, 95% CI = 76.8 - 92.7) of respondents were using the land prior to mine clearance. However, respondents reported the major difference was that the land could be used more by digging deeper and faster. It was also easier to convert land from swidden, which is very time-consuming, to lowland or paddy farming, reported as being less labour intensive. The switch from swidden to paddy also needs

to be understood within the context of official restrictions on swidden cultivation and the strong promotion of paddy by the government and local Party functionaries. Nevertheless, observation, key informant reports and the limited amount of conversion to paddy prior to clearance, suggests that swidden type practices are used as part of a risk mitigation strategy in highly UXO contaminated areas. As respondents reported, swidden requires only very shallow digging, making it less likely to hit sub-surface cluster munitions. However, not all the cleared agricultural land was being used as shown in Table 19.

Table 19: Land in Use at Time of Survey Following Agricultural Land Clearance, Research Site 1

			95	% CI
Land in use at time of survey $(N = 85, missing = 0)$	N	%	Lower	Upper
None	10	11.8	4.7	18.8
Less than half	11	12.9	5.9	21.1
More than half	24	28.2	18.8	38.8
All	40	47.1	35.5	57.6

The qualitative data suggests a number of reasons to explain land not being used or only partially being used at the time of the survey. These included lack of labour, lack of equipment or being pulled to undertake other work. The most common reported reasons in quantitative data for not using all the land were lack of labour (42.9%, 95% CI = 28.6-52.1) or lack of equipment (47.6%, 95% CI = 33.3-64.2).

Where land was cleared for a community asset, the type of asset provided often depended on the development partner, but could be schools, school latrines, vegetable gardens, protected village water supplies, forage plots, weirs and small irrigation projects and village access roads. Often schools already existed, and clearance allowed refurbishment and extensions. Similarly, where an access road was built, previously it had been a walking track and decontamination allowed it to be upgraded. These villages generally worked together, as one person explained, "Our husbands shared the labour, working together, constructing the water line; when our husbands worked digging the ditch, we looked for food and cooked" (MRL\_07\_GIF, recipient, research site 1).

These community type projects were often part of a broader development project, and as in the case of the example above, were undertaken as part of a food for work program whereby villagers provide labour in return for rice.

To explore differences between wealth category and post-clearance land use, subjects were divided into three groups based on their score on the wealth index A chi-square test for independence indicated a significant association between wealth category and clearance for an access road (chi-square = 2, N = 410, p = .76). Cramer's V = .12 indicating a small effect size. No other significant results were found between post-clearance land use type and wealth category. As can be seen in Figure 6, 44.7% of respondents who had land cleared for a road were in the poorest wealth category, 40.9% in the middle wealth category and to 14.5% in the wealthiest category.

		Wealth Category	
Road cleared (n=159, 32.3% of total)	Poorest ( <i>n</i> and % of total) 44.7% ( <i>n</i> = 71)	Middle ( <i>n</i> and % of total) 40.9% ( <i>n</i> = 65)	Wealthiest ( <i>n</i> and % of total) 14.5% ( <i>n</i> = 23)

Figure 6: Number of People who Received Clearance for Roads by Wealth Category as Scored on the Wealth Index

### 5.1.4 Household Livelihood Outcomes

More than half of the respondents reported that using the cleared land increased their income (N = 249, 59%, 95% CI = 54.3 - 36.7) and of these, 85 respondents reported their income had at least doubled (34.4%, 95% CI = 28.7 - 40.5). The qualitative data and observation suggests that while important often in terms of monetary amounts many of the respondents cash income is relatively low. A chi-square test for independence indicated no significant association between the wealth category as rated on the wealth index and change in income as reported in the questionnaire (chi-square = 4, (n = 229) = 2.65, p = 0.61, Cramer's V = .07). It was not possible to discern if respondents also considered additional rice as income, even if they did not sell it. People may have under-reported income if they felt it may be disclosed to the local authorities for tax purposes. A chi-square test for independence was conducted to see if there was an association between reported changes in income and post-clearance road land use, but there was no statistically significant difference. This was

quite surprising and hard to explain as the qualitative data showed improved road access resulted in increased trade and opportunities to sell produce. One woman for example, reported selling about two kilos of frogs every day in the market for 25,000 kip per kilo (AUD 2.7). Two women bought a hand-held tractor each, which they also rented out.

In a village where seeds and training were provided by a partner organisation and fruit trees planted, one lady grew jackfruit, bananas and sugarcane. She said that the jackfruit were easy to sell; however, many banana trees and sugarcane were destroyed by goats, as the fence was not strong enough. Pineapples could earn 40,000-50,000 kip (AUD 4.40-5.50) per day in the season, but after the first year some were stolen, also belying the concept of the harmonious collectivist society and the trees were hard to maintain with her other work responsibilities. Theft of cash crops, labour needs and livestock problems contributed to her discontinuing these activities and returning to her traditional farming activities.

Overall the qualitative data suggested that the overall gains for households were relatively small. This was supported by scores on the livelihood asset scale. The mean score was 1.88 (95% CI 1.81-1.96). Table 20 shows the mean on the livelihood asset scale for male and female respondents. An independent-sample t-test was conducted to compare scores on the livelihood asset scale for men and women. There was a significant difference in the scores for women (M = 1.79, SD = .77) and men (M = 1.96, SD = .85) t (485) = 2.24, p = .02. These results suggest that there is a difference between men and women in accessing assets post-clearance but the effect is small (eta squared = .01). An independent t-test was performed to compare scores on the scale by ethnic group. There was no statistical difference between groups. Lao Loum (M = 1.87, SD = .77) and Makong (M = 1.92, SD = .93) t (480) = .62, p = 0.56.

Table 20: T-Tests Results Comparing Male and Female and Ethnic Group Scores on the Livelihood Asset Scale, Research Site 1

									rap for cent <sup>a</sup>
	n	Mean	SD	t	df	Sig. (2	Mean	95%	6 CI
	n	Mean	SD	ι	uı	tailed)	difference	Lower	Upper
Gender									
Male	267	1.96	.85	2.24	485	$.02^{b}$	.16	02	.31
(missing n									
=1)									
Female	220	1.79	.77	2.24	485	$.02^{b}$	.16	02	.31
(missing n									
= 4)									
Ethnicity									
Makong	180	1.92	.93	.62	480	.56	.04	09	.22
(missing n									
= 1)									
Lao	302	1.87	.77	.62	480	.56	.04	09	.22
Loum									
(missing n									
= 8)									

<sup>&</sup>lt;sup>a</sup>Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

A one-way ANOVA was used to test for differences in the score on the livelihood assets scale (after clearance) and the wealth category. Differences in score on the differed significantly across the three groups, F (2, 5.26) = 7.87, p = <.001. Despite reaching statistical significance, the actual difference was a very small effect and the eta squared was .03. Tukey post-hoc comparisons of the three groups are in Figure 7.

Wealth Category					
(N = 460, missing = 31)					
Poorest	Middle	Wealthiest			
(n = 185)	(n = 166)	(n = 90)			
1.76 <sub>a</sub> (1.66-1.87) <sup>a</sup>	2.10 <sub>b</sub> (1.98-2.22) <sup>a</sup>	1.85 a (1.70-2.01) a			

Figure 7: Score on the Livelihood Asset Scale by Wealth Category

Notes:  $^a$ Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples Numbers in brackets are 95% confidence intervals of the means. Means that do not share subscripts differ at p < .05 in the Tukey honestly significant difference comparison. Livelihood asset score derived from Rasch measurement.

<sup>&</sup>lt;sup>b</sup>Equal variances assumed used because non-significant Levene's test (p = .46) Livelihood asset score derived from Rasch measurement.

A one-way ANOVA was conducted to explore the impact of type of clearance and reported score on the livelihood asset scale after clearance. Respondents were divided into three groups based on type of clearance (only agriculture, individual household use; only community resource; community and agriculture, individual household use). There was a statistically significant difference between the only agriculture, individual household use group and only community resource (p = .013) and the only agriculture, individual household use group (p = .006). The mean for the only agriculture, individual household use group was M = 1.30, for the only community resource was M = 1.89, and for the individual household use group and only community resource was M = 2.0. The results are shown in Figure 8.

	Clearance Type					
	(N = 460, missing = 30)					
Agriculture Household	Community Only	Agriculture Household and				
Only		Community				
(n = 16)	(n = 374)	(n = 70)				
$1.30_a (1.10 - 1.51)^a$	1.89 <sub>a</sub> (1.81-1.97) <sup>a</sup>	$2.00_b (1.83 - 2.18)^a$				

Figure 8: Score on the Livelihood Asset Scale by Clearance Type

Notes:  $^a$ Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples Numbers in brackets are 95% confidence intervals of the means. Means that do not share subscripts differ at p < .05 in the Tukey honestly significant difference comparison. Livelihood asset score derived from Rasch measurement.

The remainder of this chapter presents the outcomes reported in the qualitative data. The box below presents Lae, a typical program recipient who relied mainly on traditional farming methods, and the outcomes he reported from UXO clearance for wet-rice farming. In common with almost all of the respondents in this research site, he maintained a subsistence lifestyle dominated by both wet and dry rice cultivation, with intermittent engagement with the market. His main interests were having enough rice until the next harvest, not on having as much as possible or increasing the economic wealth of his household. He hoped for a better life for his children and thought he could achieve this through hard work, growing enough rice and making his children attend school. Based on the wealth index he was in the middle wealth category.

Lae is a farmer with a family of seven, four of whom work on the farm. He is not sure of his income because it is variable, but estimated expenditure at approximately 5,000 kip a month (AUD 0.55). The household has their own paddy (approximately 600 square metres), and upland or swidden cultivation (approximately one hectare). Additionally, they have livestock (one buffalo, two cows, and five chickens), selling one, or two, in two or three years. They use traditional farming tools of an axe, spade and hoe. Income also comes from making wooden poles, which last year sold for 540,000 kip (approximately AUD 54). He hopes in the future his household will be free from illness and have enough rice. He also wants his children to have a higher education than himself as he thinks they will then be able to look after him and his wife as they get old. Lae also believes an education will help his children have a 'good life' out of poverty, described as having insufficient rice and a simple house. From the demined area, which was now under paddy cultivation, ten bags of rice, where one bag is equivalent to one month's rice, were harvested. This means he now has sufficient home produced rice to last him for ten months of the year. He doesn't have enough money to buy rice for the remaining two months and prefers not to borrow from the rice bank because of the high interest. This year he filled the gap by borrowing rice from cousins and he will pay this back in rice when he harvests the new crop. He is also able to dig faster and deeper as he does not have to dig carefully, as he is not always on the alert for UXOs and especially cluster munitions, which he was afraid he will not see until he hits them. Digging deeper makes the rice crop more 'robust and beautiful', making him feel proud of his crop. He loves his land and being a farmer and his heart feels good and proud to be able to provide more rice for his family. He does not like to borrow rice from others or to fill the gap with cassava. One agency provides rice as part of the food for work program, but the rice is not the traditional glutinous rice. To make it more palatable he has to mix the agency rice with glutinous rice. He is happy his children will inherit UXO free land.

Lae's account suggested the tangible benefits from clearing agricultural land for subsistence farmers were small and much less than envisaged by cost-benefit analysis modelling. The benefits that Lae reported are more intangible and relate to feeling proud and his sense of identity as a rice farmer. These were common themes. It reflects how rice is connected not only with the practical needs of providing food for the household but also is intimately related to people's sense of self-worth and identity. A universal sentiment after UXO removal from farmland was a sense of relief, with UXO clearance not only providing physical protection but also psychological protection, as these respondents explained, "I was always afraid to dig

and plough, but needed to farm to stay alive, now I feel free" (MRL\_05, program recipient, research site 1) and "We aren't scared of death anymore while we are digging" (MRL 04 M, program recipient, research site 1).

The box below presents Noi, a program recipient for a community based project and the outcomes he reported from UXO clearance for a dam to provide water to his rice fields. Noi was part of the village security team and as such, part of the local village political structure. He had a large family and the household livelihood portfolio included a mix of rural subsistence and engagement with the cash economy and local labour markets. As with most of the respondents, he had a proactive attitude to development, considered himself diligent and anticipated a better future for his household through development trajectories. He considered his household's social position to be 'middle level' although his self-reported monthly income of 100,000 kip (AUD 10) per month and ownership of a tractor and a motorbike seem to make him relatively wealthy. Noi was interviewed in the village temple so it was not possible to assess his wealth level against the wealth index criteria. His description of his household as 'middle level' may be relative to his aspirations or his perceptions of other people's wealth in the village. Alternatively his assessment may be informed by the national rhetoric of collectivist morality, a harmonious society and a type of patriotism for collectivism, where self-promotion and boasting of one's wealth and status can disrupt social harmony.

Noi has a large family with ten people in his household, five of whom contribute to the household labour; the younger children attend primary school and some of the older children have completed primary school. One of his children works on the Nam Theun II dam as a labourer. This village has a track leading to it with vehicle access most of the year. The village moved about six years ago to be nearer to the road, which he says his household finds more convenient and easier for access to services. Noi is the deputy of the village security. In the last two years, he has bought a tractor and a motorbike.

The village helped to remove the vegetation prior to clearance; the villagers worked on building the dam at the weekends from February to May, with each household providing one labourer. A development agency contributed to the dam by providing some materials and paying the labourers in rice. As soon as there was water in the dam, Noi with his children, started to dig a ditch to channel the water to his fields. Since building the dam, his yield has increased from 22 bags of rice to 40, giving him an additional two months of rice,

leaving him without home produced rice for approximately two months of the year. He is happy with the extra rice and says this year his family was not hungry. The best thing about the dam is the household can start planting early for growing rice and the rice is beautiful. The additional rice also meant he did not have to borrow rice and he saved some money, which he planned to invest in buying fuel before the rainy season when it is more expensive. Having the dam also means he can start planting earlier and as the land is wet it is quicker to plant, giving him time for weaving and selling bamboo baskets from which he makes about 100,000 kip (AUD 10) per month. He plans to use some of this money to buy clothes for his children as well as cigarettes, monosodium glutamate (MSG) and salt. His other plans for the future include making a garden to plant vegetables, corn, and chilli. He expects to be able to grow many things in his garden and this will reduce expenditure on food items so that he can purchase other things for his house and farm. In this way he expects to be able to escape from poverty. Now, only a few households benefit from the dam, but the village has plans to allocate some of the land, made safe by landmine and explosive remnants of war removal, near the dam to each household to grow vegetables.

Noi is more integrated into the cash economy and in his narrative talked about tangible benefits. However, a key point for him was that his rice was more beautiful reflecting sentiments similar to Lae, despite the difference in wealth. In another village, where a permanent weir was built with the assistance of a development agency, to feed approximately 20 hectares of paddy, a range of livelihood outcomes were reported. Planting when there is plenty of water and the field is muddy, for example, took approximately half the time. In a group interview, it was estimated that since the weir, rice production had increased approximately four-fold. A number of other livelihood outcomes were reported. For example, water from the weir supplied vegetable gardens in the dry season and the vegetables were traded or consumed by the household. The increased rice yield helped reduce debt, and allowed investment in livestock, small trade, and household goods (salt, chilli, MSG) and increased the value of the land. Planting early also meant people could harvest earlier allowing them to sell labour, relax and socialise with friends over a cigarette and local rice-based whisky. Concepts such as being together, relaxing and partying and to experience the 'good life' with parties and celebrations were a common part of village life. Indeed, after interviews the research team were often offered a glass 'lao lao', or local rice-based whisky. The consumption of rice alcohol had an essential social meaning for villagers in this research site; was a central component

of celebrations and rituals; helped stabilise bonds between kinsmen and friends and was closely associated with cultural identity. Respondents reported for example that rice-based whisky was used at weddings and funerals. During funerals rice-based whisky alongside eggs and rice were provided as provisions for the journey of a person's soul to the next world. It is interesting that although most of the clearance tasks were for community-based projects, many of these supported rice production. When talking about benefits even of these communal assets, people tended to talk about individual rather than communal assets and individual household's, rather than communal, benefits. This focus on self also suggested a possible tension between the harmonious collectivist society and the individual.

Where an area was cleared to enable access to safe water, the benefits were multiple, including a reduced amount of time spent collecting water and undertaking laundry, having sufficient water in the house, not worrying about children drowning in the river in the rainy season, having more water for vegetable gardens and bathing more regularly. In the separate male and female group interviews, men and women mentioned how having easier access to water made joining in local celebrations and parties easier. Women mentioned it made collecting water for cooking easier and men all agreed it was easier to make the local rice whisky (an essential component of any celebration). Many of the sites that were cleared for community-based resources were cleared for rehabilitation or construction of schools including school vegetable gardens. The new schools were considered 'very beautiful' and more motivating for the teachers. Access to one asset contributed to the accumulation of other assets as the quote below shows. These assets contributed to fulfilling people's material aspirations and helped people take nascent steps to joining the market economy and contributed to a feeling a pride:

I use the water to water the chillies and spring onions, I grow spring onions, sugarcane, Chinese cabbage. Before I didn't water the garden, because it's far [to get the water]; I sold the sugarcane I grew last year to the UXO team. With the Vietnamese, I used the sugarcane to exchange for a bowl or cooking ware; one sugarcane per one cooking ware. I got one dish in exchange - I really wanted to have a dish. With the rest of the money I got from selling the sugarcane I brought trousers for my brother and chillies (MRL 07 GIF, recipient, research site 1).

Table 21 shows examples of other typically reported outcomes in the qualitative interviews against livelihood asset and post-clearance land use type.

Table 21: Reported Outcomes against Livelihood Asset and Post-Clearance Land Use Type Research Site 1

Livelihood Asset	Post- Clearance Land Use	Key Terms	Characteristic Response
Human	Rice farming	Time for other activities  Beautiful rice	After clearance it is possible to dig faster and deeper making the rice more beautiful, and we have time for other activities (MRL_06_F, recipient)
	Village water point		Now we feel more comfortable; before when we carried the water from the river we got very tired and angry (MRL_07_GIF, recipient)
	Village water point		I went to collect the water at four and came back at six – it includes showering, washing the clothes – now it takes only a few minutes. Now I have time to make dry rice; we will start to make dry rice [giving two crops in a year] in March [land cleared for piping water to a central point in the village] (MRL_07_GIF, recipient)
	Rice farming	Enough food	I got 10 bags [from the cleared land] so in total 45 bags, it's enough for my family until September so it's getting better (MRL _003_2, recipient)  This year is much better we have only rice and do not need to eat tubers (MRL _004_1_F, recipient)
	School	Education, learn the letters	I am so happy they [my children] pay attention to go to school and I hope that they will have a good future. For me, I didn't attend school so I know nothing about education, but I am so proud that my children have chance to study and learn the letters (MRL_04_F, recipient)
Social	Irrigation	Time with friends	Now I have some time to join parties with friends, before there was no time for meeting friends and I didn't even have time to smoke a cigarette (MRL_04_M_recipient)

Livelihood Asset	Post- Clearance Land Use	Key Terms	Characteristic Response
Finance	Road	Trade	And it's easy for people to transport their products to sell [after the road] or do business with men from different villages who come to buy things in our village (MRL_03_M2, recipient)
			Before we hunted for rattan to eat, but now we hunt for rattan to sell (MRL_03_GIF, recipient)
	Rice farming		The most useful thing [after demining] is we have more food to eat. If we have enough food to eat, we can also save some money. At the same time, we can also grow some vegetables to sell in the market and we can buy some other stuff for our family (010_M, recipient)
	Irrigation	Land value	The land which can grow rice early [because of irrigation] has a higher market value (MRL_004_M_recipient)
		Cash crops	It [irrigation] also helps us to grow other kinds of crops such as corn (MRL_004_M_recipient)
Physical	Road	Transport Convenience	Now there are many vehicles coming through the village. When we want to go to Ngommalat we can get transport, before we walked and slept in Ngommalat. We started from the village in the morning and arrived in Ngommalat in the evening (MRL_004_M, recipient)
			Now we have the road it is convenient for travelling to the field (MRL_004_M, recipient)

Without demining activities, development agencies would not invest in infrastructure or support community development projects, as these typical quotes illustrate:

A total of 259.806 metric tonnes of rice was distributed in 2008 to 9,203 beneficiaries. Simply, these beneficiaries would not have been able to

receive rice without UXO clearance, which is a prerequisite for our food for work program (MPL 04, partner, research site 1).

We have constructed new schools, latrines, bore holes, school gardens – we can't do the construction without the clearance (MPL\_01, partner, research site 1).

With no [UXO] clearance we cannot implement irrigation activities, only those which diversify vegetable production MPL\_02, partner, research site 1).

However, outcomes were variable and despite the land use contract, not all land was used immediately, as the following example of Tui shows. Tui considered her family to be of low socio-economic standing and although hard-working, there were only two labour units in the family so it was hard to get all the work done. She had no education herself but she had aspirations for her children to gain a good education and learn to read and write which she thought would give them opportunities for a better life. For this reason she encouraged them to go to school rather than help on the farm. She was generally positive about the future although her current effort is focussed primarily on securing her practical needs in the form of sufficient rice for her family.

There are eight people in Tui's household, six children, four of whom are in school and Tui and her husband. Tui and her husband provide the entire household's labour. They do their laundry and bathe in the nearby river from March until the end of May but in the cool season, it is too cold and windy. She has not been to school but she is glad that her children have the opportunity. She thinks having an education will help them in the future to get out of poverty. As well as farming, she sometimes makes baskets for sticky rice which she can sell for 4,000 kip (AUD 0.40) each. They have a hand-held tractor but often when they open new land for farming they have to do so by hand, as the tractor cannot pull out the tree stumps. If the tree roots are very deep they cover the stumps with mud and leave them for a long time until they became rotten and are easier to remove.

With three other households after UXO clearance, Tui and her husband built an irrigation canal to their rice fields. This has more than halved the time the family spend on planting rice. This year however, the seedlings Tui planted were not very good and she had another baby during the planting season, removing one labour unit from the household at a key time, so not all of the land was used this year. This means they have only been able to harvest 32 bags of rice compared with 50 the year before and she is worried she will have to buy more rice this year. She loves farming and thinks that in the future she should have a vegetable garden, but she is not sure if she will be able to or not. She also hopes in the future to be able to grow enough rice for her family for all the year, but it also depends on the rain and not having too many pests.

Tui's narrative highlights some contextual variables which prevented effective use of the land, including labour and quality of seeds. Other contextual variables which mediated outcomes or quality of products of agricultural land are highlighted below by way of quotes to illustrate typical themes.

There is the kitchen garden at school [in an area cleared of UXO by the project] but the vegetables are a yellow colour and not very good because of the soil condition (004\_F, program recipient, research site 1).

To finish clearing the stumps [from the field which was cleared] it needs a lot of labour, the tractor cannot take the stumps out, first we have to dig [and after UXO clearance], it takes a year to completely clear one plot of new land before we can use it (004 M, program recipient, research site 1).

It took only one day [to transplant rice seedlings on the cleared land] because there were many people to help me, about 7-8 people. There were my relatives and the villager (004\_M, program recipient, research site 1).

The white ants ate our rice's roots and so many of them [rice seedlings] died and the yield was not enough for the year (004\_M, program recipient, research site 1).

I sell the vegetables that I get from my garden but I can only make a little money, about 5.000 kip (AUD 0.50), it is quite hard to sell them because there are many people who have their own gardens and vegetables [so there is no market to sell to] (010 F, program recipient, research site 1).

The first year we harvested more than 30 sacks of rice, but this year we harvested only 20 sacks because some the land was taken to build the road to the village (TH M, program recipient, research site 1).

The first year it was very dry with not much rain during the rainy season, so I couldn't plant anything that year [on the cleared land] (003\_2, program recipient, research site 1).

In one village, a community-based dam was not used as one man explained in a group interview:

We want to rebuild the dam [built after UXO clearance] but it costs a lot of money, after the first year once the dam was complete, the project gave responsibility to the village to look after the dam, but now it is it damaged and we can't repair it as we don't have the money or the materials (MLR\_010\_FGD\_M, program recipient, research site 1).

These quotes help to illustrate other common reasons for limited benefits of non-land use and help highlight the importance of contextual factors including access to assets, in securing benefits from the cleared land:

The difference is the people who lack a little bit of rice have more opportunity than the people who lack a lot of rice, because they do not have

to sell their labour for employment and they have enough labour, their tools are modern and they are ready all the time, so they have a better life. The people who lack a lot of rice are getting worse [in terms of relative poverty] because they miss an opportunity. The families who don't have modern equipment such as tractors have to wait and sometimes while they are waiting for the tractors, the rice planting season ends and they plant late and then the harvest is not good (MLSO 03, staff, research site 1).

We did [demined] around 50 sites and 2-3 months after the CL [community liaison] did an initial post-clearance assessment. All the areas which were cleared before the rainy season were cultivated, the only exception was where we were late [doing clearance] or they were putting orchards up and the fruit trees were not delivered on time or they were struggling to put the fences up. If we clear in time for the start of the rainy season, the land is used although may be not all of it at first (MLSO\_04, staff, research site 1).

These quotes help to illustrate that access to assets, including human assets, social assets, networks and community based support, markets and the environment mediated outcomes in both positive and negative ways. These contextual variables can be at the household and organisational level.

## *5.1.5 Summary*

This chapter has presented the qualitative findings from Phase 1 at the descriptive level. In this research site the market economy was extending into formerly remote areas. This was contributing to changes in patterns of labour, resulting in a hybrid local labour market, which straddled the traditional, and the modern, and the agricultural and the non-agricultural markets, providing opportunities and constraints. However, these changes were not uniform and some could leverage the opportunities provided by these changes to a greater extent than others and there were signs of inequities.

Mine action in the research site was informed by national standards and framed within the predominant discourse of clearance for economic development. For example, most of the clearance tasks were for community asset holdings. This was consistent with the quota approach and focus on community assets and

economic benefits described by program staff. However, this seems at odds with the qualitative data from the program recipients, which suggested a more even spread of individual agricultural tasks and community based tasks in all sites. This is because in interviews, respondents focussed on benefits for their household rather than for the community, even where it was communal property that had been cleared. They described this mainly in terms of increased rice cultivation and ways in which they benefited from this. Increased rice was realised by the community assets UXO clearance as it enabled the building of weirs, dams and village level water sources.

Wealth was identified as a possible predictor (independent) variable of the outcome. Measured by the wealth index, while there were differences in reported benefits of clearance between wealth groups, the overall effect was small in all instances. This suggests that in this sample, wealth was not a predictor of self-reported, changes in asset holdings.

Finally, participants have inevitably selected what they wanted to disclose. Their accounts are unavoidably influenced by unconscious class-based norms and practices, their interpretation of the research purpose and the context and perceived social status of the researchers and power dynamics within the micro-space of the interview. Participants for instance, may have exaggerated the effects of landmines and benefits of clearance in their representations. Discussion over the advantages of growing paddy over swidden seem to intersect with the development discourse of policy elites which portrays swidden as 'traditional' or 'minority practices' and may have reflected what participants thought they should say rather than what they actually felt. The next chapter presents the findings from Phase 2.

# **CHAPTER 6**

# MAG Iraq, Sulaimaniya and Kirkuk Governorates

# 6.1 Overview: Poverty, Development and Livelihoods

The purpose of this chapter is to present the reported household livelihood outcomes of landmine/unexploded ordnance (UXO) and other explosive remnants of war (ERW) clearance in Phase 2. The chapter uses using the qualitative data gathered through interviews and the quantitative survey results. The findings are presented at a descriptive level with few comments. The chapter first provides an overview of the research site, including the mine action (MA) program, landmine/UXO and ERW contamination, poverty and development and expected outcome before presenting livelihood outcomes.

In this research site the survey had 219 (48.5%) male respondents and 233 (51.5%) were female. All respondents were Kurdish, and almost all had been displaced (N = 407, 89.9%, 95% CI = 87.8 - 93.3) due to conflict. The average household size was reported to be six (95% CI = 5.85 - 6.25). Most household heads were male (92.7%, 95% CI = 90 - 94) and had either not completed any schooling or had only completed primary school. Table 22 shows the demographics of respondents in the quantitative survey.

The area of the study site has, after decades of war and civil strife, faced massive changes and degradation including deforestation and overgrazing. Mountains, hills, rocky ridges and lowland areas with steppe ecosystems, rivers, springs, narrow gorges, valleys and oak woodlands characterise the area. At the time of the survey, water levels were very low due to infrequent rain and lack of melting snow from mountains in Iran and the study site. There was agriculture on the slopes (primarily grape), grazing (mostly goats and sheep), farming and cultivation of walnuts, almonds and figs. The villages were all accessible by four-wheel drive with the roads out of Sulaimaniya and Chamchamal modern and well maintained. Roads to most of the villages were generally in reasonable condition, partly because of their past strategic position although were often unpaved.

Poverty and development in the research site cannot be separated from the complex pattern of evacuation, forced re-location, and re-settlement over a long period and 13 years of US sanctions (1990-2003) which characterised this site and resulted in the collapse of infrastructure alongside intellectual, political and socioeconomic isolation. Since 1992, the research site enjoyed relative stability; nevertheless the combination of under-investment, sanctions, neglect and war meant that public services were generally inadequate.

Table 22: Demographic Characteristics of the Survey Respondents, Phase 2

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Demographic variable	N %		Bootstrap for Percent <sup>a</sup> 95% CI		
. ·			Lower	Upper	
Gender $(n = 452, missing = 0)$					
Female	219	48.5			
Male	233	51.5			
Livelihoods ( $n = 491$ , missing = 0)					
Farmer	21	4.6	2.9	6.6	
Livestock	1	0.2	0.0	0.7	
Fishing	7	1.5	0.4	2.9	
Other aquatic resources	7	1.5	0.7	2.7	
Unskilled labour	35	7.8	5.3	10.4	
Unskilled non-farm labour	4	9	0.2	1.8	
Skilled wage labour	9	2.0	0.9	3.3	
Small trade	3	0.7	0.0	1.3	
Seller, commercial activity (e.g.			17.9	25.9	
middle man	98	21.7			
Salaried	61	13.5	10.6	16.8	
Government allowance	1	0.2	0.0	0.7	
Farmer cash crop	21	4.6	2.9	6.6	
Wealth category ( $n = 452$ , missing					
=0)	104	40.7	26.2	45.1	
Poorest	184	40.7	36.3	45.1	
Middle	150	33.2	29.2	37.6	
Wealthiest	118	26.1	22.1	30.1	
Level of education $(n = 452, missing = 0)$					
No school	191	42	36.6	47.7	
Primary	241	53.5	48.7	58	
Some secondary level school	20	4.4	2.7	6.4	
Type of settlement					
Village	251	55.7	51	60.3	
Sub-district town	47	10.4	7.8	13.3	

Demographic variable	N	0/0	Bootstrap for Percent <sup>a</sup> 95% CI	
			Lower	Upper
District town Water source (drinking)	153	33.9	29.7	38.4
Unprotected	178	39.3	34.6	43.9
Mountain stream	107	23.4	19.7	27.7
Protected	167	37.3	40.6	49.4

<sup>&</sup>lt;sup>a</sup>Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Almost everyone interviewed in the study site had experienced displacement and recurrent loss of livelihood assets. Prior to the Iran-Iraq war and during the 'Anfal' campaign, many of the villagers were relocated to collective towns, or as one person described it:

Actually it was not a collective but was a compulsory town. They were well guarded by the Iraqi intelligence and the armed forces (MISO\_01, staff, research site 2).

He went onto explain that after the Iran War:

The Iraqi army then turned around and decided to destroy all Kurdish villages, so there went almost 5,000 villages even those ones that were far away, even 150 km away from the Iranian border, they decided to destroy all the villages and they called it the 'operations'. So they laid even more mines, destroyed water sources as well as burning all the houses and destroying them and not allowing anyone to return back to their land, making it what they called military areas in all of Kurdistan (MISO\_01, staff, research site 2).

The quotes below sum up common sentiments about the standard of living in the collective towns and show how, with limited access to livelihood assets, people were faced with potentially catastrophic situations and were often reliant on charity from people outside of their traditional clan-based networks:

What living are you talking about? We faced a very hard situation, a terrible life. In the collective town, I had no money to buy a box of cigarettes. Poor

living standards in Shorish, forced me more than once to go to Naw Shwan to collect the grains of wheat left on the ground after harvest for my children, it took over 10 hours to walk there and back, I left at 12 mid-day and returned at 10 pm (MRI 004 M, recipient, research site 2).

We spent a difficult life, terrible! We survived hunger, nothing else. We worked in secret; people took pity on us: they helped us in giving us jobs as labourers and sometimes we went to work in Arab areas (MRI\_005\_M, recipient, research site 2).

The Kurdish villages visited in this research were largely based on clan and kinship structures. There seemed to be a clear hierarchy according to age and sex, and most of the villagers were relatives. This organisation of village life provided a sense of certainty, protection and identity. The disruption caused by the 'Anfal' and displacement meant not only did the households experience financial hardship and loss of self-esteem but also a loss of social and cultural assets:

Related families were not living close to each other but in separate places in Shorish and other places and that separation restricted our relations, for example, my uncle died in Kirkuk and I could not attend the funeral (MRI\_004\_M, recipient, research site 2).

In the village we were free and able to visit each other and help each other and the relationship between the families was very strong, but after moving to different areas, we couldn't do that easily, only once in a month or two (MRI 005 M, recipient, research site 2).

Further, the traditional agricultural skills and education levels of displacees were often found to be irrelevant in the urban environment in which they found themselves, limiting their livelihood choices to reliance on charity or on menial wage labouring jobs, which provided little in the way of fulfilment or adequate remuneration.

Thus, those who returned to their village to live were drawn there because of their commitment to the land. On return however, they were generally impoverished, with few assets and had to rebuild their lives from scratch:

I had nothing when I came back [to my village] but I had no choice but to return. And for rebuilding my life, I just depended on the land and the sheep I looked after [for the tribal head] (MRI 004 M, recipient, research site 2).

The complex pattern of relocation and re-settlement resulted in some land disputes as land was used based on customary law and people had no paperwork. The process of displacement and relocation however meant that other households had sometimes used the land, often for years and also had ownership claims.

Those who resettled in the towns and preferred to stay also reclaimed their village land, but were not permanent residents in the village. Those who returned on a more permanent basis were often struggling to maintain their livelihoods, often relying on the Public Distribution System (PDS) food basket. Some villagers transited between the cities and the rural areas with livelihoods straddling paid, usually government employment and a mix of farm and non-farm and formal and non-formal income generating activities. At the time of this research, there had been a drought for over three years and people were migrating back to urban areas. In one village, there were reportedly 50 - 60 families but most of them lived outside of the village.

From observation sub-districts and district towns were quite new and compact. Villages were also generally compact, with small populations and often lacked regular access to potable water, electricity and other basic services. Houses were single level dwellings made of clay and sometimes brick and were generally close to the household's land, rather than in a village centre. Most people reported having access to wet latrines - either with a septic tank or connected to the main sewage system. However, many people did not have access to a protected water source (Table 22). The number of survey respondents with unprotected or stream water were primarily those living in villages. Almost half of households relied on farming as their main income followed by salaried government positions in the public service or government allowances such as pensions or disability allowances. This is similar to the findings of the qualitative interviews and is probably largely explained by MAG Iraq primarily clearing agricultural land to support safe return. Food security was not reported as a problem in this site as all citizens receive the PDS. Many people grew grapes, walnuts and figs for their own consumption or for market. The main cash crop was rain-fed continuous wheat, followed by a barley/fallow rotation with

minimal mechanisation, "We have a tractor for ploughing our land where we grow wheat and barley but for harvesting, we have no equipment, we do it manually" (MRI 004 M, recipient, research site 2).

The qualitative interviews suggested the main cash crop was rain-fed continuous wheat, followed by a barley/fallow rotation with minimal mechanisation. This also accounts for the need for a diversity of incomes as the opening of the local market to regional markets has decreased income from agricultural produce. Livestock production (incorporating both pastoral and settled ruminant systems) was common although the prolonged drought was forcing many people to deplete their livestock. As well as income from farming, people received the PDS food basket, and if they were Kurdish Peshmurga (part of armed resistance against the central Iraq government), they received a salary from the Kurdish regional government. Thus, in this research site livelihoods were a hybrid mix of peasant economies, small-scale trade, and jobs in state bureaucracies.

#### 6.1.1 Mine Action

MAG's program in Kurdistan is its most established operational base and has enjoyed uninterrupted program implementation since 1992. The program worked under the direction of the national authorities and was funded by donor grants. MAG used a combination of manual demining, dogs and mechanical techniques. Its head office was in Erbil and the operational bases, which formed the sites for this case, are in Sulaimaniya and Chamchamal (see map in Appendix 2). The National Standards governed MAG's work in this site, and its SOP with most of the staff locally engaged. The program started as a small emergency response to the Iraq/Iran conflict. As one locally engaged staff who, had been with MAG since the beginning, explained:

We were six teams at that time and while we were having our training at the same time we were having what we called at that time "call out tasks"-quick response teams. This was because a lot of villagers were being killed in the minefield, so after work, we stopped training and went out to the field to recover the bodies and injured people and since then we've continued expanding and expanding. The time when we started was a very difficult time, because this region was not recognised like now, so all the demining

equipment was being hand carried by the expat staff. Without them [the equipment] we couldn't do anything, so 72 detectors were sent to this program, the executive director himself and some of the others loading the detectors on to the plane (MISO\_01, staff, research site 2).

While limited, this rapid response in the early days and the ability of MAG to respond quickly in the 2003 crisis has contributed to MAG having a good reputation and standing within communities.

Target group and priorities: As in the first site of inquiry, broadly, tasks were guided by national authority priorities although within its specific areas of operations, the program had a lot of autonomy in selecting specific tasks. Community liaison was the process through which tasks were identified and recipients were informed about the clearance process. It followed the typical three phases of: pre-clearance, during clearance and post-clearance activities as in the first site of inquiry. The community liaison process was similar to that described in site 1, although partly due to security, the teams did not stay overnight in the village and only worked in daylight hours. The members of the community liaison staff were generally from the cities, but spoke the local language and avoided wearing modern city clothes in the villages. When the researcher accompanied the teams they were always greeted very warmly and invited in to have tea.

As with the first site of inquiry (MAG Lao) the expectation was that community liaison would result in appropriate task prioritisation and end-users would understand the demining process and areas had been cleared. The following quotes help to illustrate this:

... all the villagers take part in them [community liaison] activities and they have a big say in which minefields come first, suppose in a village they have 10 minefields – which one comes first and why? (IMSO\_01, staff, research site 2).

Our relationship with the community is great, I would say 98% perfect. I have nothing to complain about, they play a big part in the prioritisation process, we are working for the communities, I am not going to dictate. 'Ok

we are going to clear this minefield' - it doesn't matter if we [MAG Iraq] like it or dislike it, we are here to benefit the communities (IMSO\_01, staff, research site 2).

They [MAG Iraq community liaison] met with people of the village in the school and showed us types of mines, and asked which areas were contaminated and which areas should be cleared. My father asked them to clear our land, because the land is on a hill and the mines got washed down in the winter when it rained so we asked for clearance (MIB\_01, recipient, research site 2).

We asked MAG to clear the land for us. MAG teams move around the different villages and households. They visit the area and hold community meetings and ask which areas were contaminated and which areas should be cleared. We asked them to clear this land for us (MIB\_03, recipient, research site 2).

Over time MAG's focus changed from being primarily humanitarian to an increasing focus on post-clearance socio-economic impacts with a village mapping process and a village score card. The score card was used by the community liaison teams to assess each potential site and collect village level demographic data, which assets were blocked as a result of landmine contamination, and proposed post-clearance land use. Amongst the program staff, there was a consensus that the overall goal of the program was "to reduce the direct risk of exposure to landmines/UXO and other ERW to vulnerable communities and remove blockages caused by this contaminant where the removal will contribute to socio-economic development and conflict recovery and rehabilitation" (MISO 01, staff, research site 2).

Clearance was usually undertaken to support the safe return and economic recovery for villages. It included clearance for agricultural land and small community tasks. The target group was generally defined as returnees, internally displaced people and affected rural communities.

Working with communities to identify priorities through community liaison was a key strategy through the community liaison process. However, triage of sites

was also a process of balancing needs and resources, requiring engagement at many levels. One staff member described the process:

...[the] plan comes from the community first... because it is the CL [community liaison] which generates a lot of information, because at this stage it is all the villagers taking part in [community liaison] activities and they have a big say in which minefields come first, like in a village which has 10 minefields – which one comes first and why? And all the CL techniques we receive the information and the requests from the local authority or from the government and from UN agencies, development agencies... and we will bring it back and address it and with the resources we've got and put it in the work plan (MISO 01, staff, research site 2).

Respondents were aware of the clearance activities in their village and demonstrated an understanding of the process, and areas that had been cleared. Almost all people interviewed indicated a high level of confidence in the quality of the clearance. For example:

The importance of clearing this land is that we can use it with no fear; it poses no threat to our lives any more. We know the areas which are still mined and which we should avoid as they have been marked (MPR\_03, recipient, research site 2).

Respondents were typically of low education, had experienced chronic displacement and loss of livelihood assets, were farmers, used few modern farming technologies and had generally not prospered in the cities. A common sentiment was summed up in this person's quote, "We returned [to our village] in a poor condition, we had nothing and still we live in a poor condition" (MPR\_02, recipient, research site 2).

Despite its expansion, demand outstripped supply and livelihood pressures led to informal demining, especially during the economic sanctions, as the exchange below between the interviewer and a respondent from the MA program illustrates. Here the respondent uses the figure of 200,000 to illustrate the point that there were a lot of mines in the area. Verification of the figure is not possible because as the respondent points out, these landmines were not moved by professional deminers but

by lay people and records were not maintained. However, it is very unlikely that there were this many landmines.

Respondent: In the early days when things were harder than now, people couldn't do anything else, they needed the land and even though they knew it was mined they went there – yes because people were not waiting for their children to die or to go through a more difficult time... still because the family needs what is theirs they have nowhere else to go to so they decide to do their own demining. Two guys removed about 200,000 mines from the area, but they were killed eventually.

Interviewer: These two guys must have had knowledge about mines, were they Peshmurga or ex-soldiers?

Respondent: No, they were none of these but there were so many mines on the ground, spread all over the area and the two guys just randomly started collecting the mines and we burned them (MPR\_02, program recipient, research site 2).

Use of cleared land included agriculture for individual household use, vegetable gardens and orchards, access roads and community infrastructure such as mosques, community halls and schools. Table 23 shows the breakdown of use of cleared land.

Table 23: Clearance by Type per Household, Research Site 2

Clearance Type <sup>b</sup>	earance Type <sup>b</sup> N		Bootstrap for Percent <sup>a</sup> 95% CI	
	-,	%	Lower	Upper
Agriculture	201	44.4	39.8	48.7
Road	121	26.9	74.9	82.3
Other community task	217	48.2	46.9	56.4
Fruit/vegetable garden	112	24.9	70.9	78.9

<sup>&</sup>lt;sup>a</sup>Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Fruit and vegetables were separated as they were perceived by the program staff to be different categories. Agriculture related to crops and fruit and vegetables related to orchards and market gardening. Of the respondents in the cross-sectional

<sup>&</sup>lt;sup>b</sup>Some people had land cleared for more than one purpose

survey, 30% remembered being involved in the village based task selection process. This was also different from the qualitative sampling that suggested the respondents were all aware of the selection process. This was most likely related to the qualitative sampling and the small sample size. It may have also been due to almost half of the clearance being for community based assets and it may have been that village committees were involved in the selection process, or that people returned to the area after the clearance. A chi-square test for independence indicated a significant association between sex of respondent and attending the community liaison meeting with men more likely to attend (chi-square = 32, df = 2, p < .001) but with a medium effect size (phi = .26, 95% CI = 0.18 - 0.35). Of the agricultural land cleared, all of the people made the clearance request themselves, often with the help of the local authorities. While there was a feeling that demand outstripped supply, at the time of the survey only 16 people (3.6%, 95% CI = 2 - 5.3) reported using land that was still mined with land being used either for farming, vegetable garden or orchard or residential area. Twenty-one people (6.6%, 95% CI = 3.8 - 9.5) reported they had land which they could not use due to landmine contamination.

### 6.1.2 Post-Clearance Land Use

All the respondents reported that prior to the land being mined by the Iraqi government, the land had been used, but on return to the villages, while some informal emergency demining was undertaken to allow people to begin to reestablish themselves, many either returned to the cities until the land could be cleared or minimised its use. One respondent told us that in his village:

We have lost 18 people because of mines. All the area around here was planted with mines even the place where we are sitting now was planted with mines... tell her [the researcher] to look around – as much as she can see was planted with mines, other than the road, here in this place [where we were sitting] I lost my leg' (MPR\_02, program recipient, research site 2).

Of those plots cleared for agriculture 99.5% of respondents reported the land could not be used prior to clearance with 96.9% of respondents reporting that landmines had been found on their land (N = 451, 95% CI = 94.7 - 99.1). Where land was cleared for a community asset more than 98% of respondents reported the land

was not being used prior to clearance. Post-clearance, almost all of the land was used, with landmines reported as being found in 99% of cases during clearance (N = 449, 95% CI = 97.7 - 100). Table 24 shows the amount of cleared agricultural land under use at the time of the survey. Mines were reported to have been found on all the land that had been cleared for agricultural use and all respondents reported being satisfied with the clearance process.

Table 24: Cleared Land in Use at Time of Survey, Research Site 2

Land in use at time of survey	n	0/0	Bootstrap for Percentage <sup>a</sup> 95% CI	
(n=240, 53.%  of total)			Lower	Upper
None	2	0.8	0.0	2.1
Less than half	8	3.3	1.2	5.8
More than half	73	30.2	24.4	36.0
All	157	64.9	58.7	71.1
Don't know	2	0.8	0.0	2.1

<sup>&</sup>lt;sup>a</sup>Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Other demining tasks included land for residential areas and re-building of social and physical infrastructure such as mosques, schools and roads. One of the community liaison staff told the researcher that after agriculture and residential area, requests for clearance for a mosque was one of the most common requests. All the respondents reported that mines were found on all the land that had been cleared for agricultural use; and this was supported by program documentation.

Where land was cleared for a community asset all the land was being used post-clearance. To explore differences between the wealth category and post-clearance land use, subjects were divided into three groups based on their score on the wealth index (poorest, middle, wealthiest, refer to pg. 81). A chi-square test for independence indicated a significant association between the wealth category and clearance for an access road (chi-square 73(2), p = < .001, Cramer's V = .40) indicating a large effect size suggesting respondents in the poorer households receive clearance for a road. Figure 9 shows the number and percentage of total of respondents who had land cleared for a road by wealth category.

	Wealth Category			
Road cleared (n = 165, 40.2% of total)	Poorest ( <i>n</i> and % age of total) 54.2% ( <i>n</i> = 109)	Middle ( <i>n</i> and % age of total) 39.3% ( <i>n</i> = 79)	Wealthiest (n and % age of total) 6.5% (n = 13)	

Figure 9: Wealth Category by Road Post-clearance Land Use

Figure 10 shows the number of people who received clearance for agricultural land by wealth category as scored on the wealth index. A chi-square test for independence indicated a significant association between having land cleared for agricultural land and the score on the wealth index, (chi-square = (2, n = 201), p = .000, Cramer's V = .48) suggesting a large effect size. This was supported by observation and the qualitative interviews. The poorest people lived in the villages and it was in these areas where agricultural land was cleared.

		Wealth Category	
	Poorest	Middle	Wealthiest
	( <i>n</i> and % of total)	( <i>n</i> and % of total)	( <i>n</i> and % of total)
Agricultural land	54.2% (n = 109)	39.3% (n = 79)	5.4% ( $n = 11$ )
cleared $(n=201,$			
44.4.% of total)			

Figure 10: Number of People who Received Clearance for Agricultural Land by Wealth Category as Scored on the Wealth Index

### 6.1.3 Household Livelihood Outcomes

The immediate outcomes of demining were often tangible, visible and of particular importance in restoring the livelihoods in the nineties, in the villages in Sulaimaniya Governorate, close to the Iranian border. People started returning in the nineties and are still returning today. For example, in Penjwin from the main road it was possible to see former minefields being ploughed and infrastructure being built. In other areas there were also very visible signs of former minefields being used for market gardening and agriculture. In Chamchamal, people started to return in about 2003, often having waited for clearance before they could return to their village. Here too, people were using decontaminated land, mostly for market gardening, agriculture and livestock.

Without mine clearance, the return to their villages would not be possible or could have resulted in potentially catastrophic health events. A sense of safety and security was reported as one of the most significant benefits of mine clearance, for example, "Clearance of this minefield has given us peace of mind, and it has made us free from the threat of mines so we do not worry about our lives anymore" (MIR\_03, program recipient, research site 2).

In the quantitative cross-sectional survey, 271 (59%) of respondents reported they currently had a cash income from the demined land. Of these, most reported using the income to purchase food (N = 96, 35.4%, 95% CI = 29.5 - 41.3) or to construct or improve their house; houses were often badly damaged during the conflict (N = 145, 53.5%, 95% CI = 48 - 59.4). In the qualitative interview, one respondent who had used the demined land to plant summer and winter crops and made 10 million Iraqi Dinars (approx. AUD 8,000) in one year was able to build a concrete house. All the respondents noted however that they felt their income had decreased with the opening of the regional markets.

Table 25 shows the number of people who reported a change in income by wealth category as scored on the wealth index. It was not possible to obtain a chi-square and p value to explore if there was a statistically significant difference between those who had land cleared for different purposes and reported changes in income due to some cells having an expected count of less than five violating an assumption of the chi-square test (Pallant, 2007; Field, 2009).

Table 25: Number of People Who Reported a Change in Income by Wealth Category as Scored on the Wealth Index

		Wealth Category	
Amount of change	Poorest	Middle	Wealthiest
n = 271 (59.9%  of	( <i>n</i> and % age of total)	( <i>n</i> and % age of total)	( <i>n</i> and % age of total)
total)			
A little	34.7% (n = 67)	60 (n = 31.1%)	34.2% (n = 66)
About double	61.3% (n = 38)	27.4% (n = 17)	11.3% (n = 7)
A lot	6.3% (n = 1)	50% (n = 8)	43.8% (n = 7)

In the qualitative data few people spoke about changes in income and most considered themselves still to be poor. This may be based on their understanding of what it is to be a good citizen and not wanting to appear wealthy. It may also be based on comparisons with other people who overall survived the war without losing

all of their wealth. One participant in the qualitative interviews for example, noted that people who lived in the towns were much richer than those in the country. Since 2003 there has also been a considerable drop in demand, and as a consequence price, for local produce. The most significant change reported related to an overall feeling of happiness and satisfaction, mainly due to the ability to use the land, build housing, and to be able to move around with a sense of freedom.

The mean score as reported on the livelihood asset scale was 2.41 (95% CI = 2.38 - 2.43). Table 26 shows the mean score on the livelihood asset scale (3 response options). An independent t-test to compare scores on the livelihood asset scale for males and females showed this difference was significant (t (429) = 2.70, p = .01, 95% CI = 0.09 - 0.01) but the effect was small (eta squared = 0.01). An independent t-test to compare scores on the livelihood asset scale showed that where the land was cleared for agricultural land the difference was significant (t (438) = 7.86, p = .001, 95% CI = 2.31 - 2.36), but the effect was small (eta squared = 0.04).

Table 26: T-Tests Results Comparing Scores on the Livelihood Asset Scale, Phase 1

	N	Mean	SD	t	df	Sig. (2 tailed)	Mean difference	Per	rap for cent <sup>a</sup> % CI
						,		Lower	Upper
Gender									
Male	210	2.38	.23	-2.75	437	0.009	05	10	01
(missing 9)									
Female	229	2.43	.22	-2.75	437	0.009	05	.210	.247
(missing 4)									
Agricultura									
1 land									
Yes	193	2.50	.20	7.86	438	0.001	.16	.12	.19
No	247	2.34	.21	7.86	438	0.001	.16	.12	.19

<sup>&</sup>lt;sup>a</sup>Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples Equal variances assumed used because non-significant Levene's test (p = .18)

A one-way ANOVA was used to test for differences in the score on the livelihood assets scale and the wealth category. An ANOVA was conducted to explore the impact of poverty as recorded on the wealth index and reported score on the livelihood asset scale. Subjects were divided into three groups based on their score on the wealth index (poor, middle, not poor), from the poorest to the wealthiest. The scores differed significantly between the poorest and the middle

group and the poorest and the wealthiest group, F (2, 436) = 15.82, p = <.001. Despite reaching statistical significance, the actual difference was a very small effect and the eta squared was .03. The results are in Figure 11.

	Wealth Category (n = 439, mis	ssing = 13)
Poorest $(n = 178)$	Middle (n = 146)	Wealthiest $(n = 115)$
$2.33^{a} (2.30-2.37)^{a}$	$2.46^{b} (2.43-2.50)^{a}$	2.44 <sup>b</sup> (2.41-2.48) <sup>a</sup>

Figure 11: Score on the Livelihood Asset Scale by Wealth Category

Clearance was undertaken for a number of different purposes, both communal and individual, but despite this, in the qualitative data respondents focussed on individual benefits and particularly benefits associated with moving home to their 'grandfather's land'. The box below presents Hammad, a typical program recipient and the outcomes he reported from UXO clearance for agriculture. Like all respondents, Hammad was forcibly relocated several times and lived in the collective towns where he experienced considerable hardship. Returning to the village after demining allowed him to reintegrate into his traditional clan and kinship networks and systems of reciprocity and patronage. This was important meeting his practical needs. It was also indispensable in restoring his sense of identity and self-respect and his place in the world. His local village level political power also enabled him to fulfil his familial obligations. He considered himself poor but was slowly rebuilding his livelihood assets. He aspired to a better future for himself and his family and ascribed his current situation to demining, his own diligence and the support of the head of the clan, who did not live in the village, but allowed the villagers to use his grazing land.

<sup>&</sup>lt;sup>a</sup>Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples. Numbers in brackets are 95% confidence intervals of the means. Means that do not share subscripts differ at p < .05 in the Tukey honestly significant difference comparison.

Hammad was born in the village where we met him and where he now lives. His father and grandfather were also born in the village. However, in 1969 the village was destroyed by the Baghdad government. His family returned in 1972/1973 and rebuilt their livelihoods until the 'Anfal' Campaign during which their village was once more destroyed and he was forced to relocate to Shorish, one of the collective towns, close to Chamchamal district. He remembers life in the Shorish as being a difficult time, barely managing to provide sufficient food for his family. He returned to his village in 1991 to find the area heavily mined and showed us an area of land and a water source that had been cleared by MAG. Without this clearance he states it would not have been possible for his family to remain here and provide for themselves. After two years the village was again destroyed and mined with Hammad's household once again being relocated. This time they were not able to return until 2003. Without clearance, Hammad feels return would have been impossible for his family. Indeed only 15 of the original 25 households have returned to the village. All these households belong to the same clan as Hammad and are an important source of strength for him and one he missed when living in the collective towns.

Like many people, the process of conflict and forced relocation has depleted his household's livelihood assets and he returned here with nothing. For Hammad, the land is his life and source of living. Since 2003 he has been able to rebuild his house, re-start farming (mainly orchards) and now has a herd of about 12 sheep. However, the most important benefit of landmine clearance and returning to his village was the restoration of his sense of self and pride. In the collective towns (where people were removed to when they were expelled from their villages), people were reliant on others and on the PDS so this sense of identity and pride were greatly eroded. Here in his own village he is amongst his fellow clans- people, he has the respect of the villagers and importantly when outsiders from the city come to picnic in the village rather than looking down on Hammad they recognise him as a village elder and respect him for the knowledge he has of the area. Returning to his grandfather's land helped him regain the respect of others and he is proud to live here.

For Hammad returning to his grandfather's land or home village was the most important benefit of demining, this was a common theme throughout the qualitative interviews. Another typical program recipient was Mr Muhamed described below. He considered himself poor when compared to people living in the cities, but was relatively content with his standard of living. For Mr Muhamed, demining was indispensable to his life and restoring his livelihood. He was generally ambivalent about current processes of national governance and development, and attributed his

progress since returning to the village to demining and his own commitment, industry and past experience as a farmer.

Mr Muhamed's land has been in his family as far as he is aware, for at least five generations. For generations they have been farmers, growing crops and raising livestock. He was told by his father and grandfather not to sell the land but to pass it on to his sons, which is what he intends to do. During the Iran/Iraq war his family was forcibly relocated even though it was winter and he begged to be able to stay until the spring. He moved with few possessions and failed to prosper in the collective town, making little income from the milk he got from the seven cows he was able to take with him when he relocated. Without the livelihood skills or opportunities to gain meaningful employment and separated from his kinsfolk, he felt devalued and excluded, surviving but not living. He says his family survived because of the food hand-outs provided by the government, without which they would have starved. In the late nineties he returned to his village, finding it heavily mined and his house destroyed. Preferring to stay in their village, Mr Muhamed's family built one room for them to live in and worked as best they could around the mines. Mr Muhamed lost a leg due to a landmine injury and several of his livestock were killed by mines. As he was injured on return to his home village rather than in battle he is not considered a war victim and therefore not entitled to a pension. He notes with some disgust that Italian companies are welcomed in Kurdish Iraq but do nothing to compensate for the Italian made mine to which he lost his limb.

Two MA agencies worked in the village for five successive years demining land; and on the land where we met Mr Muhamed, he had built his house. Nearby is a water point that was previously mined, and from his house we could see the orchard and vegetable garden and an area where in Spring, he and his family have picnics. All these areas were demined by the MA agencies. It took about 3 years from when the demining was completed for him to begin to have enough surplus food to sell and another 6 years to replenish his livestock. Currently he suffers from not having enough water; the main water source is dry and water is trucked in from elsewhere. He would really like the government to help with providing irrigation so that he can grow more fruit. There is a brook nearby and water could be diverted, but the villagers lack the resources to do this on their own. The villagers have requested help several times but have had no response. Due to the drought he can only grow sufficient food for his household and livestock and makes money by selling milk and meat. Nevertheless, he wishes to stay in his village. Here he can earn an income and do work which he enjoys. If he returns to the city he says he can only survive by begging and relying on hand-outs. He says there is nothing more important to him than the clearing of the landmines, because this assistance quite simply saved his life.

Despite the difficulties, Muhamed wanted to continue to live in his village. Returning to his own village was the most important thing for Muhamed. Here he was connecting with his identity and culture and regaining his pride and sense of self-esteem. In his own village he felt better able to manage his difficulties and recover from future shocks. Anna was a female program recipient and her story is presented below.

Anna inherited her land from her father, who had inherited it from her grandfather. Her grandfather and father were all farmers and so are Anna and her mother. Her family were forced to move to a collective town, during the 'Anfal' they fled to Iran, later returning to the collective town. During the conflict the village was heavily mined including some of Anna's family land. Since the end of the conflict the family have returned to their village and have started farming again. Although they had lived outside of their village for a long time, Anna wanted to return to the land of her grandfather where they have "our own land". Her family attended a community liaison meeting in the village, where they were informed about the types of mines there might be in the village, what they looked like. They also discussed which areas in the village should be cleared. "They met with the people of the village in the school of the village and showed us the types of mines, which contaminated the land and which areas should be cleared". The land that was cleared specifically for Anna's family was a vineyard. At first they were able to earn a small income from the grapes in the vineyard, but now there are a lot of imported grapes in the market and it is not possible for her to make any money. In addition the drought has affected their yield, and although the government has dug a well for their drinking water, there is not enough water to irrigate their cropland. Almost all of the people in the village are related in some way and her father's five brothers are also in this village. Each of the brothers has also had their land cleared and they also use this land for grapes.

Returning to her village gave Anna access to clan-based networks on which she could rely when she needed additional help. These were essential to her sense of well-being and prosperity, and for her, the re-establishment of kinship ties was indispensable to the accomplishment of economic endeavours of her household. In her community she felt better able to manage and bounce back from stresses and shocks than she could have in a different community. Table 27 shows examples of

other typically reported outcomes in the qualitative interviews against livelihood assets and post-clearance land use type.

Table 27: Outcomes Against Livelihood Asset and Post-Clearance Land Use Type, Research Site 2

Livelihood Asset	Post-clearance Land Use	Key Terms	Characteristic Response
Human	Village access	Freedom	We are free – we can go wherever we want (004_M, recipient)
		Respect	If the lands were not cleared I would have to find a place free of mines to live. It is not possible for me to rent a house to stay in the city, you see I'm handicapped, I have only one leg and I don't want to become a beggar asking people for money to live (MRI_02_M, recipient)
			To live without asking people for money is very nice (MPO_02, staff)
Social	Road	Time with friends and family	We can see and visit each other easily, making the relationship stronger (MRI_05_M, recipient)
			In spring we can have a picnic in the fruit garden (which was cleared) (MRI_002_M, recipient) It is so important for us to see and visit each other (MRI_004_M, recipient)
Finance	Fruit orchards	Income	We sold grapes from the vineyard It [the income] was used to cover our daily living expenses such as rice for instance and flour for baking. (MRI_01_F, recipient)
			We sell our milk products like yoghurt and cheese (MRI_003_M, recipient)
Physical	Land for accommodation	Basic needs	I built my house and the place where the water project is was also mined (MRI_002_M, recipient)

Livelihood Asset	Post-clearance Land Use	Key Terms	Characteristic Response
Environment	Agriculture	Fodder/livestock	We started using these areas right after the clearance, I have used it for grain this year [for animal fodder] MRI_03_M, recipient)
			Without this land we would have to go far for grazing, not only that, but we would have to pay other villages to allow us graze our animals in their lands (MRI_004_M, recipient).
			I depend on the land I use and the sheep I looked after (MRI_004_M, recipient).

Grandfather's land: Regardless of economic status, the most consistent and enduring result of demining was the reconnection with 'my grandfather's land'. Without exception all of the respondents expressed a strong emotional attachment to their grandfather's land and home village. The ability to return to one's 'grandfather's land' was usually perceived as the most important benefit. Even where people lived elsewhere, they expressed an intense and continual relationship with the land. It not only reconnected people with their land and key livelihood resource, it reconnected them with their physical, social and spiritual inheritance, restored their identity and place in the world. One person characterised it as:

It's [not having your land] like someone having one of his arms affected by cancer it's yours, if you remove it you won't be happy about it, so you want it treated before you can do anything else (MIO 01 staff, research site 2).

Respondents reported it was considered 'a shame' if people sold their grandfather's agricultural land. The land is a way of staying connected to the past and something that is shared between the people and their culture. It was described as giving a sense of identity and belonging, knowing that their grandfather, their father and their uncle had all grown up in this area, a place where all the family could be together and where one's roots originated. Even for city dwellers the concept of their grandfather's land and returning to this regularly for family picnics and celebrations was important. Picnics and having fun with the extended family were frequently

mentioned as being important aspects of being Kurdish and an important benefit of demining. In this sense, the benefits of demining were seen to extend beyond the individual household and the village to broader society:

Kurdistan is a family based or tribal based society, there is a negative side to that, but at the weekends and holidays people turn back to their family and having fun and picnics together... It's going back [to your grandfather's land], so it is not just the villagers – a lot of people from the city are going and spending time in the villages in our countryside (MIO\_01\_staff, research site 2).

It was also described as a place where there was a sense of safety, somewhere to go if you needed help, where you can be sure someone will take care of you. As one person said "I don't know how to explain it. It is something we have grown up with. With us, it is something like a religion for the people to keep the land" (MIO\_02\_staff, research site 2).

Another person, referring to his demined land, when asked about what the land meant to him said:

It means a lot, it is my life, I depend on it and the water resources for living. I have nothing to do here without my lands and garden fruit... ...it is the source of my living (MIB\_03, recipient, research site 2).

Returning to one's grandfather's land restores a sense of pride, self-esteem, connectivity with others and a sense of identity. Access to safe land does not only help people fulfil the practical activities necessary for the reproduction of the household, for example farming, market engagement and house-building, but enables the fulfilment of social and cultural responsibilities. It gave people a sense that they could heal and be stronger in the face of future shocks. One person succinctly summed up the feelings expressed by all the respondents, "I returned to my grandfather's land, by returning to my village, to my land, I feel that I have been able to regain the respect of others. I am proud to live here" (MIR\_04, recipient, research site 2).

In a patriarchal tribal society, this also meant returning to where people had client and patronage relationships, defined by trust and affection, strong social ties, respect, a sense of personhood as well as a place to build a house and a plot of land for farming. Some of the old relationships may have been based on fear of the patriarch, family debts, and even oppression and have been disrupted by decades of war and displacement. Their current state was not disclosed.

As in the first site there were contextual variables that mediated outcomes, especially economic outcomes. A common theme in the interviews was that over the last three years, drought and an opening of the market to international trade had reduced the profits for local farmers with locally produced fruit and vegetables becoming uncompetitive. As one person explained:

When we first returned we used the land and benefited from it by selling our grapes from the vineyard, which we made at the bottom part of the land [which had been cleared], but now we suffer from a lack of water and the benefits are less than before – now we can produce enough grapes only for our own consumption, not to sell, but I don't think we will get enough grapes even for ourselves this year because of the lack of water. In addition, since 2003 the market has opened to other products from outside of Iraq. The fruits from outside now dominate the local market and are cheaper in price than the local fruit. Fruits from the outside also look more shapely and nice although they do not taste good as local products, but they draw the attention of the purchasers. In 2000 we started growing peaches [on the land which had been cleared], the price of peaches was 2000 ID for 1 kg but now though the type of the peach we grow is better than before, the price is lower it is 500 ID for 1 kg (MIR\_001, recipient, research site 2).

I tell you, if the government helps us to sort out the problem of water in this village, we can use our lands for vegetables like cucumber, tomato, and watermelon as well and we will gain even more benefits (MIR\_002\_M, recipient, research site 2).

We do not have enough fruit to sell this year because of a lack of water. The price of sheep was also less last year due to the lack of water that affected the grazing (MIR 004, recipient, research site 2).

There was a good market until 2003 as the local market was not open [to imports], as it is now (MIR 001 F, program recipient, research site 2).

However, some areas had seen improvements, mostly as a result of government policies:

[The price of lamb has improved] because we were helped by the government who supplied farmers with wheat and barley for their animals at a very cheap price. So this year it is different, we can sell a young sheep [lamb] now for 1000 ID, which is the price of two the last year (MIR\_004, recipient, research site 2).

Friends and relations were important in helping to get produce to market as people were able to marshal kin-ship networks to assist, "My uncle who has a pick-up truck transported the grapes from the vineyard to Slemany to sell for us" (MIR\_001\_F, recipient, research site 2).

Reasons given for not using or only using part of the land related to the economic status of the household. Wealthier people were reported as being slower to use the land, as they tended to be based in the city and returned to their village land at weekends and holidays. For these people, it was not the economic imperative that drove the desire to have their land cleared. More often, the benefits of reclaiming land were reported as being cultural and social, related to one's obligation and connections to ancestors and future generations, reconnecting with their kinship community and integral to their sense of self and community identity. Poorer people with limited access to resources used the land faster and tended to use all of it, relying on the land for most of their income. Drought, increased cash needs, trade liberalisation and increased fuel costs were the most common reasons reported for decreasing land use.

#### 6.2 Chapter Summary

This chapter has presented the findings from each of the sites of inquiry. In each site the effects of violent conflict remain evident. War depleted household assets and contaminated one of the most valuable sources of livelihoods in rural communities – the land. The war changed patterns of livelihoods by repeated displacement.

However, the process was not uniform. Those who generally failed to prosper in urban areas remained in their villages, although often maintaining links with the city. Those who fared better in the cities are maintaining a city base, returning to the villages occasionally. As in the first research site, MA in the research is informed by national standards and framed within the predominant discourse of clearance for economic development. A significant statistical association between the poorest wealth category and receiving clearance for agricultural land use was observed. This was supported by observation that it is the poorest households that live in the villages where agriculture is the main livelihood activity.

Respondents' narratives often placed them as helpless sufferers in the face of Arab persecution and may have been designed to evoke sympathy in the researchers. Respondents comments may also have been influenced by the need, partly met by landmine clearance, to restore their rights and place in the world. However, in choosing how to represent their experiences and what to include and what to leave out, participants exercised their individual agency. 'Grandfather's land' refers to returning to one's village which was made possible by the clearance and rehabilitation of both agricultural and community land. A key outcome expressed by the qualitative respondents was that returning to their 'grandfather's land' gave them a break from the demands of modernity, and allowed them to reconnect with traditional structures and identities and had emotional and cultural significance. It allowed people to access social networks and forms of patronage. These cultural aspects were not captured in the scale data as the rapid analysis undertaken in Phase 1 to develop the scale focused on identifying items for the scale under five asset classes of the livelihoods framework. The following chapter presents the findings from Phase 3 of the research.

#### **CHAPTER 7**

## National Program Lao PDR, Nong, Paksong and Pek Districts

#### 7.1 Overview: Poverty, Development and Livelihoods

The purpose of this chapter is to present the reported household livelihood outcomes of landmine/unexploded ordnance (UXO) and other explosive remnants of war (ERW) clearance in Phase 3. To achieve this, the chapter uses using the qualitative data gathered through interviews and group meetings and the quantitative survey results. The findings are presented at a descriptive level with few comments. The chapter first provides an overview of the research site, including the mine action (MA) program, landmine/UXO and ERW contamination, poverty and development and expected outcome before presenting livelihood outcomes.

In this research site 421 (42.4%) of the survey respondents were female and 573 (57.6%) were male. Respondents in this case were ethnically diverse, falling into three of the four official language groups of Lao PDR: Mon Khmer, Hmong and Lao Tai. The mean age of the household head was 45 years old (95% CI = 44.33 - 45.89). Eighty-six households reported having at least one UXO victim in their household (8.7%, 95% CI = 6.9 - 10.4). There was more diversity among the three districts included in this research site when compared with the first two sites already described. This was due to the fact that unlike the other sites, the districts are geographically located in three different provinces. The demographics for this site are summarised in Table 28. The ethnicity and wealth categories are shown by district to highlight the differences between districts.

Table 28: Demographic Characteristics of the Survey Respondents, Research Site 3

				or Percent <sup>a</sup>
	N	%		6 CI
			Lower	Upper
Gender $(n = 994, \text{ missing } n = 0)$				
Female	421	42.4	39.2	45.2
Male	573	57.6	54.8	60.8
Ethnicity ( $n = 993$ , missing $n = 0$ )				
Lao Tai	582	58.6	55.5	61.7
Hmong	91	9.2	29.5	35
Mon Khmer	320	32.3	29.5	35.3
Ethnicity by district (n=993, missing $n = 0$ )				
Lao Tai, Pek	406	79.9	76.4	83.2
Hmong, Pek	88	17.3	14.1	20.5
Mon Khmer, Pek	14	2.8	1.4	4.2
Lao Tai, Paksong	16	61	55.2	66.8
Hmong, Paksong	3	1.1	0.0	2.6
Mon Khmer, Paksong	103	87.7	32.5	43.8
Lao Tai, Nong	10	4.7		
Mon Khmer, Nong	203	95.3		
Wealth category				
Poorest	413	41.5	38.4	44.8
Middle	378	38	35.0	41.0
Wealthiest				
Wealth category by district $(n = 994, missing n = 0)$				
Poorest, Pek	96	18.9	15.4	22.2
Middle, Pek	286	56.2	52.1	60.8
Wealthiest, Pek	127	25	20.9	28.7
Poorest, Paksong	116	42.6	36.9	48.5
Middle, Paksong	80	29.4	24.2	34.1
Wealthiest, Paksong	76	27.9	22.4	33.1
Poorest, Nong	201	94.4	91.1	97.3
Middle, Nong	12	5.6	2.7	8.9
Wealthiest, Nong	0	0	0	0

<sup>&</sup>lt;sup>a</sup> Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Within this research site, the Nong district was the most remote, and endemically poor. Subsistence livelihoods prevailed with a reliance on upland farming and livestock with some rain-fed lowland paddy. This was supplemented by hunting, fishing and gathering non-timber forest products. Traditional livelihoods

were changing through government promoted relocation and an official discourse, which portrayed swidden, upland farming as 'backward' and unsustainable. Land zoning regulations were pushing swidden farmers to either illegally reopen their fallow fields or to practice permanent cultivation for which they had few skills. There were few opportunities for waged labour, and not all households were able to make the transition to wet-rice paddy farming. As in the first site of inquiry in the Lao PDR, livelihood systems were deeply embedded in the dietary preference for rice and cultural and social life of village communities.

There was limited food in the market and the road stops a few kilometres outside the district town. Villages were visibly poor; some households only had bamboo houses on stilts, with thatch or plastic sheeting for roofing, one room, a kitchen with traditional fireplace and veranda. Food insecurity was a chronic condition, few had access to potable water and sanitation, and household areas were unfenced with animals wandering freely. In the Nong district, farmers aimed primarily for survival and security, not affluence and profit, with most of their effort devoted to day-to-day subsistence. They relied on mutual aid (reciprocity), the reinforcement of family ties, and adhered to established traditions. Local subsistence was dominated by swidden farming but increasingly farmers were encouraged by the government to transition to wet-rice farming. During the time spent in the Nong district town in the process of this research, there was rarely food in the market. The only restaurant required 24 hours' notice for a simple meal of rice and vegetables. Most of the time while we were there, the researchers bought vegetables and fish from local households, paying someone to cook them for us. This is also seen in the score on the wealth index by district showing that the poorest group were in the Nong district. This was confirmed by the qualitative data and observation.

Households in both Pek and Paksong were visibly better off, almost half had access to a pit or wet latrine. Both districts were integrating into the market economy and showed signs of rapid economic change since the researcher's previous visit (2002 in Paksong and 2007 in Pek). Each had reasonable road infrastructure with paved roads extending to several villages and reasonable mobile phone coverage. This infrastructure and the market were transforming previously remote, rural areas into transnational spaces. Compared with the Nong district, there was much more livelihood diversity, including cash crops and evidence of deagrarianisation,

occupational multiplicity and rural industrialisation, for example, large coffee packers and distributors in Paksong. Almost all households in the Paksong district were engaged in cash cropping. The main cash crop was coffee; the industry was integrated into both regional and global markets. Participants reported that as the price of coffee had increased they had invested more of their assets in coffee for income-generation. In the Pek district corn was one of the main cash crops. Other cash crops included vegetables and peanuts and a number of households were integrated into the off farm market, which was virtually non-existent in the Nong district. Villages closer to the district town in Pek were generally engaged in the cash economy although the more remote villages had less regular engagement. Further, in the Pek and Paksong districts, with more established market economies, land was seen as an economic commodity to be traded and sold rather than a resource to be maintained and passed on through the generations. In the Paksong district the emergence of a strong coffee market and a nascent tourist trade had increased the value of land; and people from outside the district were moving in and buying land. Table 29 shows the main household livelihood activities in this research site.

Table 29: Main Household Livelihood Activities, Research Site 3

Main Books - 1 - 40-24-		_	Bootstrap 1	for Percent <sup>a</sup>
Main livelihood activity (N=994, missing = 0)	$oldsymbol{N}$	%	95% CI	
(11–994, missing – 0)			Lower	Upper
Rice farmer	263	26.5	23.6	29.4
Swidden	95	9.6	7.7	11.5
Cash crop	276	27.8	25.1	30.8
Livestock	137	13.8	11.7	15.9
Fishing	8	.8	0.3	1.4
On farm labour	21	2.1	1.3	3.1
Off farm wage labour	74	7.4	5.8	9.1
Handicrafts	25	2.5	1.6	3.5
Non-forest products	16	1.6	0.9	2.5
Remittances	1	0.1	0.0	0.3
Other	76	7.6	6.1	9.3

<sup>&</sup>lt;sup>a</sup>Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

As in the first site of inquiry in Lao PDR, households with no land or insufficient land could sometimes 'borrow' land, or the village head could allocate unclaimed land to needy families. Reasons for having no land, or limited land were related to poverty, and government policy discourses of development which cast swidden farmers as traditional farmers have divided the landscape into forest and permanent agriculture, reducing the area available for swidden, the traditional landuse practice. In addition some households had moved to be closer to the village, but were allocated limited land in their new location. Nong is also on the Lao Vietnam border and is very mountainous which also makes it difficult for people to extend the area of land under wet-rice cultivation.

In each district, population growth, and the government sponsored shift from swidden to wet-rice farming, were also reducing the scope for borrowing land or having land allocated to one's household; many of the villages showed evidence of transitioning from land abundance to land scarcity. Khamla, a program recipient, had over the years, reduced the amount of land he held from twenty hectares to less than six as he divided his land holding amongst his children. In Nong many people had insufficient land and were reducing fallow periods because they had no other areas available to farm. This also made swidden farming more labour intensive and less productive as there were more weeds and less potential for growing other crops alongside the dry rice crop.

#### 7.1.1 Mine Action Program in the Research Site

Established with the support of international donors and technical support from international MA NGOs, the main service provider in this site is the UXO Lao. UXO Lao has been working in these three districts since 1994. Funded through the UNDP as a project, it is a quasi-government organisation; it is hierarchical and structured in a similar way to a government agency and reports to the Ministry of Labour and Social Welfare. It receives no government contributions apart from in-kind contributions of offices. Almost all of the staff and management are Lao nationals, but international advisors also support it. Demining was undertaken almost entirely by manual clearance teams and in accordance with the National Standards and program SOPS.

A review of the NRA database revealed that clearance tasks were grouped into three categories (Table 30):

- Agricultural land cleared for individual household use. In this category no agricultural community land was cleared
- 2. Community land (usually for community infrastructure project, often with external support)
- 3. Agricultural land cleared for individual household use and community land. This is where individual households had land cleared for their personal use and lived in a village where clearance has been undertaken to release a household asset to which the individual household also has access

Table 30: Clearance by Type Per Household, Research Site 3

Clearance type (N=994,	n	%	Bootstrap for 95%	r Percentage <sup>a</sup> % CI
missing = 0)			Lower	Upper
Agriculture only (individual household)	224	32.5	20	25.1
Community only	595	59.9	56.6	63
Agriculture & community	175	17.6	15.3	20

<sup>&</sup>lt;sup>a</sup>Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Within the districts of Pek and Nong most of the clearance was undertaken as a community task only (71.5%, 80.3%, respectively). In Paksong, most of the clearance was for the removal of individual landmines and explosive remnants of war (48.3%). This was much higher compared with Pek and Nong (17.3%, 2.2%, respectively). A chi-square test (Table 31) produced a significant statistical difference between the use of the cleared land and districts with a large size effect (chi-square = 24 (df = 4), p = .001, phi = .50). This was almost certainly due to the different wealth levels, livelihood diversification and the presence of development partners in the different districts. For example, in the Paksong district most of the clearance was for individual agricultural land, which the qualitative data and observations showed was for coffee. In Nong most of the clearance was for small infrastructure projects for the World Food Program, Food for Work activities. In Pek most of the clearance was for community agricultural land. The 88 individual

agricultural tasks in Pek were for Hmong recipients as part of the government policy to shift swidden farmers to lowland wet-rice farming.

Table 31: Chi-Square Test Clearance by Type Per Household by District, Research Site 3

		District	
Clearance type (N =	Pek (n and %age of	Paksong (n and	Nong (n and %age
994, missing $n = 0$ )	total)	%age of total)	of total)
Agriculture individual	17.3% (n = 88)	48.2% (n = 131)	2.3% (n = 5)
Community task only	71.5% (n = 364)	22.1% (n = 60)	80.3% (n = 171)
Agriculture individual and community	11.2% (n = 57)	29.8% (n = 81)	17.4% (n = 37)

Target groups and priorities: Task prioritisation was guided by national authority priorities in particular the national strategy, which committed the national program to increasing the amount of land cleared. It focused primarily on agricultural land as a means to promoting rural development. As one key program informant commented, 'Our goal is that 90% of our clearance assets are directed at agriculture.' In accordance with the national strategy, other priorities were for key public services such as education and health clinics. Then clearance for grazing land and forested areas, communal facilities (medical/public health, water points, and schools) and Government facilities and offices. Until relatively recently, in line with the national strategy, the focus was on increasing productivity of the land cleared. Increased productivity was assessed based on the increase in the amount of land cleared per year.

Program staff reported that the socio-economic impact has only recently become part of the selection criteria. As with all operators, the program worked to national standards and its own standard operating procedures using a quota approach. Table 32 shows clearance tasks by wealth category. A chi-square test for independence indicated a significant association between the wealth category and clearance type chi-square = (4, n = 994) = .45 p = .000). Cramer's V = .15 indicating a very small size effect.

Table 32: Clearance Tasks by Wealth Category, Research Site 3

		Wealth Category		
Clearance type (N =	Poorest (n and %age	Middle (n and %age	Wealthiest (n	and
994, missing = $0$ )	of total)	of total)	%age of total)	
Agriculture individual	27.7%(n = 62)	437.9% (n = 85)	34.4% (n = 77)	
Community task only	46.9% (n = 279)	38.3% (n = 228)	14.8% (n = 88)	
Agriculture individual and community	41.1% (n = 72)	37.1% (n = 65)	21.7% (n = 38)	

The prioritisation process was linked to the UXO sector strategy, which explicitly commits the organisation to increasing productivity in terms of the amount of land cleared – its focus is on agricultural land and local infrastructure, such as schools and clinics, but not roads. The process was far more bureaucratic than in the other two sites of inquiry, and began with the program sending a letter to district departments asking for requests for clearance. Following this, survey teams went to the district and relevant sites to conduct a survey. As with the MAG Lao program in the first site of inquiry, a quota approach was used, with the amount of area being cleared restricted per village. The intent was to spread resources throughout the districts, although there were still villages that had not received any clearance activities, despite known contamination. The task prioritisation process was a structured process and did not rely on community liaison teams. It aimed primarily to serve the government as the following quotes illustrate:

Most people submit a letter requesting clearance ... and also a letter is submitted by NGOs requesting clearance for development projects - the document goes directly to the district administration office (LPO\_02, public servant, research site 3).

[The program] collects detailed information at the district level and drafts a work plan. We will also consult with the villagers and ask them which households should be selected as first priority and based on the bombing data and poverty status of the household. The work plan is approved by the Vice Governor and submitted to Vientiane (NPPO\_01, staff, research site 3).

Every year we summarise the annual work plan from the district offices and submit to the clearance agency; normally the clearance tasks are schools, hospital/Souksala (clinic), village office/cluster office, and irrigation. The tasks for access road and clean water are requested by villagers (NPPO\_03, local government, research site 3).

They [villagers] make request letters and submit them to UXO clearance project via the village head; my land was selected through this process (IDI 01, recipient, research site 3).

The guidance that local authorities were given in this process was unclear, although almost all local government respondents said that their understanding was that UXO clearance was primarily for safety rather than economic development and this guided their decision-making.

Through this prioritisation process, the program developed a work-plan for approval by the Province and then the NRA. Residual capacity was tasked to other areas in the village based on the productivity outputs. While the process seemed relatively clear for local authorities, for development agencies and villagers there seemed to be some lack of clarity, with people often unsure about how their land or village had been selected. Most assumed the district or village authorities had generated the request. In one case each household in a village had contributed money to have an area cleared for a road as an 'emergency' task. In theory the clearance process is a no–fee for service, but it was explained that in this case as it was an emergency and not in the work plan, the village was charged a small fee.

The following quotes help to illustrate the target population's understanding of the process:

I asked the village head but he also doesn't know [why land was not cleared], I think the people who received clearance within our village were on the list of the clearance organisation's work plan. My household and other villagers requested to the CA [community awareness] team leader when he came to do risk awareness in the temple; he noted down everyone who requested [clearance] and then I cleared the vegetation and waited until the coffee production season started, but there was no response from them

[the clearance organisation], so I planted coffee in that land. Now the coffee has grown; for one year it has been planted so now they cannot do UXO clearance. (NCR 001, recipient, research site 3)

The operator staff told us that the area selected to be cleared depends on the decision of us [operator], the Naiban [village head] did not provide any information, there is a list of land owners, who are selected for clearance from the district, but we do not know how to get on this list. (NXR\_004, recipient, research site 3)

In several instances, people were unsure how to request clearance, felt the process was too complicated, or felt they were not eligible. As a consequence the poorest sections of the community often did not request clearance as they did not understand the request process; or they lacked confidence in the process; or were concerned their request would not be approved; or felt the process was too complicated and were discouraged from applying. Below are some characteristic responses:

The forms are complicated, written in Lao and English, sometimes even the staff don't know how to complete them (LCR\_01, villager, research site 3).

I did not report or request UXO clearance because I am not sure if I have to pay or not; I don't have money to pay them if they charge for clearance and also I am not sure they will come to clear or not even if I make a request. So I decided to remove the UXO myself (LXR 03, villager, research site 3).

While many of the respondents were considered very poor, especially in the Nong district, observation and qualitative data also suggested that those with more assets were able to access services. Access to social networks and social status, for example, being a village head or knowing someone who worked for the service provider and an understanding of how to use the system to their advantage, were key characteristics:

[I found a lot UXO in my land] I have a friend who works for UXO clearance project and he told me that 'I will help you if you want to clear'.

Then I submitted the request letter to the village head and then I asked my friend to help (LXR 04, program recipient, research site 3).

Another respondent, Nui from the Nong district, worked for a mass organisation and was a rice farmer. She lived in the district town in a wooden house with electricity, and owned a refrigerator and a television. Nui had been on several study tours in Lao PDR and overseas to study development. Part of her work involved disseminating what she had learnt to the villagers. She was building a new house and while doing so found UXO. She reported this to the local authorities and they were able to place her into the work plan within a month.

However, Neung, a farmer in Paksong district described that the lack of access to assets, can stop people requesting the removal of landmine and explosive remnants of war, "People who cannot clear vegetation cannot have their land cleared and I do not have enough labour to clear the vegetation in time" (NCR\_007, recipient, research site 3).

Other respondents reported that they thought the area of land they wanted cleared was too large for one household due to the quota approach so they put other names on the request form. As one respondent explained:

The total land cleared for my household was three hectares; I put two different names on the paper to get clearance because my land is over one and a half hectares and I understand they will not clear over one and a half hectares for one household; I put my name and my wife's name on different request forms [as different households] (LCR\_03, program recipient, research site 3).

As the examples above suggest, the task identification process is more centrally driven and focussed on local government priorities. Outcomes from this more structured process are different from those in the first two sites of inquiry, which used a community liaison process. Some confusion was expressed about how the task prioritisation worked, and often, those with the most access to assets were better able to access the service.

The approved work plan was reported as being hard to change, but there was some flexibility at the discretion of the provincial co-ordinator and in response to tasks that are classified as 'emergencies'. For example as one respondent explained:

One day he [our son] went to weed in the garden with his younger brother; while weeding he found a UXO and he picked it up because he thought it was Petonque,<sup>7</sup> suddenly his younger brother shouted "UXO"! He was frightened and threw it away but he was unlucky and it exploded. After that the land was cleared (NCR 001, recipient, research site 3).

There were more requests than resources available and as in the first site in the Lao PDR, people often decided to use contaminated land to pursue livelihoods. As one program manager explained, "The main focus is on new land but in reality the land already used is also contaminated with UXO" (NXK\_2, program staff, research site 3).

In such cases, once under cultivation it may not be possible to clear the land or people may not want their land cleared as they cannot risk losing their crop. This was of particular concern in the Paksong district where coffee is the main crop as one man explained:

Because my land is already planted with Katimor coffee, they cannot clear it because it is overgrown; the clearance team has to search everywhere. They can only do clearance in cleared areas [cleared of vegetation] where there is no crop but not where there are big coffee bushes.

Balancing resources and requests means sometimes "They [villagers] complain, 'And did this man receive clearance and not me?'" (NXK\_2, program staff, research site 3).

Table 33 shows the reason why respondents thought their individual agricultural land had been cleared.

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<sup>&</sup>lt;sup>7</sup> French for the game of bowls.

Table 33: Reported Reasons for Individual Agricultural Land Being Selected for Clearance

Reasons for land being	n	%	Bootstrap for Percentage <sup>a</sup> 95% CI	
cleared $(n=178 \text{ missing} = 0)$			Lower	Upper
High UXO contamination	64	28.6	21.9	34.8
Household request	59	26.3	21	32.1
Village head request	53	23.7	18.8	29
Poor household (defined as rice insecure)	2	0.9	0	2.2

<sup>&</sup>lt;sup>a</sup>Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Where land was cleared for a community asset most people felt it was because the village authorities had made the request (N = 455, 76.5%, 95% CI = 72.9 - 79.7). Where land was cleared for a community asset only two of the sites were not being used before clearance (0.3%, 95% CI = 0.0 - 0.8) with one site still not being used at the time of the survey.

### 7.1.2 Post-Clearance Land Use

Of the agricultural land cleared, most people were using the land pre- and postclearance for the same or similar purposes, although some people had moved from swidden to paddy or cash crops. For example, 26.3% of people whose agricultural land had been cleared had converted to cash crops, mostly corn or coffee (n = 59, 95% CI = 21 - 32) and 28% (n = 62, 95% CI = 21.0 - 33.0) changed to lowland wet season paddy. This was also in line with the government strategy. People reported that generally paddy farming was less time-consuming and labour intensive than swidden, which was becoming harder due to the shorter time fields were left fallow. The stated preference for switching to paddy also needs to be understood within the prevailing government discourse of modernisation. However, some farmers were unable to make the change, either because they felt they had insufficient skills or their land was inappropriate. Where land was used for the same purpose, almost all respondents reported they were able to use the land more efficiently by digging deeper and faster.

Most community sites were used for similar pre- and post-clearance purposes with the most reported use being for schools (N = 395, 95% CI = 62.5 - 76.1). In most cases, unlike the first research site in the Lao PDR, rather than a development partner requesting a school area clearance, the request was from the district education

office in response to the letter sent by the clearance organisation. In some cases this was reported to be to facilitate new buildings, whereas in other cases it was to provide a safer environment for the students.

# 7.1.3 Household Livelihood Outcomes Following Unexploded Ordnance Removal

In the cross-sectional survey most people reported that their income had increased from using the land, with only 22 respondents (2.4%, 95% CI = 1.4 - 3.3) saying there had been no increase. The three most common uses of the extra income were for food, schooling and household equipment. The interview data and observation suggests that while important in monetary terms, the cash income of respondents was relatively low, particularly in the Nong district and in parts of the Pek district. Outcomes reported on the livelihood asset scale are reported separately for Nong as the items were slightly revised for the Pek and Paksong districts. Unlike the previous two cases, the scale administered in this phase of the research allowed testing against the respondents' score for the different assets included in the scale (human, physical, finance and social).

**Nong:** A mean score was calculated for each of the sub-scales of the livelihoods asset scale and are shown in Table 34. Given the district was the poorest and most remote it is perhaps not surprising that the largest proportion of 'not applicable' responses were in the finance and physical sub-scales.

Table 34: Mean Score on Each of the Sub-Scales of the Livelihoods Asset Scale, Nong, Phase 3

			95%	6 CI
Asset	N	Mean	Lower	Upper
Human	208	3.34	3.27	3.41
Social	192	3.29	3.23	3.34
Finance	181	3.00	2.97	3.07
Physical	180	3.56	3.40	3.50

<sup>&</sup>lt;sup>a</sup>Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

There was no significant difference between men and women and the score relating to each livelihood asset scales. Most of the respondents were from the same ethnic group, so it was not possible to test for differences between the score relating to the livelihood asset sub-scales and ethnicity. Independent t-tests were undertaken to see if there was a significant difference between the score on each of the asset sub-scales and the number of assets released through clearance (one or two or more) but no significant difference was observed.

A one-way ANOVA was used to test for differences in the score on the different sub-scales and the wealth category. Subjects were divided into three groups based on their score on the wealth index (poor, middle, not poor). On the social sub-scale, differences in the score differed significantly between the poorest and the middle group and the poorest and the wealthiest group, F (2, 189) = 3.51, p = .03. Despite reaching statistical significance, the actual difference was a very small effect and the eta squared was .03. On the physical subscale a one-way ANOVA also revealed a statistically significance difference between the score on the physical subscale and wealth category. Differences in the score differed significantly between the poorest and the wealthiest group, F (2, 177) = 4.09, p = .018.

Despite reaching statistical significance, the actual difference was a small effect and the eta squared was .04. A statistically significant difference was also observed between the human sub-scale and the wealth category. Differences in the score differed significantly between the poorest and the wealthiest group, F (2, 205) = 4.39, p = .013. Despite reaching statistical significance, the actual difference was a small effect and the eta squared was .04. The results for these tests are shown in Table 35. The results indicate that in terms of increased access to social and human assets the wealthiest group benefited most based on their scores on the asset scales. There were no statistically significant differences between reported changes on the finance scale and the wealth category.

Table 35: One-Way ANOVA against the Mean Change Recorded on the Livelihood Asset Sub-Scales Social, Nong District, Phase 3

		Social Sub-Scale	
Wealth	Poorest	Middle	Wealthiest
	(n = 111)	(n = 60)	(n = 21)
	3.29 a (2.46-2.84) <sup>a</sup>	3.21 <sub>a, b</sub> (3.08-3.32) <sup>a</sup>	3.48 <sub>b</sub> (3.34-3.63) <sup>a</sup>
		Physical Sub-Scale	
Wealth	Poorest	Middle	Wealthiest
	(n = 103)	(n = 53)	(n = 24)
	3.39 a (3.32-3.46) <sup>a</sup>	3.4 <sub>a,b</sub> (3.39-3.58) <sup>a</sup>	3.60 <sub>b</sub> (3.50-3.71) <sup>a</sup>
		Human Sub-Scale	
Wealth	Poorest	Middle	Wealthiest
	(n = 121)	(n = 63)	(n = 24)
	$3.38_a (3.30-3.46)^a$	3.19 <sub>a,b</sub> (3.03-3.35) <sup>a</sup>	3.54 <sub>b</sub> (3.35-3.73) <sup>a</sup>

<sup>&</sup>lt;sup>a</sup>Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples Numbers in brackets are 95% confidence intervals of the means. Means that do not share subscripts differ at p < .05 in the Tukey honestly significant difference comparison.

A one-way ANOVA was not possible to test differences between reported score on the livelihood assets and type of clearance due to the small number (n = 5) of respondents who had land cleared for individual use. Independent t-tests were conducted to explore if there were any differences between those who had clearance for community only and those who clearance for individual land use and community. A statistically significant difference was only found between the score on the physical sub-scale and type of clearance. Those with community only land cleared = M 3.41 (95% CI 3.35-3.47) and those with community land and individual land = M 3.61 (3.50-3.71), t (173) = -3.17. The results suggested that those with land cleared for community land and individual land benefited slightly more than those with land cleared for community land only, although the magnitude of the differences in the means was very small, eta squared = .03.

Using the scale data, non-parametric correlation coefficients (Spearman rho) were used to assess the relationship between the four sub-scales. The descriptive statistics for the sub-scales are in Table 36, showing a positive correlation between the variables. Using Cohen's (J. Cohen, 1988) guidelines to assess the strength of a relationship, a small association is seen between social and finance (rho = .294) and a large association between the social and physical (rho = .53) scales. A moderate

relationship was observed between the physical and finance scales (rho = .31) and finance and human scales (rho = .39). This relationship was also confirmed in the Rasch analysis in Chapter 3, where the overall livelihood scale demonstrated good fit to the Rasch model.

Table 36: Spearman Correlation Coefficients (rho) Among the Livelihood Asset Subscales, Nong Phase 3

Scale	Social	Physical	Finance	Human	
Social		.53ª	.29 <sup>a</sup>	.11	
Physical			.31 <sup>a</sup>	.14 <sup>a</sup>	
Finance				.39 <sup>a</sup>	

<sup>&</sup>lt;sup>a</sup>Correlation is significant at the .01 level (2-tailed)

Only five respondents had land cleared for individual use in Nong and only 38 for community and agriculture, individual household use restricting any exploration of differences between task category groups.

**Pek and Paksong:** Table 37 shows the mean score on each of the sub-scales of the livelihoods asset scale. No respondents from the Hmong ethnic group are included in the calculations for the physical scale as all respondents (N = 88) answered 'not applicable' to at least two of the seven items that made up the scale. The main reason for this is that the clearance in the Hmong villages was for either rehabilitating or extending an existing school or providing a new school, and in one village, an improved access road. These villages are in the highlands, quite remote and the main reported livelihood activities were swidden with some wet-rice farming, livestock and hunting. Improved access to a school or an improved access road would not be expected to substantially improve access to the other items on the physical scale.

Table 37: Mean Score on Each of the Sub-Scales of the Livelihoods Asset Scale, Pek and Paksong, Phase 3

Asset		3.4	95% CI <sup>a</sup>	
	n	Mean	Lower	Upper
Human	624	4	3.90	4
Social	610	2.83	2.72	2.95
Finance	360	2.98	2.85	3.12
Physical	553	3.56	3.43	3.68

<sup>&</sup>lt;sup>a</sup>Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

The higher human and physical scores are related to the type of clearance and post-clearance land use. Most of the clearance sites in Phase 3 were undertaken for community purposes, typically as part of a 'package' where the operator undertakes the clearance and a different agency inputs the development tasks. Most of these tasks were for improved schools, community facilities and access roads. The qualitative interview data in Phase 3 showed that most of the community clearance was undertaken for schools or other priority local government infrastructure. This would affect both the human and the physical scales.

The qualitative interviews suggested that the lower scores and overall number of responses on the finance sub-scale were due, at least in part, to the fact that land was often being used prior to clearance for cash crops (for example, corn and coffee). In addition, where land was cleared for these cash crops, unlike wet-rice farmers, respondents did not comment on the ability to dig deeper and faster. For example, once the coffee plants had grown the farmers did not usually have to undertake any further digging.

There was no significant difference between men and women on the score relating to each of the livelihood asset scales. A one-way ANOVA was conducted to explore the impact of ethnicity as recorded on the sub-scales of the livelihood asset scale. Subjects were divided into the three main ethnic groups (Lao-Tai, Hmong and Mon Khmer). There was no significant statistical difference between scores on the livelihood asset scale and ethnicity for the social or finance scales, but there was a

significant statistical difference on the human sub-scale. On the human sub-scale there was a statistically significant difference between the Lao-Tai and Mon Khmer groups (F (2, 621) = 10.88, p = .002. Despite reaching statistical significance, the actual difference was a very small effect and the eta squared was .02. The results are shown in Table 38. The small number of Mon Khmer is explained in part by most of the Mon Khmer sample being in the Nong district. However, those that were included did not score highly on the human sub-scale compared to the other two groups. The physical scale was excluded from these tests in relation to ethnicity as the Hmong respondents could not be included in the test as they were excluded for reporting 'not applicable' to changes in physical assets.

In order to explore if there were any statistical differences between wealth groups, the respondents were divided into three groups from the poorest to the wealthiest. A one-way ANOVA was conducted to explore the impact of poverty as recorded on the wealth index and the score reported on the different sub-scales of the livelihood asset scale. A significant difference was found between wealth categories (refer to page 81 for wealth categories) and scores on the physical sub-scale of the livelihood assets scale. The scores differed significantly between the poorest and the middle group and the poorest and the wealthiest group, F (2, 550) = 5.39, p = 0.005. Despite reaching statistical significance, the actual difference was a very small effect and the eta squared was .01. The results are shown in Table 38. No statistically significant differences were found between the score on the wealth index and the other livelihood asset scales.

A one-way ANOVA was conducted to explore the impact of the type of clearance and reported score on the sub-scales of the livelihood asset scale. Subjects were divided into three groups based on type of clearance (only agriculture, individual household use; only community resource; community and agriculture, individual household use). A statistically significant difference was found between type and use on the physical scale but not on the other scales. This may be because access to physical assets is a more tangible outcome. The results are shown in Table 38. The scores differed significantly between the individual and community tasks and individual task only and between the individual and community task and community only, F(2, 550) = 8.80, p = 0.000. Despite reaching statistical significance, the actual difference was a very small effect, and the eta squared was

0.03. However, the results suggest that the benefit is greater when people receive clearance for their own individual land as well as a community asset.

Table 38: Statistically Significant ANOVA Results Against the Sub-Scales of the Livelihood Asset Scale

		Human Sub-Scale		
Ethnicity	Lao-Tai	Mon-Khmer	Hmong	
	(n=247)	(n=61)	(n=86)	
	$4.09_a (3.96-4.20)^a$	$3.41_b(3.21-3.73)^a$	$3.90_{ab} (3.59-4.20)^a$	
		Physical Sub-Scale		
Wealth	Poorest	Middle	Wealthiest	
	(n=202)	(n=268)	(n=83)	
	$3.41_{a}(3.19-3.36)^{a}$	$3.51_a (3.34-3.69)^a$	$4.05_b (3.07-4.41)^a$	
	·	Physical Sub-Scale		
Type of	Individual	Community	Community	&
Clearance	(n=191)	(n=309)	individual	
	•	. ,	(n=103)	
	$3.61_a (3.31-3.89)^a$	$3.36_{a}(3.20-3.51)^{a}$	$4.08_{\rm b} (3.75 - 4.37)^{\rm a}$	

<sup>&</sup>lt;sup>a</sup>Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples Numbers in brackets are 95% confidence intervals of the means. Means that do not share subscripts differ at p < .05 in the Tukey honestly significant difference comparison.

Independent t-tests were undertaken to see if there was a significant difference between the score on each of the asset sub-scales and the number of assets released through clearance (one or two or more) but no significant difference was found. Where land was cleared for individual agricultural use the most significant reported change was that people felt more confident and safer when using the land (N = 181, 82.6% 95% CI 78.1 - 87.2). The most significant reported change where clearance had been for community plots depended on the type of post-clearance land use. Respondents reported the most change where an access road was built or enhanced. They reported increased trade, feeling proud and having more access to information as the most important changes.

Spearman's *rho* was used to assess the relationship between the four subscales. The descriptive statistics for the sub-scales are in Table 39, showing a positive correlation between the variables based on Cohen's (J. Cohen, 1988) guidelines to assess the strength of a relationship; a moderate association was seen between social and human (rho = .32), social and finance (rho = .43), social and physical (rho = .34) and finance and human (rho = .41) scales. The strongest correlation was between the physical and finance subscales (rho = .46) with the lowest occurring between the social and human sub-scales (.32).

Table 39: Spearman Correlation Coefficients (rho) Among the Livelihood Asset Subscales, Paksong and Pek Research Site 3

Scale	Social	Physical	Finance	Human
Social		0.43**	0.43**	0.32**
Physical			0.46**	0.34**
Finance				0.41**

<sup>\*\*</sup>Correlation is significant at the .01 level (2-tailed)

Another issue emerging from the results is the trend in the item difficulty assessed by estimates of each of the items in logits presented in Appendix 12. Lower logits show that an item was relatively easy to affirm and higher logits show that an item was relatively difficult to affirm. As shown in the appendix, in the social subscale, two items (S3 How much food, e.g., fruit, vegetables, rice, chilli, does your household have to share with other villagers/friends when they need it; and S8 How confident are you that there are people in your community who would help your household if needed?) were harder to affirm than the other items in the sub-scale. This may be because particularly in poorer households, most social ties were with people within the village. In other words there were poor-to-poor ties. These poorer households would be unlikely to be able to sustain these forms of mutual assistance. It may also be because increased market integration and competition is weakening social ties within the village. Items related to "meeting other people" and "going outside of the village" were easier to affirm. This was supported by the qualitative interviewws and was also likely to be related to increased road and market access beyond the additional access provided by UXO clearance.

In the physical sub-scale item P5 (How has the quality of your household's house changed (e.g. new roof, some timber or stone or metal sheeting)?) was harder to endorse. The explanation for this is not clear, but it may be because some of the other assets included in the scale such as schools and access roads providing better access to the district and local health care clinics were often direct inputs from downstream development agencies or local government following the clearance and therefore were seen to be more directly related to UXO clearance.

In the finance sub-scale, four items were harder to endorse than the other items (F3 On average in one month how much money can your household save (e.g. in a

buffalo or cash) to use in the future? F4 How much in one month does your household have to buy basic items? F5 How much do you worry about your household having enough to meet its basic needs (things you must have) in the future? and F8 How has your access to healthy livestock changed?). Items F3, F4, and F5 may have been hard to affirm due to increased cash needs as the districts transition into a market economy. It is not clear from the interviews why item F8 was hard to endorse, but may relate to different livelihood systems.

In Paksong district for example, the main source of income was coffee and few households had substantial livestock holdings. In the finance sub-scale item F1 (How has the [financial] value of the land that has been cleared [of UXO] for your household changed [increased or decreased]?) was much easier than the other items to endorse (logit = -1.83). This was supported by the interviews where people commonly commented that the value of their land had improved following clearance. This was particularly the case in Paksong and Pek districts, which have rapidly integrated into the cash economy and land value has increased. While not mentioned in the interviews specifically this is likely to also be related to changes in land ownership and the privatisation and commoditisation of land and land-based production. The remainder of this chapter considers the qualitative outcomes.

The box below presents Nong, a typical program recipient, and the outcomes he reported from UXO clearance for wet-rice farming. Nong's family was relatively well-off. They had a diversified livelihood portfolio of waged-labour, government work, small-scale trade, employment with commercial enterprises, and on-farm subsistence. His household was integrated into the village and local Pek district political structures and he had friends who worked for the UXO clearance agency.

There are ten people in Nong's family, six children, five of whom are female, his wife and parents. His son is 29 and works for Lao Samphan Company as a supervisor in the Pek district, only returning to visit the family sometimes. Two of his children are married and live with their husbands, one daughter is working in Vientiane province and the fifth child is now studying accounting locally. His wife is the Women's Union representative for the cluster. Nong's main job is lowland farming with almost three hectares under cultivation. Most of the labour is provided by him and his wife, but sometimes he exchanges labour and sometimes he hires labour paying about 3,000 kip per day (AUD 3). He has sufficient rice for his household and is able to give some to his children who are no longer living at home. In addition, to farming, he raises livestock, and until last year he also had an income from a sand and gravel excavation business.

The village is very UXO contaminated, and between 1962 and 1973 during the war, his family moved to Vientiane, returning at the end of the war. He found it very hard having to start farming again as much of their land was contaminated. It was very slow, and in the first few years he could not plant as much as he wanted. During this time several people were injured due to UXO.

Before the UXO program started, he used to move any UXO which he found to the side of the field and tell the children not to touch. This time when he and some of the other villagers wanted to open more land, they asked the clearance organisation to help them. The land was very contaminated and it took about two months for the team to finish. In total they cleared about 26 hectares for grass land, upland farming and paddy. This was then divided by the village authorities for about ten families; Nong's family were given about three hectares, which is used for paddy, and some is for a vegetable garden.

Nong and his uncle initially made the request through the village head after a friend, who worked for the UXO clearance project, told him he would help him. So he submitted the letter to the village head and then asked his friend to help. Only about 60% of the land that was cleared is under cultivation, as it is quite high and there is not enough water. Further, with so many of Nong's family living away from home he does not have enough labour. However, Nong is happy to have had the land cleared as it means he has some safe land to hand over to his children. The value of the land has increased and he does not have to worry anymore when he is farming. He knows the area has only been cleared to about 25 centimetres\* but he is not worried about this, because it is unusual to find cluster munitions, which he feels are the most dangerous, any deeper than that.

<sup>\*</sup>In accordance with National Standards

This is the only district where large areas of land were cleared. Clearing large areas in this district is relatively easy as the landscape is rolling plains with limited vegetation removal required for clearance. In the other two programs, and in the Paksong and Nong districts it was rare for more than one hectare to be cleared. Nong estimated that 40% of the land was not being used because it was high and not appropriate for wet-rice farming. It is not clear why this land was cleared in this case, but it does resonate with program staff reports that the main emphasis was on increased productivity. Nong's narrative also emphasis how livelihoods were becoming a hybrid between on and off farm work in this district.

The box below describes Noy, another typical respondent. Noy was from a large family, a member of the local Party, a civil servant and part of the village leadership. He considered his success a result of UXO clearance, along with his enthusiastic, diligent, decisive attitude; his ability to follow advice from agricultural advisors; and his willingness to try many times in order to succeed in new activities. He exhibited a positive attitude to development and expressed a belief that life could and would be better, partly by acting in accordance with development politics seen in Lao national discourses, which emphasised a shift from traditional swidden farming to lowland, wet-rice farming.

Noy's narrative of the benefits of wet-rice farming may be coloured by his socio-political position, but he also seems to want to portray himself as a modern man integrated into the cash economy and a man who is able to develop activities in his district. Amongst almost all respondents, there was a consensus that without UXO clearance development projects such as the dam in Noy's village would not be implemented. Not all respondents reported benefiting greatly from UXO clearance. For example, in some areas in the Nong district the topography is not favourable to paddy farming, and for the poorest, securing enough basic rice is the priority. Unlike Noy, such farmers are unable to invest in 'yangbong' or other crops; changing agricultural production may risk food security. They reported that yields from traditional farming systems cannot provide enough rice for their households due to shortened fallows. For these mainly upland farmers, they would have preferred support to invest in improving existing swidden systems. Such support is not part of the political and economic development discourse of the government.

Noy is male, married, 32 years old and has lived in this village all his life. He has three children and they live with the extended family – his parents and his two brothers and their wives and children. All the children are quite young with only Noy's eldest attending school. As the eldest son, Noy is the head of the family although his mother controls the family finances. The main sources of income are upland farming, lowland farming, gardening and selling sticky rice containers (*Tipkhao*), beer and collecting and selling scrap. He buys scrap metal (which often includes UXO) from the other villagers for 500 kip/kg which he then sells on to Vietnamese traders for 1,000 kip/kg (AUD 0.10). This income is important to him as it helps bridge the gap between harvests when they need to buy rice. In addition he has chickens, collects and sells the bark of the '*Yangbong*'s, bamboo shoots (in the wet season) and cardamom. In the dry season he collects grass which he makes into brooms and sells to Vietnamese traders. Some years he gets additional income from selling a cow. He considers his family to be not rich and not poor. He has a permanent house made with wooden poles, a zinc roof, wooden walls and floor and the household is able to provide sufficient rice for everyone throughout the year.

Noy has seen a lot of changes in the village over the last ten years. Now there is a road to the village, which has brought in many traders and given people in the village access to labour markets and more information about different farming methods. His parents for example, only performed upland farming, as this was all they knew, but he and his brothers also spend time on lowland farming. A dam has also been built in an area that was cleared of UXO, and this provides more water, making it more convenient for paddy. Villagers also have fish in the dam but they are not ready to be harvested.

His land has been cleared of UXO, but he suspects there are other areas which still need clearance. He worries about working in areas with UXO in case he becomes disabled and a burden to his family. In Noy's opinion there is not much that people can do to protect themselves from a UXO injury while farming except burn the land first, which will bring UXO to the surface so they can see it while they are farming.

When the UXO organisation came to the village, they had obtained a list from the district authorities – he is not sure where the list came from, but they cleared almost two hectares in the village. The technical staff selected the areas for clearance, choosing areas which were used for upland farming, but which could be converted to lowland after clearance. Noy explained it is harder to perform paddy farming in areas which are

<sup>&</sup>lt;sup>8</sup> The bark of Yangbong is used to make incense. A tree found in the forest, Yangbong is now being promoted by the local authorities as a cash crop, the products of which can be sold to Vietnamese traders.

contaminated as you need to dig deeper so it is too dangerous. Noy prefers to undertake lowland farming as it is less labour intensive and the yield is better, even if there is UXO. He thinks he would probably undertake lowland farming now even though he knows there is a risk of injury. The problem with upland farming is with shorter and shorter fallow cycles, the yield is not so good, and the rice is not beautiful.

Prior to the UXO team coming, Noy cleared the vegetation from the land by burning, then the team came, marked the area and once they had finished showed him the boundaries of the cleared area. He was able to start using the land for paddy, and with seed provided by the government, he grew Yangbong immediately. The yield has doubled compared to before clearance where he was using the land for upland farming. Lowland farming is also less labour intensive, so he has time to perform other jobs and to go outside of the village, purchasing and selling goods and finding out what other people are doing.

As a point of comparison, Table 40 shows examples of other typically reported outcomes in the interviews.

Table 40: Outcomes Against Livelihood Asset and Post-Clearance Land Use Type

Livelihood Asset	Post- clearance Land Use	Key Terms	Characteristic Response
Human	Rice farming	Time for other activities	Using cleared land for paddy gives more time for other activities
			With clean water in the village we save time collecting water
		More rice	We can have more rice as we can dig deeper and the rice is more beautiful and larger area under cultivation
		Health	Less worry about accidents and loss of limbs – unable to work and cover cost of health care
	Cash crops	Dare to hire labour	After clearance there is less worry about hiring labour to work on the land [if there was an accident the land-owner would need to pay]

Livelihood Asset	Post- clearance Land Use	Key Terms	Characteristic Response
Social	Rice farming	Food to share	More food means we can share with others [and participate on social activities/ceremonies]
	Road	Information	We get more information from people outside
			It is easier to go and meet people
Finance	Farmland	Land value	The land value is higher without UXO
	Road	Trade	More people come into the village and we can sell for higher price
Physical		Convenient	The road access is more convenient
Environment	Village dam		The water from the dam is used for fish breeding [also source of income] and washing

In one case, in destroying the UXO, part of the household's crop was also destroyed:

We could not eat the rice [after clearance] because the rice was mixed with soil and gravel. This soil and gravel came from the UXO destruction because [when they did the clearance] the rice was already cut and drying in the field when they destroyed the UXO. The UXO was found in the dike and they collected [the UXO] and placed them together and destroyed them, so the soil and gravel spread through the rice but they had told us not to take rice out beforehand (LXR 01, recipient, research site 3).

There was general agreement that without clearance, development projects would not be implemented. For example:

Without clearance the development projects might not happen because people are afraid of UXO; the land has to be cleared before planting Yangbong and for paddy (NCH\_04, public servant, research site 3).

UXO clearance is vital for development projects because if there is no clearance they won't provide funds (for the development project) (NCH\_02, public servant, research site 3).

A UXO clearance certificate is very important for donors before they approve funding (NXK 01, public servant, research site 3).

As in the previous two sites a number of contextual factors were identified which mediated outcomes as highlighted in the quotes below.

The poor and chronically rice deficient households, who were vulnerable to livelihood shocks and out of necessity, risk averse, were unlikely to alter their land use pattern as their main priority was securing rice. They could not afford to experiment with new crops or methods, as failure would be catastrophic. As one respondent explained:

They want to plant other crops but they worry they won't have rice, or would like to do other jobs, but worry they won't have rice, they want to plant "Yangbong" tree but could not, because they have to plant rice (LNR 02, village head, research site 3).

In one village in the Nong district people had grown bananas with an agreement to sell them to a middle man. When this agreement did not come to fruition, they were left with the bananas and no market and no means or understanding of how to source an alternative market. This respondent sums up other reasons for the poor not using the land efficiently:

The poor lack capital, have no education and lack of knowledge of how to do things differently. In some cases they have capital but no knowledge. The people have never moved to anywhere else. Because of their low level of knowledge, even if they go to find work as a labourer they don't know where to go. None of the villagers have ever been to Savanakhet [provincial town] because the price of the bus is expensive (LNR\_02, village head, research site 3).

However, access to assets, especially physical assets such as a road were reported as being important in both introducing new knowledge, but also in helping people move produce to markets. Government policy and market incentives were also influential in how the land was used. For example, in the Nong district, land was being used to grow *yangbong* with seeds provided by the government. In Paksong the price of coffee and good market access meant that many farmers were moving away from a mix of rice and coffee to a focus on coffee only. The government policy to reduce swidden farming was also reported as leading to a shift to paddy farming. Pests and lack of water were commonly cited reasons for poor yields.

# 7.2 Chapter Summary

The findings suggest a range of livelihood outcomes depending on the use of the post-clearance land. The benefits of demining can be diverse depending in part on post-clearance land use. It can help for example the practical activities necessary to facilitate household production, such as farming, market engagement and house building. It can also assist in the fulfilment of social and cultural responsibilities. The more sophisticated scale demonstrated that access to the different assets were related to each other. This was also supported by the Rasch measurement fit to model statistics in Chapter 3 (Table 3, p. 63). This was also supported by the qualitative data, for example, access to a weir was reported to lead to increased rice cultivation and increased participation in social activities and relaxation. In each of the three districts included in this phase of research, respondents scored higher on the human and physical scales. This may be because these are the most direct and tangible changes. For example, access to school, rice, physical assets and a sense of safety related to UXO decontamination are highly visible and quantifiable changes. A number of contextual variables were also identified which mediated outcomes of clearance. Chapter 8 is the discussion chapter where a response to the research objectives is provided.

## **CHAPTER 8**

#### **Discussion**

This chapter synthesises the qualitative and quantitative findings and the literature reviewed in Chapter 2 in order to address the overall research question of:

Who benefits from demining, in what ways does it affect household livelihoods, and in what contexts?

The chapter begins by discussing the evolution of mine action (MA) and its governance and finance structures. It then addresses each of the objectives of the research.

#### 8.1 Mine Action

#### 8.1.1 Mine Action in the Research Sites

The evolution of MA in the sites of inquiry followed the typical trajectory outlined in Chapter 2. In Lao PDR, in the period following the cessation of hostilities, clearance of unexploded ordnance (UXO) was ad-hoc with small humanitarian programs implemented by the US and the Soviet Union. Following the end of the Cold War, and the emergence of humanitarian MA as a sector, on-going programs were implemented in the Lao PDR and Iraq (Bolton, 2010). In the sites of inquiry, a mix of government projects, NGOs, and for-profit operators, governed by international and national standards, undertook demining activities.

In both Lao PDR and the Kurdish Region of Iraq a landmine impact survey had been completed. In Lao PDR this was completed in 1997 (Handicap International, 1997) and was used by the national authorities to determine where operators should work. In the Kurdish Region of Iraq it was completed in 2006 (iMMA, 2006). These surveys prioritised at the village, district and governorate level the number of injuries weighted above economic assets blocked by landmines, explosive remnants of war (ERW) and UXO and did not provide a baseline at the household level against which the programs could be evaluated.

In the first two sites, international staff with military backgrounds primarily led the management of operations. In the third site, the program was managed by national staff, but with the support of technical experts. These experts were also exmilitary international staff. In the sites of inquiry, the prominent narratives for framing MA were ones of safety, risk elimination, and technical expertise and economic development. These predominant discourses were not restricted to the international staff and intersected with national narratives of economic development, modernity and what it was to be a good citizen in the modern state. In the first two sites of inquiry the economic narrative was particularly dominant and reflected the dominant narrative of the donors. In the third site of inquiry, at the field level, the rationale for MA was framed primarily around moral narratives of safety while at the central level there was more of a focus on economic benefits. The technical expertise was reinforced by international and national standards and further legitimised in donor contracts and international treaties of which Lao PDR and Iraq are signatories. In each of the research sites, manual demining was the main method of clearance. The intent was to check every square metre of the area identified for clearance to a certain depth specified by national standards (usually 20-25 centimetres) (NRA, 2009). The national standards also detailed minimum standards ensuring on-site safety. In each of the sites of inquiry, a quota approach was taken whereby a certain number of hectares were cleared per village. Each site of inquiry was in stages 2 and 3 of a MA program with economic development rather than public health or threat reduction, being the main objective.

As a policy instrument to reduce poverty, the economic narrative in the sites of inquiry framed landmine, ERW and UXO clearance as essentially an incentive program. The program provided a fully subsidised clearance service to households and communities that it assumed did not have the resources to safely remove these explosive contaminants on their own. It was also assumed that this contamination prevented poor people from using their land and enjoying economic development. Provision of decontaminated land was expected to act as an incentive for households and development actors to invest in the land and return it to productive use. In this way, the benefit derived from the direct incentive (cleared land) would leverage access to other livelihood assets, seen primarily in economic terms. In line with contemporary preferred donor strategies, each program site also partnered with other

agencies, especially for community based tasks. These other agencies provided the inputs for other development initiatives following clearance.

In common with MA programs globally, and incentive programs more generally, the program was delivered through two main components. The first was through communication and the second through delivery of the incentive itself through the process of demining. The purpose of the communication was to inform households and communities of the program and identify areas to be cleared. In the first two sites of inquiry, and in line with international standards, the communication component was delivered through community liaison teams. These teams identified the areas to be prioritised for clearance with the community and then fed these tasks into operational planning processes. In the third site of inquiry, communication was mainly through the technical survey teams or the district authorities. These technical survey teams undertook the traditional level 1 surveys documenting the size of the hazardous area, soil type, ground cover, type of and logistical information. To be considered for clearance, a formal written request had to be made by the landowner or end-user. In each site these processes also involved a process of triage as not all hazardous areas could be cleared.

#### 8.1.2 Governance

The literature review in Chapter 2 showed that since the end of the Second World War, demining and understandings of post-conflict explosive contaminants and funding for its removal have been influenced by the broader global political and security discourses and processes of globalisation (see for example, Bolton, 2010). For example, in the immediate aftermath of the Vietnam War, UXO clearance in Lao PDR, was largely State led, with limited assistance from the Soviet Union and Vietnam (Bolton, 2010). Since the mid-nineties, governance of demining in Lao PDR has become a global, multi-layered and multi-actor issue with international and national players making decisions about the program. For example, both Lao PDR and Iraq are signatories to international treaties that guide MA. The program in the third site is funded and largely managed through the United Nations Development Programme (UNDP). In the first two sites of inquiry, MAG, an international NGO, contributes to technical working group meetings, including reviews of national standards, and is influenced by its international donors and their strategic priorities.

#### 8.1.3 Funding

In each of the research sites, international donors funded the MA programs. In the first two sites, the program was implemented by MAG, an international NGO. Donors contracted MAG, mainly the Department for International Development (DfID), AusAID, the United States and the European Union contracted MAG based on a competitive process, with agreed specified outputs and outcomes but MAG was given quite a lot of autonomy both by the donors and the national authority to determine which specific sites to demine.

The grants were also linked to the donors' strategic objectives, which in these sites was primarily economic development. MAG was accountable to the donor, and reported on an agreed timeframe against outputs and outcomes. It was also accountable to the host country national MA authority; reporting on location, size, type of ordnance cleared, areas cleared and the number of beneficiaries in accordance with the International Information for Mine Action System (IMAS). In the first site, MAG complemented a service provided by a quasi-state operator funded by the UNDP. In the second site MAG addressed a gap in state services. In the third site (the national UXO program), the program was implemented by a government agency and funded primarily through multi-lateral aid channelled through UNDP. This program was funded to meet donors' strategic objectives of supporting economic development, strengthening economic and diplomatic ties and building capacity of the state to implement MA programs. It had less onerous reporting requirements than MAG. In each site, services were provided free of charge to the end user. In each site, demining activities were undertaken within a discourse of development politics and to promote accumulation of material wealth. It was incumbent on demining agencies to do so to maintain and expand their market share.

Each program was informed by the principles in Figure 1 (Chapter 2). A difference was that in the first two sites, the donor discourse was privileged whereas in the third site the government discourse of development was privileged. While both focus on accumulation of economic wealth, in the third site, there was more emphasis on national priorities of modernisation through, for example, promoting a shift from swidden to wet-rice and cash crops. In the third site of inquiry there was also a greater emphasis on the amount of land cleared, which was also in accordance with the national strategy and MDG 9.

As seen in Chapter 2, despite the shift to a focus on economic development, there is little evidence to date to show how and in what ways MA, and clearance of war debris, contributes to livelihoods and these broader development goals. The first objective of this research was to document the outcomes of such programs.

# 8.2 Addressing the Research Objectives

#### 8.2.1 Objective 1

This objective aimed to document the outcomes of demining on household livelihoods from the perspective of program recipient households in the sites of inquiry. The themes listed below were documented from program recipient perspectives.

**Peace of mind:** An important benefit for households was a sense of safety and peace of mind; the ability to live and work without having a constant underlying concern about safety due to landmine or UXO injury, which would be a significant livelihood shock for households. Recipients reported safety, happiness and freedom as some of the most significant changes. This corroborates findings of previous research (Bolton, 2010; GICHD, 2006).

From one asset other assets flow: The tangible benefit of demining is realised directly by the return of decontaminated land but this in itself does not cause development. Both the quantitative and qualitative data show that returning land to households and communities enables access to a range of assets – social, human, physical and financial. The idea that access to one asset can increase access to other livelihood assets is also supported by the literature (Carney, 2008; Ellis, 2000; Scoones, 2009; van Dijk, 2011). Significant statistical associations between each class of assets were found using Spearman's Rho further supporting the idea that access to one asset can facilitate access to another.

With improved road access in Lao PDR, women were able to save time, as it was the women who usually carried the produce to the market. With access to a road, the women often received lifts all or part of the way on small, locally purchased, hand walking tractors. Access to safe water in the village resulted in numerous benefits, including time efficiencies, especially for women and children. A similar finding was observed in an earlier study in Lao PDR (Durham, 2008) and elsewhere (H. White, 2009). Statistical testing for associations between sex and scores on the

livelihood asset scale showed very little difference and where there was a statistically significant association the effect size was small. The reasons for the small effect size in this study are likely to be related to the limited scale of such projects in the research sites, making population level effects unlikely (Barrientos, 2011; Barrientos et al., 2005). The quantitative survey and qualitative interviews also suggest that, while there were some differences between demographic factors such as gender and ethnicity in access to assets, the differences were relatively small. The exception was in the third site where none of the ethnic Hmong-Yao group reported changes in access to physical assets possibly due to their remoteness.

The qualitative interviews suggested that the type of post clearance land use was more important in terms of type of benefits than demographic factors. This reflects the findings of other evaluations (Alexander et al., 2010). In the Kurdish Region of Iraq, a statistical association was found between the level of poverty and the increase in income (p = .000) but the effect size was small. In Phase 3, respondents scored higher on the human and physical scales. These scales include the most direct and tangible change including access to physical assets, usually provided by a downstream development partners and sense of safety. As discussed below however, particularly in the first two sites, qualitative data emphasised social and cultural benefits.

Social and cultural capital: Increased access to social capital was observed across all sites. In Lao PDR, by being able to farm more efficiently, people had more time for socialising and networking. Where improved village access was observed, people were able to build bridging capital through strengthening connectedness outside the immediate village and access more information and basic services. Social capital is frequently depleted during conflict and rebuilding community structures, social bonds and networks is an important element of post-conflict recovery and building collective resilience. These act as important protective factors in groups of people, who are learning to negotiate a changed world, as they build new forms of community to manage the challenges of the post-conflict environment (Fielding & Anderson, 2008). These challenges include both the rebuilding of previous networks and establishing new networks. This is particularly important in a modern networked society, with disjoints between local and global forces and between the social, cultural and political spaces (Castells, 2010).

Cultural capital and identity: The research sought a link between demining, livelihoods, poverty reduction and economic development and in the rapid qualitative analysis the focus was on the livelihood assets as at the beginning of this research. In the more in-depth analysis undertaken in Australia another story emerged from the qualitative data. The qualitative data revealed an unexpected outcome which had not been included in the livelihood asset scale. By providing safe access to land, after decades of contamination and repeated displacement, participants were in the process of building cultural identity. Accounts were seen to present, perform and negotiate an identity in relation to a situated context of meaning (Kohler Riessman, 2008).

In Kurdish Iraq, the ability to return to one's village and grandfather's land was reported as an important factor in increasing feelings of inclusiveness, a sense of belonging, well-being and reconnecting with one's culture and identity. This finding is corroborated by other studies of the Kurds which have noted the importance of land and how loyalty and identity is intimately tied to tribal and land affiliation (Dawoody, 2006).

Cultural capital has been linked to health and economic development and participation in cultural activities has been shown to be an important predictor of self-perceived well-being. Cultural activities promote feelings of connectedness or activate other health and economic resources, such as social support. However, to maintain social support certain behaviours and value orientations, including the use of appropriate language, communication styles and behaviours are expected (Carpiano, 2006). Cultural capital and the values, norms and knowledge that constitute cultural capital are also connected to people's sense of identity and may contribute to developing self-esteem. In both Kurdish Iraq and Lao PDR, the qualitative data suggests that in important ways, demining can help people participate in cultural activities and build their self-esteem. It can help people and communities develop the resilience to manage future shocks and use positive coping strategies in facing challenges and transition.

In this study, particularly in the first site of inquiry (MAG Lao), sufficient 'beautiful rice' or in Kurdish Iraq, returning to 'grandfather's land' were perceived as indispensable for the reproduction of life, well-being and social, political and economic success. Through these processes respondents were building what Castells

(2010) calls project identity and in the case of the Kurdish Iraqis, rebuilding cultural identity.

#### My grandfather's land

Armed violence and forced relocation in search of refuge, community formation and change in difficult circumstances, is an experience which has occurred so frequently in the second study site that it can be seen as a defining characteristic of the program recipients and their 'Kurdishness'. Living in camps and collective towns, the respondents often felt devalued, stigmatised and oppressed with their social capital shattered. In their new locations, impoverished and often without the skills to prosper in their new environment, they struggled to integrate and find meaningful employment. In this process of relocation and change and renegotiation of identity, Kurds in the study site became disconnected from their 'grandfather's land' and their culture; their social capital became severely depleted.

Returning to their 'grandfather's land' reconnects people to their traditional values, practices, community responsibilities and helps them re-establish their legitimised identity. In a patriarchal, tribal society, this also meant returning to where one had client and patronage relationships, defined by trust and affection, strong social ties, respect, a sense of personhood, as well as a place to build a house, and a plot of land for farming. Even where people have chosen to stay in urban areas the ability to return to their 'grandfather's land' to celebrate traditional functions, ceremonies and picnics is important in helping them to reconnect with the past, fulfil their social responsibilities and their collective identity as Kurds, and to strengthen their bridging and bonding social capital. Through this process people are able to reclaim their shared and individual history, affirm the permanence of their values and celebrate their culture.

Building collective identity can contribute to collective resilience. Collective resilience refers to the bonds and networks that bind communities together, providing support and protection, and facilitating post-conflict recovery and ways of managing stress in times of transition (Fielding & Anderson, 2008). Particularly in collectivist societies such as Kurdish Iraq and Lao PDR, collective identity and group membership can enhance self-concept and self-esteem. Building collective identity is particularly pertinent in Kurdish Iraq where households are returning to their villages and having to rebuild the sense of community. It is likely to become increasingly important in rural Lao PDR where development and the extension of the market economy to previously remote places are contributing to rapid change. Communities

with weak collective resilience are likely to find it harder to manage productively the rapid transition from a traditional, to a modern economy.

Risk prevention and protection also helps build collective resilience. Demining increased people's sense of protection and reduced the likelihood of exposure to live ordnance and landmine/UXO injury. Further, in rural communities having access to safe land is a protective factor – another component of collective resilience (Fielding & Anderson, 2008).

**Push factor for investment:** In all sites of inquiry, it is evident that landmine, UXO and ERW removal can act as a 'push factor' for external investments. This includes public investments, often delivered via NGOs, in education and small rural infrastructure.

Clearance for community assets tends to be more equitable, in that in theory, the asset is for everyone to use. However, in the third site, some respondents were unaware that clearance had been undertaken for a community project (N = 247). Further, not all community-based assets are for the benefit of the whole community. For example, a small area may be cleared for a dam or irrigation, which is only used by a small number of households.

Table 41 summarises the different assets that landmine, UXO and ERW removal can contribute to recipients.

Table 41: Summary of Livelihood Asset Outcomes

Asset	Example		
Human	Improved food security		
	Investment in education		
	Investment in basic goods—food, blankets		
	Pride, self-respect		
	Increased labour		
	Sense of safety, happiness, subjective well-being		
	Reduced risk of injury		
Physical	Public investments in schools, roads, water, sanitation		
Social	Social networking—in and out of immediate family and village		
	environment		
	Feelings of inclusiveness, connectedness and identity		
Finance	Savings		
	Reduced debt		
	Increased land value		
Environment	Land		
Culture	Connections to cultural activities and sense of belonging/collective		
	identity		

# 8.2.2 Objective 2

This objective aimed to qualitatively identify the context (household, community, organisation, policy, broader socio-economic) and processes by which benefits were accrued and sustained.

In this study, context relates to significant factors which may mediate outcomes and their sustainability. This research has identified a number of contextual factors which mediated post-clearance impact and the extent to which change was sustained. They highlight the fact that the process of change from clearance to land use and outcomes and impacts are not linear or an unambiguous, one-way progression. These contextual factors increased or decreased benefits, and were influenced by the way in which individuals responded as well as the broader socio-economic environment and are listed below.

#### **Household context:**

**Post-clearance land use.** Many families in the study areas maintained a fragile equilibrium, experiencing chronic poverty or moving in and out of poverty, or near poverty. Generally, there were only small statistical differences between scores on the livelihood asset scales and wealth categories as determined by the wealth index.

However, the qualitative data suggested a number of contextual variables, often related to poverty, which mediated impacts.

Lack of labour or the loss of a productive labour unit, due to pregnancy, illness or migration often prevented cleared land being consistently used. Lack of access to equipment and knowledge of modern farming techniques also prevented households from using cleared land in a more productive way. This lack of modern technology constrained the potential impact, especially when competing for market share. For these households livelihood assets are essential for effective participation in the modern market economy (Todaro, 2009; Vazquez Barquero, 2010). Additionally, other studies have highlighted the importance of the household context and access to assets in maintaining benefits and the ability to innovate (Alexander et al., 2010).

District government staff, program co-ordinators and farmers often attributed poor success to a lack of understanding, knowledge, skills, confidence and ability to take actions to improve their agricultural productivity or to participate in the market economy. Perceptions of susceptibility to food insecurity and the extent to which using the land in new, more productive ways, such as converting from swidden to paddy or allocating labour to cash crops, would improve food security and meet livelihood goals were also important qualitative household variables. This relates to the self-belief or self-efficacy and belief that the task will be beneficial (task efficacy) (Phillips, 1997; Tolli, 2008; Vancouver, 2008). Elsewhere farmers' selfefficacy has been found to play a significant role in decisions to change farming practices (Wu & Mweemba, 2010). Feedback loops were also important variables in determining how land was used. For example, in Paksong, strong coffee prices contributed to people investing more of the livelihood portfolio into coffee production. However, in the Nong district, the lack of a market for bananas meant that people were subsequently reluctant to use their land in non-traditional ways. In poor communities, community assets such as dams, weirs, latrines, fishponds and wells, may not be maintained. Reasons given included the quality of materials supplied, ability in terms of resources, and skills in maintaining them.

**Drought, floods and pests:** In both Lao PDR and the Kurdish Region of Iraq, crop production and benefits from increased access to agricultural land remained at the mercy of the weather. In Lao PDR, pests and diseases were chronic constraints of production, which affected the extent to which benefits are sustained. In Kurdish

Iraq, a three-year drought severely impacted the mostly rain-fed cropping system and forced people to return to urban areas. For example, 40 selected respondents were not using their land at the time of the survey and were unable to participate in the research as they had returned to the urban areas due to the drought.

Markets: The ability to access, negotiate and operate within the market economy mediated benefits from cleared land. For example, in the Paksong district in the third research site, and to an extent in the Pek district, program recipients were networked into broader markets. While the benefits from clearance and coffee cultivation were subject to the vagaries of the market, in the main, market prices had encouraged farmers to maintain and extend coffee production in areas which had been cleared of UXO. However, in the Nong district in the third site of inquiry, farmers grew bananas on cleared land, but the intermediaries did not return to purchase them, leaving the farmers without a market or tangible benefit from UXO clearance.

In Kurdish Iraq, imports from Syria and Turkey had significantly decreased the return on investment in cash crops grown in demined areas. Market demand accompanied by reduced prices stopped farmers using the produce of their cleared land for economic gain, especially where the farmers lacked the resources to convert the land to other productive assets. Such findings have been found elsewhere (Alexander et al., 2010).

**Organisational capacity:** Organisational capacity relates to the program contextual factors and processes which mediated benefits and through which the program 'worked'.

Communication. Organisational capacity can affect incentive or transfer type programs. This includes having staff, who are local and can speak the local language, flexible working conditions whereby staff can stay overnight in a village, make multiple visits at varying times in order to meet more villagers, and having male and female team members. It also includes the ability to use strategies to deliberately engage men and women, including holding women only meetings (Tessoriero, 2010). These strategies helped address household contexts, which otherwise could potentially limit engagement. This ensures that people are aware of the program and their eligibility, and understand how to apply. For example, if there are any

expectations or conditions, that people will use the land post-clearance, potential recipients should be made aware of them (Keller, 2006).

In the first two sites (MAG Lao and MAG Iraq) this communication role was undertaken by the community liaison teams who consisted of small, mobile, male and female teams. These teams were the first point of contact between MAG and the community. Typically they conducted a number of community and household interviews returning to the villages on several occasions. Tasks were identified and prioritised with the communities. Where individual households were targeted the intent was to prioritise the poorest households first. The community liaison teams also undertook a non-technical survey including mapping of the hazardous site, noting the type of contamination, vegetation and logistical issues. The teams completed the paperwork and obtained a signature from the land user and village head. Pre-clearance recipients signed a land use contract whereby they agreed to use the land post-clearance. While not enforceable, it helped communicate the expectation that post-clearance, the land would be used.

In the third site of inquiry mainly community awareness or risk reduction teams, district authorities or technical survey teams, undertook the communication role. For example, the community awareness teams collected information on surface UXO and sometimes made a list of households requesting clearance, which was passed onto the technical survey teams. At the beginning of the year when the agency performed their work planning, requests were received from district offices. The technical survey teams also went to the villages and mapped hazardous areas. The approach was much more structured than in the first two sites of inquiry and to be included for consideration in the work plan, households had to submit a form to the UXO agency. There was no land use contract, and it was less clear to the respondents why certain areas were cleared and not others, and a number of people were not aware of any clearance activities in their village.

Task and identification prioritisation. As outlined, the programs in this research were targeted rather than universal, and each had a method of identifying potential consumers. A form of triage was used based on an assessment of need, assumed level of contamination and in the first two research sites, expected socioeconomic benefit. In the third research site, program staff tended to emphasise risk reduction more than expected socio-economic gains. In each site staff noted that

sometimes logistical constraints acted as a mediating contextual factor in the process of deciding whose land she be cleared and when. Additionally, organisational drivers, influenced by organisational structure and funding bodies, affected outcomes.

In the first two sites of inquiry the approach to task prioritisation was essentially community based although mediated by contextual variables. In the third site of inquiry a more structured approach was taken. These two different processes resulted in different outcomes. In the first two sites of inquiry there was a good understanding of the target group and confidence in the quality of the clearance. This has been found elsewhere where community liaison and processes of community engagement have been used (Bottomley, 2003a; Durham, 2008). Observation and cross-checking with the district government records indicates that the poorest villages are the main target and that, within those, many of the recipients are amongst the poorest. In fact, many had plots of land of less than one hectare. In the third site where a more structured approach was used respondents were often unsure about which areas had been cleared, to what depth they had been cleared and how sites had been selected. There was a lack of clarity about the process and the poorest sections of the community often did not request clearance. This was attributed to a number of factors. Firstly, many respondents stated they did not understand the request process. Secondly, many lacked confidence in the process and doubted that their request would be approved. Thirdly, many were discouraged because they believed that the process was too complicated for them to successfully navigate.

Quality of service/product. Quality of the service and product also relates to the extent to which the organisation inspired confidence in the demining process. This trust was reaffirmed if no items were seen while working the land. It is likely that this reaffirmation is important not only at the individual household level but also at the broader community level. Informal community sources of information, for example from other people using land demined by a MA agency, may be critical for on-going trust in the clearance process and continued post-clearance land use. As noted in the two MAG sites respondents indicated a high degree of confidence in the land cleared but less so in the third site. Where people lack confidence, they continued to farm 'carefully', not fully benefitting from the clearance.

*Institutional processes.* Institutional processes were also a factor in postclearance land use and asset accumulation. For example, where clearance occurred in the rainy season, it was too late for farmers to utilise the land that year. In other cases farmers were not able to wait for clearance given the imperatives of earning a living. In one area in Phase 1 the plants arrived too late for recipients to use them.

Funding. Funding and the capacity of the organisation to deliver a clearance service to the affected population also affected outcomes. In each site, a quota approach was taken whereby a certain amount of land was cleared in each village, but tracts of land remained contaminated. In almost all the qualitative and quantitative interviews people reported contaminated land remained and program staff reported no areas could be considered 'impact free'.

Policies and institutional arrangements: Government policy influenced how land was used post-clearance. For example, in the Nong district in the third site, the local authorities were influential in promoting a shift from upland to lowland farming as well as growing cash crops such as bananas and *yangbong*. In Kurdish Iraq, despite the drought that contributed to farmers losing their investment on cash crops, sheep farming remained reasonably profitable because of government intervention. However, the current Kurdish government policy of public compensation as a substitute for unemployment also acted as a barrier for people returning to agriculture.

**Externalising control:** The discourse of safety and technical expertise has established MA as an industry and has externalized control of protection of civilians from landmine and UXO injury to donors, government and NGO service providers. While local knowledge and needs were sought in the task identification and prioritisation process, externalising control limited the space for building the capacity of communities to self-manage the threat. Thus communities were forever reliant on external providers, and being unable to pay for the service, had little power to negotiate when clearance would take place, for whom, or for what purpose. The safety discourse impacted on the ability of programs to fully engage with communities to understand the strategies they used to manage explosive remnants of conflict contamination.

**Widening ownership:** A key strategy in the first site of inquiry was discussed by Pawson (2002) in his review of incentive based programs, called widening

ownership. In the first site MAG often worked with downstream development partners, thus increasing ownership of the final product of the demined land. Where MAG worked with a development partner, the decontaminated land supported community projects, such as weirs, dams and schools. By widening ownership to the partner, post development inputs were assured. The new asset or assets were used by a number of households widening ownership further and spreading the cost of maintenance. However, in some cases, lack of organisational capacity prevented the development inputs being delivered on time or to a sufficient standard. In some cases, even where the cost of maintenance was spread, the community context was such that the asset was not maintained.

Table 42 summarises the different contextual factors which can mediate outcomes and who accesses the service.

Table 42: Contextual Factors that can Mediate Outcomes and Who Accesses the Service

Asset	Example
Household /community context	Access to labour Skills and knowledge of different processes and market Access to equipment, finance, markets, roads, finance, communication networks and technologies Access to social capital and networks Understanding and being able to action the request process Ability to take risks and innovate Evidence land use likely to result in positive outcome Level of self-efficacy (believe have skills) Level task-efficacy (there has to be benefits e.g. increase in yield, more time, meets expectations and aspirations) Ability to participate in community liaison visits and meetings Livelihood activities (e.g. if their livelihood activities bring them into contact with landmines/UXO) Past experience (e.g. think they can self-manage the problem, experience of accidents, perception of risk, evidence of landmines/UXO)
Environment	Drought, floods, pests, disease Type of land

Asset	Example	
Organisational capacity	Human resource capacity of organisation Communication skills and procedures of organisation Flexibility of organisation Quality of product and service including timing and post-clearance inputs Bureaucratic impediments such as having to complete a written form or the need to clear vegetation	
Policies and institutions	Organisational drivers – economic development, safety, amount of land cleared Government policy to support local producers Public investment in basic services and education/training for farmers Access to other incentives (e.g. seeds) Flexible work schedules which allow staff to visit villages at different and multiple times Staff which can empathise with and speak the same language as the target population Staff with good oral communication skills Ability to understand context and use deliberate strategies to be inclusive Mixed gender teams Accurate communication about program and area cleared	

#### 8.3 Addressing the Research Question

# 8.3.1 Who Benefits From Demining, in What Ways Does it Affect Household Livelihoods, and in What Contexts?

This research has characterised MA demining in the sites of inquiry as an incentive program, which aimed to contribute to poverty reduction and development. The underlying assumptions were that households and communities in contaminated areas did not have the resources to safely remove these explosive contaminants on their own. It was assumed that this contamination prevented poor people from using their land. The expectation was that through the communication component the target group would learn about the program and either apply for inclusion or be identified by program staff for inclusion. The task prioritisation process was expected to identify the poorest households or communities for clearance. Clearance of contaminated land was then expected to act as an incentive for households and development actors to invest in the land and in doing so secure access to other livelihood assets. These livelihood assets were seen primarily in economic terms.

This focus on economic benefits is reflected in donor policies, program documents and staff interviews, especially in the first two sites of inquiry. It is also seen in the increased use of socio-economic and cost-benefit approaches to evaluate MA.

This research challenges some of these assumptions and affirms others. Households and communities in contaminated areas were often using the land prior to clearance and had developed their own strategies to manage the risk. This was particularly the case in Lao PDR where the contamination is mainly sub-surface cluster munitions which may explode when hit, for example with a hoe, or when moved but are not pressure activated in the way that anti-personnel landmines are. This study corroborates other studies which suggested affected communities were not passive victims of war (Bottomley, 2003a, 2003b; Durham & Ali, 2008; Moyes & Vannachack, 2005). Instead affected households and communities were active actors who in the absence of a timely response to landmine, ERW and UXO contamination, developed strategies to minimise the risk of farming contaminated land.

The qualitative interviews and observation suggested that for some households the presence of UXO allowed households to smooth income through the collection and sale of war scrap including UXO. This allowed households to recover from shocks and helped insulate consumption patterns during times of rice shortage. In the Kurdish Region of Iraq, there was more support for the first and second assumptions. The qualitative participants insisted that the return to their 'grandfather's land' was not possible without landmine clearance. However, some did note that informal, deregulated demining had happened. Nevertheless, 99.5% of respondents reported the land was not being used prior to clearance. The presence of the PDS and government salaries also provide a safety net and may also have acted as a disincentive for the relatively risky practice of farming mined land.

In both phases in Lao PDR (Phase 1 and Phase 3) local government and program staff accounts and qualitative data from interviews with development NGOs supported the notion that without clearance, development projects would not have been implemented and that following clearance NGOs would typically provide inputs, usually in the form of materials and other incentives such as food for work projects. This was particularly the case in the site in Phase 1 where MAG often partnered with a downstream development actor, providing a package of clearance

followed by NGO activities. In the Kurdish Region of Iraq it was not possible to interview development NGOs, but this finding has been found elsewhere and is supported in practice by MA NGOs and donors (AusAID, 2006; DfID, 2010; GICHD, 2005). The survey data also suggests that most of the clearance was for community resources such as school rehabilitation or construction, access roads and water sources. In this way the benefit derived from the direct incentive (cleared land) was used to leverage access to other livelihood assets. Particularly in the first research site the emphasis on economic development was leading to more partnerships with downstream development partners.

The program in each site of inquiry aimed to reach the poor. As a relative measure of wealth was used and only within the sample who had received clearance, it was not possible to determine definitively if the programs targeted the poorest in the community. In the first and third sites the spread across the three wealth categories (poor, middle, not poor) of those who had individual plots of land cleared was fairly even. In the second site, more households in the poorest category than the other two categories reported having individual plots of land cleared. However, in the third site of inquiry the process of task identification and prioritisation did not seem to work in favour of the poor and often they reported being confused or intimidated by the bureaucratic processes. Further, in each site the main aim was to return land in a non-contaminated state to people who were expected to use the land in profitable ways. It did not seek to address other contextual factors which contributed to poverty and thus like other incentive type programs its effects on longer-term poverty reduction were likely to be limited.

Program staff in the first site of inquiry expressed concern that the increased focus on economic returns for donor investments would lead to a focus on less poor households. There was also a concern that the quota approach resulted in a scattered, less efficient approach to clearance. In the sites of Phase 2 and 3, while monetary gains were reported from clearing individual plots at the macro-level these gains were relatively small and unlikely to affect macro-level indicators, especially in the short-term. This finding is also corroborated by other research on incentive programs (Barrientos, 2011; Barrientos et al., 2005). In addition, in this context it was sometimes hard to disentangle home produced items, such as rice with income from produce or labour which was sold. Further, and consistent with the incentive related

literature, clearance on its own, is unlikely to improve access to basic services, such as education and health, without direct investment in these public goods and basic services (Barrientos, 2011; Barrientos et al., 2005). However, this finding is contradictory to the predominant MA discourse of economic development that permeates the sector and the findings of cost-benefit approaches used to evaluate the impact of MA. However, these approaches consider factors such as productivity increases over time and appreciation in land values as well as the economic cost of displacement. These effects cannot be measured in this study.

An unexpected finding was the extent to which respondents' narratives focussed on social and cultural capital. The narratives gathered from the interviews suggest these impacts were significant for the respondents. The individual stories tell of resilience resulting from negotiation with the environment; the importance of regaining or strengthening one's identity, in order to heal and be healthy in the face of adversity. These perspectives draw attention to the agency of the narrators. Demining the land created the opportunity for economic activity, but it also generated unanticipated social benefits: the rebuilding of social capital and the revelation of the resilience of the people who told their stories. Figures 14.1 and 14.2 in Appendix 14 provide examples of how benefits can accrue from cleared land.

# 8.4 Addressing the Third Research Objective

This part of the chapter addresses the third research objective of developing a livelihood asset scale to assess households' self-reported changes in access to livelihood assets resulting from demining. The development and validation of the livelihood asset scale focused on measuring access to livelihood assets; an inclusion of both qualitative and quantitative approaches to measurement; and the use of the Rasch model to obtain fundamental measurement rather than proxy measures. The final scale consists of four sub-scales (human, physical, social and finance) with each sub-scale showing a good fit to the Rasch model. Content validity was assured through the literature, operationalising the assets prior to undertaking the research, the qualitative interviews and the expert reference groups. A lack of variance in the items related to the environment meant these items were not included in the final scale. Given that the main benefit of demining is increased access to a key natural

asset for rural communities, this lack of variance is not surprising. The Rasch measurement results obtained in Phases 1 and 3 (in Lao PDR) indicated the scale performed better in these sites than in Phase 2. This is likely to be because although the scale items were checked with the reference groups, the qualitative interview data which was used to generate the items was obtained in Phase 1 in Lao PDR. The livelihood assets were operationalised as outlined in Table 3, page 63 and did not include cultural assets. In Phases 1 and 3, in the more-in-depth analysis of the qualitative interviews cultural assets related to the symbolic significance of rice emerged as important. In Phase 2, the cultural significance of returning to 'grandfather's land' emerged as important in the qualitative interviews. This was not captured in the livelihood asset scale.

There are areas for further research for the livelihood asset scale. Chief among them is reviewing the response categories which currently do not work very well. This will require more qualitative research with the target population to identify more appropriate response categories. Specifically, some items were too easy for respondents to endorse; and respondents had difficulty discriminating between the two positive and two negative categories. The latter point was confirmed by enumerators. Prior to the next phase of testing, further qualitative investigation is needed to provide guidance on modifying the phrasing, especially where there are high frequencies of 'not applicable' and to provide guidance on the response categories and the four-point response format. The questionnaire and livelihood asset scale format did not allow for the collection of additional qualitative data, which would have both informed the development of the scale and the findings (Onwuegbuzie, et al., 2010). Anchoring vignettes would be useful in this respect to evaluate the comparability of self-reported measures within different sections of the population (G. King & Wand, 2007). A revised response format could also increase the utility of the tool, making it applicable in pre- and post-intervention contexts. The scale will also need to be cross validated and tested for differential item functioning across livelihood systems and cultural contexts. Finally, consideration needs to be given to including cultural assets as a sub-scale.

#### 8.5 Chapter Summary

This chapter has synthesised the findings under the three research objectives. The study identified a number of tangible and intangible outcomes associated with MA demining. In synthesising the findings more weight has been given to the qualitative data as the livelihood asset scale which provided the outcome measure was under development throughout the research. This meant that the outcome variable was not consistent across all three sites. Further, without baseline data, changes in access to assets were based on self-reported perspectives, and how people choose to represent changes may have been influenced by their perceptions of the social context of the interview setting. Triangulation of methods and sources added strength to the overall research and findings as did the use of a theory-driven approach (Donaldson & Gooler, 2003; Pawson & Tilley, 1997; H. White, 2009). The use of the Rasch measurement also provided a robust method of scale evaluation (Hobart & Cano, 2009; Pallant & Tennant, 2007).

Chapter 9 is the concluding chapter of the thesis and discusses the significance, policy implications and avenues for future research of the study.

#### **CHAPTER 9**

## **Conclusion**

This final chapter concludes the discussion and analysis from the previous chapters and presents the significance, policy implications and possibilities for future research drawn from the findings of the study. As these case studies from the Lao PDR and Kurdish Iraq and the literature have demonstrated, following violent conflict the continued presence of landmines, unexploded ordnance (UXO) and other explosive remnants of war (ERW) can block access to livelihood assets, and limit livelihood options. Mine action (MA) is the international community's response to this hazard. The intent of MA is to contribute to post-conflict recovery, reconstruction and development through the removal of explosive remnants of conflict.

# 9.1 Significance of Study

This research project was undertaken in the Lao PDR and the Kurdish Region of Iraq, two of the most affected areas in the world. The conflict in each of these areas, the subsequent development process and MA in each of these sites have been shaped by global, regional and national socio-economic, political and cultural contextual factors.

The direct, tangible benefit from MA demining is decontaminated land and reduced risk of exposure to these explosive contaminants. This research has looked at the experiential "access" dimension to assets. Contemporary MA is underpinned by the assumption that this direct benefit or transfer will act as an incentive for recipients to use the land which will then have multiplier effects on other livelihood asset holdings. Few studies have examined this assumption at the household level. This study is significant because it explored the underlying assumption of MA demining to see how and in what ways households experienced the transfer of decontaminated land and how it enabled them to increase access to other asset holdings. This is important because like other social programs, MA in these research sites did not cause development outcomes. Rather, it was the extent to which contaminated land was identified and prioritised and introduced opportunities to the

affected populations within their economic, social and cultural context which produced outcomes.

The study, unlike many cost-benefit studies, found that most of the contamination was at the household level in rural areas in Lao PDR and the Kurdish Region of Iraq and where farms are largely for subsistence, financial benefits are small. In most cases, the lack of social protection meant that farmers could not afford to experiment with new crops and methods nor did they have the infrastructure in place to ensure access to markets. Nevertheless, the study showed that MA demining provided opportunities for direct tangible benefits beyond the transfer of decontaminated land. These included a sense of safety and investments in local infrastructure which contributed to increased social, human, physical and financial capital. However, there were concerns amongst practitioners, that a focus on economic impacts would result in operators targeting the not-poor who would be better placed to realise the economic benefits of clearance.

A less tangible and unexpected finding in this study was the non-economic ways in which demining was reported to facilitate well-being. Many of the respondents in the qualitative interviews explained how demining helped connect them to aspects of their culture and built their social capital. The individual stories tell of resilience resulting from negotiation with the environment and the importance of cultural and social identity, in order to be healthy in the face of adversity. These perspectives draw attention to the agency of the narrators. Demining the land created the opportunity for economic activity, but it also generated unanticipated social benefits and the revelation of the resilience of the people who told their stories.

The research shows that MA is not simply a technical task undertaken to promote economic development. It is inherently a political, human activity. This makes responding to explosive remnants of war and recovering from its impacts a shared responsibility between individuals, civil society and governments. It recognises what this research has demonstrated: that the respondents were not passive victims of war and poverty. They sought a different life especially for their children, and tried to solve the problem themselves. War and post-conflict politics damaged the agricultural economy and on-going landmine and ERW contamination prevented investment and delayed the transition for affected community post-conflict

into local economies. The slow pace of clearance is likely to contribute further to this delay by preventing investment and critical support to bring land to profitable use.

## 9.2 Policy Implications

The study has several policy implications for MA, not only in the sites of inquiry but globally.

First, if the purpose of MA is to provide economic dividends in the short-term, resources should be directed to large infrastructure projects such as transport corridors, hydro-electric projects, commercial enterprises and high-quality agricultural land suitable for large scale mechanised farming. However, such projects are likely to have limited positive impact on the poor who are affected by landmines (Horwood, 2003b).

Second, at the macro and micro-levels, an excessive focus on the socioeconomic rationale for MA may lead, even if unintentionally, to a collusion with the status quo and a reinforcing and perpetuating of existing inequities by expanding access to assets for those who already have the greatest access to assets. These inequities could also have contributed in some way to the conflict. This also raises questions of how values are placed on outcomes and who determines which outcomes are privileged. The focus on economic outcomes rather than the more intangible benefits described by many of the participants in this research, inherently privileges the values of donors over the values of program recipients.

Third, the quota approach potentially develops 'islands of safety and development' within the micro-space of a village. A more effective and equitable way of allocating resources would be to provide universal access by surveying or clearing all contaminated areas within the boundaries of villages, where there is a high prevalence of poverty. In villages where there are pockets of poverty, focussing on individual households may be more effective (Epprecht et al., 2008). This would also allow for the use of objective measures of change as well as the inclusion and valuing of more community-based and community-sensitive indicators including the emergence of unexpected benefits.

Fourth, the continuing prioritisation of safety over speed can leave many communities without a MA service for decades. However, to date attempts to shift the discourse from one of zero risk in prioritised sites, to a level of acceptable

residual risk, through aggregating threat levels, have had limited success. Here, the technical and safety discourse intersects most frequently with the moral humanitarian discourse and issues of accountability. This appeal of zero risk is explained in contemporary Western societies by the tendency to place a person or agency as culpable for any misfortune (Jackson, Allum, & Gaskell, 2006). This combined with the potential for extensive media coverage in the case of a landmine/ERW injury makes a shift to a residual risk approach highly contentious. This discourse also privileges Western forms of expertise over indigenous knowledge.

Finally, in Phase 3 of this project a number of indicators were proposed for measuring MA impact (Durham & Nanhthavong, 2010, pp. 32-38). These are found in Appendix 11.

#### 9.3 Avenues for Future Research

The research also suggests further avenues for research.

- 1. First, a more complete understanding of the affected community's perceptions of risk is required to balance outsider perceptions of risk and integrate lay and expert perceptions of risk.
- 2. Second, the research proposed, based on the qualitative data and the literature, that self and task-efficacy are likely predictors of how decontaminated land is used. There are available measures of task and self-efficacy which could be adapted to test this proposition and the statistical strength of any association. Similarly a number of contextual factors were found to mediate outcomes. These could also be tested using statistical models.
- 3. Third, the livelihood tool can be further developed and tested in other contexts to test its applicability across livelihood systems and programs and to allow it to be used as a pre and post intervention assessment tool.

# 9.4 Concluding Comments

This research has shown that MA can potentially contribute to development in powerful ways, although there will be time lags before these impacts are seen at the macro-level. The research makes a significant contribution in understanding how

MA can contribute to post-conflict recovery and development by showing how it helps strengthen collective identity and resilience. This is an important resource in helping people to generate access to livelihood resources, and contributes to building long-term resilience and well-being. Cultural and social identity, expressed through respondents' enduring obligations to kinship networks and cultural practices, conceptualised in this research through 'grandfather's land' 'having picnics', 'beautiful rice' and 'partying with other villagers' can be enhanced by demining, and supports identity. At the same time, MA can contribute to people's desire to find their place within structures of the state – a desire often expressed within the discourse of national development politics as aspirations for a better life. In this way people in mine affected areas can build synergies between and reconcile with their 'traditional' identity (kinship networks, cultural practices and discourses) and their 'modern' identity (the national discourse of economic development). The research has also contributed to the literature on how to measure changes in household livelihood assets and contributes to the growing literature and interest in asset indices of change.

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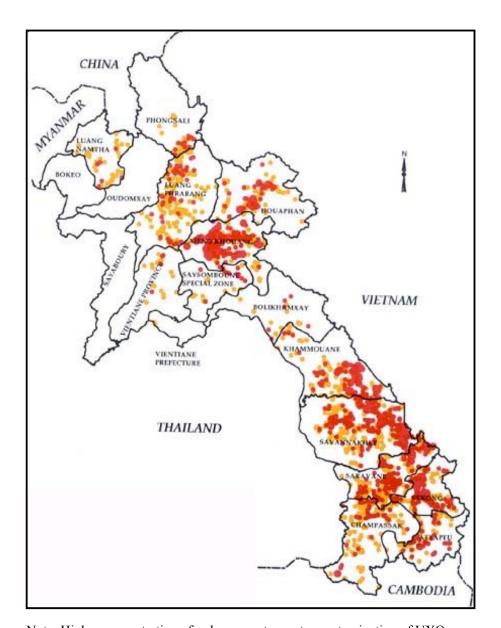
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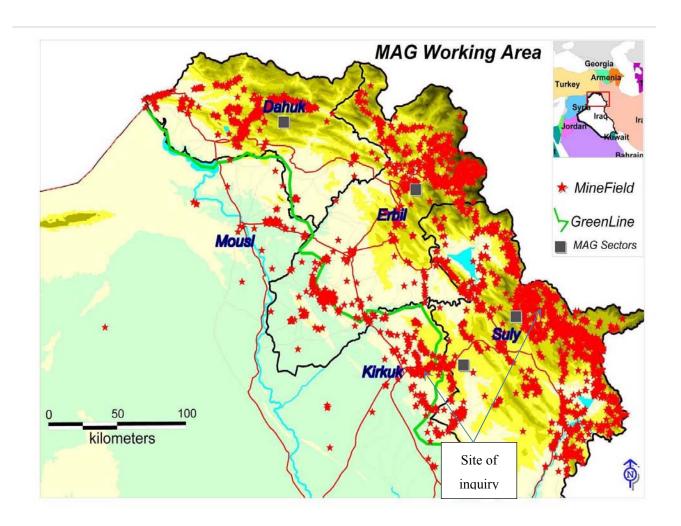
## Appendices

Appendix 1: Map of the research sites in Phase 1: MAG's program in the Lao PDR

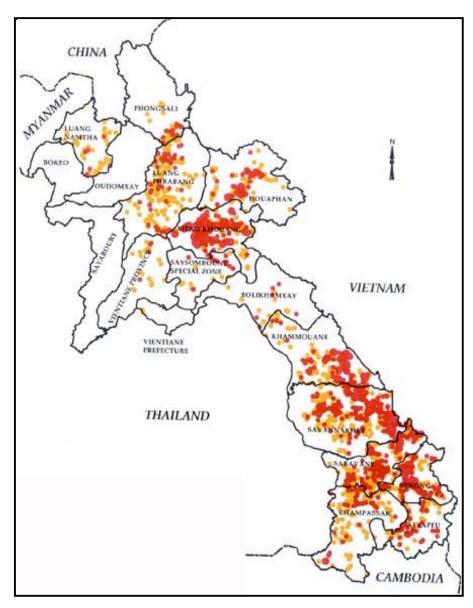


Note: Higher concentration of red represents greater contamination of UXO

Appendix 2: Map of the research sites in Phase 2: MAG's program in the Kurdish Region of Iraq



Appendix 3: Map of the research sites in Phase 3: MAG's program in the Lao PDR



Note: Higher concentration of red represents greater contamination of UXO

### **Appendix 4: Informed Consent**

### **English Version**

Date:
My name is
My name is, I want to obtain information from this village (name of the
village) so as to help you in cleaning your area from explosion risk. I am asking yo
to participate in every parts of this questionnaire.
The interview takes 45-60 minutes, please try to answer all the question
honestly, there are no right or wrong answers. Your answers will be confidentia
your name is not going to be reported and there is no possibility that anyone will b
able to recognize you from your answers. There are no direct benefits for you from
this research. We hope however, that this study will be beneficial to those people
who live in areas with landmine and UXO contamination. Your participation is
voluntary and you can decide not to answer any of the questions. You can also sto
the interview whenever you like. If you choose not to participate in this interview
you and your family will not be penalized and there will be no change in th
demining services provided to your household or the rest of the village. If you have
any concerns with the study you can report it to the local government authorities of
to your service provider (name service provider). Do you have any questions? Yo
ask about this study whenever you like during the interview. Can I start th
interview?
Signed/thumb print
Print name
Date/
Witness Print name

#### Lao Version

ແບບຟອມອະນຸຍາດໃຫ້ສຳພາດໄດ້ພາຍຫຼັງໄດ້ຮັບຂໍ້ມູນແລະເຂົ້າໃຈບັນຫາ พ้ອມທັງເຈັຍເອກະສານກຸ່ງວກັບຂໍ້ ມູນ

ກ. ແບບຟອມຍິນຍອມອະນຸຍາດຂອງຜູ້ໄດ້ຮັບຜົນປະໂຫຍດ/ນາຍບ້ານ ພາຍໃຕ້ແຜນງານ MAG

ແບບຟອມອະນຸຍາດຂອງຜູ້ເຂົ້າຮ່ວມຍິນຍອມໃຫ້ສຳພາດ- ສະປັບພາສາລາວ

ຜູ້ໄດ້ຮັບຜົນປະໂຫຍດ/ນາຍບ້ານໃຕ້ແຜນງານ MAG

ໂຄງການສຶກສາຄົ້ນຄ້ວາ: ປະເມີນຜົນກະທິບ ທີ່ໄດ້ມາຈາກການເກັບກູ້ ລບຕ/ກັບລະເບີດ ຊຶ່ງມີຕໍ່ຊີວິດການເປັນ ຢູ່ຂອງປະຊາຊີນໃນ ສປປ ລາວ ແລະເຄີດດີສະຖານ

ແບບຟອມອະນຸຍາດສຳລັບຜູ້ເຂົ້າຮ່ວມສຳພາດ ສະບັບພາສາລາວ

ວັນທີ:

ຊື່ຂ້າພະເຈົ້າຄື:

ທີ່ຢູ່:

ຜູ້ແປພາສາໄດ້ອ່ານເຈັຍເອກະສານໃຫ້ຂໍ້ມູນກຸ່ງວກັບໂຄງການນີ້ໃຫ້ຂ້າພະເຈົ້າຟັງແລ້ວ, ແລະຂ້າພະເຈົ້າກໍພ້ອມ ທີ່ຈະໃຫ້ສຳພາດ. ຂ້າພະເຈົ້າສະໝັກໃຈຊ່ວຍ ແລະກໍເຂົ້າໃຈວ່າຂ້າພະເຈົ້າຈະບໍ່ໄດ້ຮັບຄ່າຕອບແທນເປັນເງິນ ຫຼື ເປັນຂອງຂ້ວນບໍ່ວ່າປະເພດໃດທັງສິ້ນອັນເນື່ອງຈາກການຊ່ວຍເຫຼືອຂອງຂ້າພະເຈົ້າຄັ້ງນີ້. ຂ້າພະເຈົ້າຈະມີ ໂອກາດສາມາດຊັກຖາມອັນໄດກໍໄດ້.

ຂ້າພະເຈົ້າຍັງເຂົ້າໃຈອີກວ່າຕົນເອງສາມາດຢຸດ ບໍ່ຕອບຄຳຖາມໃນເວລາໃດກໍໄດ້ເຊັ່ນດຽວ, ແລະຂ້າພະເຈົ້າກໍ ສາມາດສອບຖາມກ່ຽວກັບໂຄງການນີ້. ຂ້າພະເຈົ້າຊ່ວຍໂຄງການດ້ວຍຄວາມເຂົ້າໃຈວ່າຄຳຕອບຂອງຂ້າພະ ເຈົ້າຈະຮັກສາໄວ້ເປັນຄວາມລັບ ແລະບໍ່ມີໃຜຈະຮູ້ຊື່ວ່າຜູ້ຕອບຄຳຖາມຕ່າງໆນັ້ນແມ່ນຂ້າພະເຈົ້າ.

ຂ້າພະເຈົ້າຕົກລົງໃຈໃຫ້ອັດສຽງການສຳພາດນີ້. 🛘 ຖ້າເປັນໄປໄດ້ຂ້າພະເຈົ້າບໍ່ຢາກໃຫ້ອັດສຽງສຳພາດ. 🗅

ຂ້າພະເຈົ້າເຂົ້າໃຈວ່າຄຳຕອບຂອງຂ້າພະເຈົ້າຈະຖືກນຳເອົາໄປລວບລວມກັບຄຳຕອບຂອງຄົນອື່ນໆ, ແລະຂໍ້ມູນ ນີ້ຈະເອົາໄປໃຊ້ໃນການລາຍງານແລະພິມເຜີຍແຜ່. ຂ້າພະເຈົ້າໄດ້ຕົກລົງເຫັນດີເຊັ່ນນີ້ໂດຍເຂົ້າໃຈວ່າເພິ່ນຈະ ບໍ່ແຈ້ງຊື່ຂອງຂ້າພະເຈົ້າ ຫຼືໃຫ້ຂໍ້ມູນໃດໆກໍຕາມທີ່ພາດພິງກຸ່ງວໂຍງມາຫາຂ້າພະເຈົ້າໄດ້.

#### **Kurdish Version**

كةر ةكة تكاية فؤرمى رازيبونى خوارةوة بخوينةرةوة ثيش دةست ثبكردن بةضاويكةوتنةكة" من كةناوم ..... زانياري كؤدةكةمةوة لقطوندي ( ناوي طوندةكة) بوئةوةي يارمةتيمان بدات بؤ تبطقيشتن لة كاريطةرى ثاككردنةوةى ناوضةكة لة تققةمةني . من داوات لي دةكةم بؤ بتشدارى كردنت لة يقك بة يقكي ثرسيار ةكاندا ضاو ثَيَكةُوتن بِ نزيكةَى 45 خولةك بؤ يقك كات ذمير دةخاية نيَت بِ تكاية هةولَ بدة وة لأمي هةموو ثرسيارةكان بةراستي و وقك خؤى بدةرقوة و هيض وةلأميّك بةهقلَة دانانريّت ( مقبةست وةلأمي طوند نشينةكتية) وةلأمةكانت ثاريَزراو دقبن و ناوت تؤمار ناكريَت وة ئةطةرى ئةوةشي نية كةتؤ بناسَنريت ( لقبةر بواري ئةمنى ) , تؤ راستةو خؤ سودمةند نابيت لقم ليكؤلينةوقية. ( زايارى ثيّدانة دا كة كةسى طوند نشين يان هند. دةيدات)ئيمة هيوادارين ئةم ليكؤلينةوةية سود بةو خةلكة بطةيةنيت كة لةناوضة بة تةقةمةني(Mine & UXO) ثيس بوة كاندا دةذين بةشدار بونى تؤ خؤبةخشانةية و دةتوانيت وةلآمى هةرثرسياريك نةىيتةوة كةناتةويَت و دةتوانيت ضاو تُنكوتنة كة رابطريت له هتر كاتيكدار رقت كردنة وقى ئةم ضاوتَيكة وتنة كاريطة رى لةسةر خؤت و خيزانة كةت نابیَت ( واتا لقروی خزمةت طوز اری کة بدریَت بة خةلکانی تری طوندةکة و نةدریَت بة ئیَوة) هقروةها کارناکاتة سقر ئة خزمة طوزاريانة على المبواري مين و تققمة ني تش كاش دة كريت المناوضة كقدا بنطقر هم رمخنة وسمرنجيك ا هةية دقربارةى ئةم ليكؤللينةوةية دةتوانيت ثةيوةندى بةفةرمانطةى حكومي ناوضةكةتةوة بكةيت يان سقرداني نوسنطةيةكي MAG بكةيت 0(نُقطةر رةخنقيةك هقية لةكارمةندي ريّك خراوةكة) ناية هيض ثرسياريكت هةية ؟ دفتو انيت ثر سيار دقر بارةي ئقم ليكؤ لَينقو قية بكةيت لةهةر كاتيكدا كقبتقويت . نُستا دقست بقثر سيار قكان بكقم ؟" بةلَى ئيمزا - يان ثةنجةمؤر ..... (ئةوكةسة ي كة ضاويكةوتنةكةت لقطةل ئةنجامداوة ئيمزا دةكات بة بقلي يان بة نةخَير) نةخيَر ئيمزا - يان ثةنجةمؤر .... ئيمزاي ضاو ثيكةوتن كةر (كارمةندي ريكخراوةكة) لةلايةن سةرثةر شتيارةوة تقواو بكريت

ذمارةي راثرسي.. | | |

#### **Appendix 5: MAG Code of Conduct**



#### MAG CODE OF CONDUCT

During your employment with MAG you are required to conduct yourself in a way that ensures MAG retains its reputation as an NGO of integrity and respect. Your actions and behaviour reflect on yourself as well as on MAG and all employees are therefore required to follow MAG's code of conduct. Failure to follow the code and behaviour that is illegal (under home country as well as host country laws) or brings MAG into disrepute will be dealt with according to MAG's disciplinary procedure. In some cases the matter may be so serious that it will lead to criminal prosecution or we may choose, or be obliged, to report you to any relevant professional or legal organisations or authorities.

#### I. As a MAG staff member:

- I will make myself familiar with and observe all MAG procedures, instructions and policies
- I will respect the laws, religion and traditions of the Lao PDR and seek to establish good relations with colleagues and local people where I work
- I will apply myself fully to the duties necessary to perform my job
- I will not take any other paid employment without the written approval of the CPM
- I will at all times observe MAG safety and security procedures
- I will observe all reporting and operating procedures
- I will respect other people's property and belongings
- I will handle MAG's financial and material resources with the utmost care, safeguard these at all times against theft or other damage, keep and maintain them properly, and ensure that private misuse does not occur
- I will not release to others any private or confidential information relating to MAG or MAG staff (or for which we are responsible) unless legally required to do so
- I will not use MAG's computer or other equipment to view, download, create or distribute inappropriate material, such as pornography

#### II Relationships with local communities

The success of MAG's work needs positive relationships with members of the local community. All employees should try to maintain good relations with all local residents, service providers, local government and other agencies. Involvement in political activity that might compromise MAG's objectives must be avoided.

- I will show respectful behaviour to local customs and practices
- I will not ask for or invite any personal payment, service or favour from beneficiaries, in return for our help, support, goods or services of any kind

#### III Relationships with other staff

Employees must maintain open, professional and respectful relationships with each other.

- I will not be abusive or rude to my colleagues
- I will be respectful at all times when dealing with my colleagues

#### IV Sexual exploitation and abuse

Sexual exploitation is defined as the abuse of a position of vulnerability, differential power or trust for sexual purposes, including profiting monetarily, socially or politically from the sexual exploitation of another. Sexual abuse means the actual or threatened physical intrusion of a sexual nature whether by force or under unequal and coercive condition. Sexual exploitation and sexual abuse violate internationally recognised human rights standards and are unacceptable behaviour for MAG personnel. MAG will take all appropriate measures to prevent sexual exploitation or abuse of anyone by any of its employees. For these purposes and regardless of local laws or customs:

- MAG forbids sexual relationships with any person under the age of 18 years
- MAG employees must refrain from exchanging any money, goods, services, offers
  of employment or other things of value, for sexual favours or activities; and from
  engaging in any sexual activities that are exploitative or degrading to any person
- Where a MAG employee develops concerns or suspicions regarding sexual abuse or exploitation by a fellow employee, he or she must report such concerns to a senior manager
- MAG employees should create and maintain an environment that prevents sexual exploitation and abuse and promotes the implementation of the Code of Conduct

Managers at all levels have responsibility to support and develop systems that maintain this environment and report instances of non-compliance to a senior manager.

Sexual exploitation or abuse by MAG personnel constitutes an act of gross misconduct and will lead to dismissal.

#### V Weapons

MAG employees may not carry or possess any illegal, unregistered firearms. This is regarded by MAG as an act of gross misconduct and will lead to dismissal.

#### VI Alcohol and Drugs

MAG operates a drug-free workplace. This means that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited at MAG worksites and premises.

I will not drink alcohol or use any other substances whilst undertaking MAG business (which includes using vehicles).

Please remember that even outside working hours you may be viewed as a representative of MAG and therefore should maintain self-control and limit the use of drugs.

#### VII Abuse of Power

To ensure MAG's reputation is maintained, employees may not use their power or position for their own benefit or for the benefit of family members or friends.

I will <u>not</u> accept commissions, payment or significant gifts of any kind from vendors, job applicants, beneficiaries, government officials, other staff

I will not enter into any sort of business relationship on behalf of MAG with family, friends or other personal/professional contacts for the supply of any goods or service to MAG or any employment related matters without authorisation

#### Representatives of MAG

This Code of Conduct applies to anyone acting as a representative of MAG including consultants and family members.

I will report any incident or concern relating to this Code of Conduct

#### **Appendix 6: Qualitative Interview Guide**

- Can you begin by telling me a little about yourself and your household?
   (Prompts: who lives in the household, ages, how long lived in village, married/single, children in/out of school, other family members in the village etc.)
- 2. Can you tell me about your livelihood activities? How have these changed over time? What are some of the reasons for these changes? Can you tell me about your main activities in the dry/wet season? Who in your household is working in different livelihood areas (e.g. farming, marketing, petty trading, scrap metal collection, fishing/hunting, skilled/unskilled agricultural or non-agricultural labour/ government/salaried).
- 3. Do you and your household stay in this village all year round or do people move away at certain times? Why is this? How is this changing? What are some of the reasons for change?
- 4. Can you tell me about how you came to know there were UXO in this village/your land? How did you learn where the UXO were?
- 5. How have you managed UXO contamination? How did your parents/grandparents manage UXO contamination? What has been the effect of UXO contamination on the village/livelihoods/your household?
- 6. Can you tell me about how you felt about you and other household members farming/working in a contaminated area?
- 7. Can you remember when the UXO clearance agency first came? Can you tell me about it? How was it decided where to clear? Was the land that was cleared already in use before clearance? How was it used? How do people protect themselves from having an accident while using the land? Was it important to you to have the land cleared? Why is this/why not?
- 8. Can you tell me about the area of land that has been cleared? What is the size of the area? Who cleared the vegetation prior to clearance? Who cleared the land? Was any local labour used? What was the land used for before clearance? How has its use changed over time?
- 9. Please tell me about when the land was handed over to you by the UXO agency
- 10. Can you tell me what happened after the land was cleared?

- 11. Can you explain to me how the land came to be used after clearance? What is it being used for now? Who uses the land? How? How long after clearance did the land start being used again? What was needed to make it possible to use the land?
- 12. Can you explain to me some of the benefits of clearance? Tell me about the feelings of others family members after clearance? Can you tell me about any negative things?
- 13. How do you feel about your household's future? How has this changed? What are some of the reasons for change?
- 14. What has been the most significant change since clearance?

# Appendix 7: Questionnaire and Scale, Research Sites 1 and 2 (MAG Lao and MAG Iraq)

#### **English Version**

#### Household Questionnaire (A: AG land)

#### **Instructions to interviewer**

Please complete the section 1 questions 1-7 before going to the interview. All questions to be asked unless otherwise indicated. Please complete in black pen.

Once at the place of the interview, please read the consent form and gain the consent of the respondent before continuing to Section 2.

#### Section 1

I	None consulat	- l f	the leteration	
Instructions to interviewer	Please complete before the Interview			
Please read the following consent form before	1.1 Interviewer code:   _			
starting the interview:				
"My name is (name of interviewer) We are	1.2		rview date:	
collecting information in (name of village)	_ _ / _	/_2_ _	0_ _0_ 9_	
to help us understand the effect of UXO				
clearance. I would like to ask you to participate	1.3 Province cod	de: l l	1	
in a one-to-one interview. It will take about				
45mins-1hour of your time. Please answer all	1.4 District code	e:	1	
the questions as <i>truthfully and accurately</i> as		- 11.	<b>_</b> '	
you can. There are <i>no right wrong answers</i> .	1.5 Village code		1 1	
Your answers will be kept confidential.	1.5 village code			
Your name will not be written down. It will not	1.6 Household o	oda. I	1 1 1	
be possible to identify you. There is no direct	1.7 Type of		Village	
		1		
benefit to you in participating to this study.	settlement	2	Suburban/district town	
However, we hope that the research will	Circle one	3	Urban/provincial town	
benefit people living in UXO/mine				
contaminated areas. Your participation is		1		
voluntary. You may refuse to answer any	1.8 Was the	1	Yes	
question and you may choose to stop the	land cleared	2	No	
discussion at any time. Refusing to participate	for AG land	999	Don't know/not sure	
will not affect you, your family or the	(own			
UXO/mine services in this community. If you	consumption,			
have any doubt/concerns about this interview/	sell, cash			
research please contact your local government	crops,			
office or the MAG office. Do you have any	livestock)?			
questions? You may ask questions about this				
interview at any time. May I begin the	1.9 Was the	1	Yes	
interview now?"	land cleared	2	No	
Yes	for a road?	999	Don't know/not sure	
1	ioi a ioau:	333	Don't know/not sure	
\   Signature/thumb print	1 10 14/22 +1-	1	Yes	
	1.10 Was the	_		
	land cleared	2	No .	
No.	for	999	Don't know/not sure	
No	community			
Constructible arts of all	infrastructure			
Signature/thumb print	(e.g. school,			
	religious site,			
	latrine,			
Signature of interviewer	houses,			

To be completed by supervisor	irrigation, water)		
Signature of supervisor	1.11 Was the	1	Yes
Supervisor code:   _	land cleared	2	No
Questionnaire number:	for vegetable of fruit garden	999	Don't know/not sure

1.12	What is the level of UXO contamination	1	High
		2	Medium
		3	Low
1.13	Is this a very poor village	1	Yes
		2	No

#### <u>Section 2</u> <u>Instructions to interviewer (CL)</u>

Read to the respondent (villager) – 'I would now like to ask about your household. There is no right or wrong answer. Please answer as truthfully as you can'

A household is a group of people living and eating together in the same house as a family.

Read all questions. Do not read answers, circle answers unless indicated.

2.1	Sex of respondent	1	Male
	Do not ask!	2	Female
	Circle one		
2.2	What is the sex of the household head?	1	Female
	Circle one	2	Male
2.3	What ethnic group do you belong to?	1	Lao Soong
	Circle one	2	Lao Theung (Makong)
		3	Lao Loum
2.4	How would you describe yourself?	1	Resettled (determined by the
	Read the answers		government)
	Circle one	2	Recently moved here (self-determined)
		3	Local (born in this area/have lived in this
			area for a long time)
2.5	How many people live in your household?		_ _
	Write the answer		
2.6	How many people 15-64 years in your household	1	More than two
	(family), cannot fully work ((i.e. are unable to	2	Two
	work a full day, 5 days a week e.g., chronic	3	One
	illness/disease or disability)?	4	None
	Circle one	999	Not sure
2.7	How many people 15-64 years in your household	1	None
	(family) can <i>fully work</i> (i.e. are able to work a full	2	One
	day, 5 days a week)?	3	Two
	Circle one	4	More than 2
		999	Not sure
2.8	What is the level of education of the <b>head of</b>	1	No school
	household (family)?	2	Primary
	Circle one	3	Lower secondary
		4	Upper secondary
		999	Not sure
2.9	How many people in your household have a	1	None
	job/position in any social groups in the village?	2	1

	(e.g. government organisations, union, security,	3	2
	village head, elder, development committee)	4	More than 2
	Circle one	999	Not sure
2.10	What is the <i>main</i> material of the roof of your	1	Grass/thatch
	house?	2	Bamboo
	Observe and record. Do not ask question!	3	Zinc/wood
	Circle one	4	Tile
		999	Not sure
2.11	What is the <i>main</i> material of the walls of your	1	Mainly bamboo
	house?	2	Mainly wood
	Observe and record. Do not ask question!	3	Mainly bricks
	Circle one	4	Mainly rock
		999	Not sure
2.12	Where do the people in your household usually	1	None/bush/forest
	go to the toilet?	2	Communal latrine
	Circle one.	3	Pit latrine
		4	Flush/Wet (water) latrine
2.13	What is your main fuel for cooking?	1	Sawdust
	Circle one.	2	Wood
		3	Charcoal
		4	Gas/electricity
		999	Not sure
		6	Other, specify
2.14	Is there <b>vehicle</b> access to your village <b>all</b> year?	1	Yes
	Circle one.	2	No
2.15	How many months in a year does your household	1	More than 8 months
	usually lack rice?	2	5-7 months
	Circle one	3	1-4 months
		4	No months (have rice all year)
		999	Not sure
2.16	How far is the <i>district market</i> from the village?	1	More than 20 km
	Circle one	2	10- 20 km
		3	5-10 km
		4	Less than 5km
		999	Not sure
2.17	Where do you get your <i>drinking</i> water from?	1	River, stream or dam
	Circle one	2	Well/borehole <b>un</b> protected
		3	Well/borehole protected
		4	Mountain source (incl. GFS)
		5	Other, specify

# Section 3 Instructions to interviewer (CL)

Ask the respondent 'what have your 3 main work (income) activities been in the last YEAR?'

Do not read answers (use codes)

	What are your household's 3 main work income activities in the last YEAR? (Rank most important)
1	
Main	
2	III
Second	
3	
Third	

#### Income activity codes (do not read)

1 = Farmer - rice ( water rice field, dry rice,	10 = Collection and/or sale of Forest Products
hai/naa)	(NTFPs) (plants)
2 = Livestock rearing and/or selling	11 = Hunting (including birds)
3 = Brewing	12 = Small trading (e.g. small shop)
4 = Fishing	13 = Seller, commercial activity (e.g. middle man)
5 = Collection of aquatic animal resources	14 = Remittances
other than fish	15 = Salaries, Wages (employees, longer-term)
6 = Unskilled wage labour – agriculture	16 = Collecting scrap metal/explosive powder
7 = Unskilled wage labour – non-agriculture	17 = Government allowance (pension, disability
8 = Skilled wage labour (short term, not paid	benefit)
monthly)	18 = Vegetable gardening
9 = Handicrafts /Artisan	19 = Farmer cash crop
	20 = Others, specify

#### Section 4 A: AG land, for individual household

#### **Instructions to interviewer (CL)**

Read to the respondent (villager) 'now I would like to ask you about the land that has been cleared of uxo for your household/family. There is no right or wrong answer. Please answer as truthfully as you can'

#### Read all questions unless indicated. Do not read answers, circle answers unless indicated.

4.1	Has your AG land been cleared of UXO?	1	Yes Go to Q.4.2	
	Circle one	2	No 7	Go to
		999	Not sure/can't remember \( \)	<b>G</b> 0 t0
4.2	Before clearance was the land used for AG land	1	Yes	Section B
	(own consumption, sell, cash crops, livestock)?	2	No	i
	Circle one	999	Don't know/not sure	
4.3	<b>Before clearance</b> was the land used for vegetable	1	Yes	
	of fruit garden	2	No	
	Circle one	999	Don't know/not sure	
4.4	Who requested the UXO clearance?	1	Self/owner	
		2	Village authorities	
	May circle more than one	3	District authorities	
		4	NGO/IO	
		999	Don't know/not sure	
		6	Other, specify	
4.5	Were UXO found on the land when it was	1	Yes	
	cleared?	2	No	

	Circle one	999	Don't know/can't remember/not sure
4.6	How much of the UXO cleared land is being used?  Circle one  After clearance is the land used for AG land (own consumption, sell, cash crops, livestock)?  Circle one	1 2 3 4 999 1 2 999	Less than half More than half All of it None Don't know/not sure  Yes No Don't know/not sure
4.8	After <i>clearance</i> is the land used for vegetable of fruit garden/hai  Circle one	1 2 999	Yes No Don't know/not sure
4.9	If <b>not</b> used, what is the <b>main reason</b> why?  Circle one	1 2 3 4 999	Lack of labour/pregnancy Lack of equipment/money Weather (floods, drought/irregular rains, pests) Clearance too late/clearance in planting month Don't know/not sure
4.10	How satisfied were you with the UXO clearance process?  Circle one	1 2 999	Satisfied Not satisfied No comment/not sure
4.11	After UXO clearance, did you have help to use the land?  Read answers  May circle more than one	1 2 3 4 999 5	Help from the government Help from a NGO/IO Help from the village Help from my family /no external support Don't know/not sure/can't remember Other, specify
4.12	After clearance have you found any UXO on the cleared land?  Circle one	1 2 999	Yes No Don't know/not sure/ can't remember

4.13 What is the **most significant** change for your family **because of** the UXO clearance on your land? **(Write the answer)** 

<u>Section 4 B: Community land/physical assets/community projects (e.g. school, religious site, water, dam, weir, road, community vegetable garden, market, houses)</u>

#### **Instructions to interviewer (CL)**

Read to the respondent (villager) 'now I would like to ask you about the land that has been cleared of UXO in this community for community activities, for example school, religious site, borehole, weir, road, community vegetable garden, market, houses. There is no right or wrong answer. Please answer as truthfully as you can'

	T		T.,	<del></del> -
4b.1	In this village has land been cleared for		Yes —	If completed Section
	community activities (school, religious site,	2 999	No Not sure/san't remember	4 (AG land) go to
	borehole, weir, road, community vegetable garden, market, houses)?	999	Not sure/can't remember→	
	Circle one			Section 5, if no AG
4b.2	<b>Before</b> clearance was the land used for AG land	1	Yes	land, close interviev
	(own consumption, sell, cash crops, livestock)?	2	No	1
	Circle one	999	Don't know/not sure	
4b.3	<b>Before</b> clearance was the land used for a road?	1	Yes	
	Circle one	2	No	
		999	Don't know/not sure	
4b.4	Before clearance was the land used for	1	Yes	
	community infrastructure (e.g. school, religious	2	No	
	site, latrine, houses, irrigation, water)	999	Don't know/not sure	
	Circle one	<u> </u>		
4b.5	Before clearance was the land used for	1	Yes	
	vegetable of fruit garden	2	No	
	Circle one	999	Don't know/not sure	
4b.6	Who requested the UXO clearance?	1	Self/owner	
40.6	who requested the OXO clearance?	2	Village authorities	
	May circle more than one	3	District authorities	
	way tirtle more than one	4	NGO/IO	
		999	Don't know/not sure	
		5	Other, specify	
			Other, specify	
4b.7	Were UXO found on the land when it was	1	Yes	
	cleared?	2	No	
	Circle one	999	Don't know/can't remember	r/not sure
4b.8	How long ago was the UXO cleared land	1	Less than one year ago	
	handed over?	2	1– 2 years ago	
	Circle one	3	2-4 years ago	
		4	More than 4 years ago	
		999	Don't know/can't remember	r/not sure
4b.9	After clearance is the land used for AG land	1	Yes	
	(own consumption, sell, cash crops, livestock)?	2	No	
	Circle one	999	Don't know/not sure	
4b.10	After clearance is the land used for AG land	1	Yes	
0	(own consumption, sell, cash crops, livestock)?	2	No	
	Circle one	999	Don't know/not sure	
			Bon e know, not sure	
4b.11	After clearance is the land used for a road?	1	Yes	
	Circle one	2	No	
		999	Don't know/not sure	
4b.12	<b>After</b> clearance is the land used for community	1	Yes	
→U.12	infrastructure (e.g. school, religious site, latrine,	2	No	
	houses, irrigation, water)	999	Don't know/not sure	
		223		

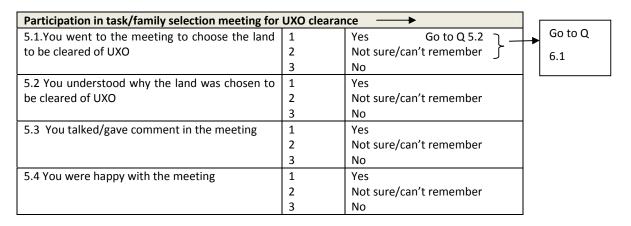
	Circle one		
4b.13	After clearance is the land used for vegetable of fruit garden Circle one	1 2 999	Yes No Don't know/not sure
4b.14	After the UXO clearance, what help did your	1	Help from the government
40.14	village have to use the land?  Read answers	2	Help from a NGO/IO
		3 4	Help from the village No support from outside
	May circle more than one	999 5	Don't know/not sure Other, specify

4b.15 What is the <i>most significant</i> change for your family <i>because of</i> the UXO clearance for village activities? <i>(Write the answer)</i>

#### **Instructions to interviewer (CL)**

Read to the respondent 'now I will read sentences one by one, please tell me if you think the sentence is yes, true for you, you are not sure/can't remember, or no, not true for you. There is no right or wrong answer. Please answer as truthfully as you can'

Read each sentence one by one. Circle the number of the response.



#### Section 6

#### **Instructions to interviewer (CL)**

Read to respondent (villager): 'Now I would like to ask you questions about after UXO clearance and how things are different and who benefits. There is no right or wrong answer. Please answer as truthfully as you can'

Read each sentence. Circle appropriate box for level of change

	1				
	+		0	-	
Human					
After UXO clearance					
6.1 The number of children in your household enrolled in school is:	More before	than	The same	Less before	than
6.2 The number of children in your household miss school due to poor heath is:	More before	than	The same	Less before	than
6.3 The amount of food variety your household has to eat (e.g. more vegetables, more meat, more fruit) is:	More before	than	The same	Less before	than
6.4 The time you have to do other things is:	More before	than	The same	Less before	than
6.5 The pride you feel for your household is:	More before	than	The same	Less before	than
6.6 The amount of fear or worry you feel about <b>children in your household</b> having UXO/mine accidents is:	Less before	than	The same	More before	than
Social After clearance					
6.7 The amount (number of times) you are able to participate in weddings, social, religious events, feeling part of the community is:	More before	than	The same	Less before	than
6.8 The amount (number of times) you or household members are able to visit friends and relatives <b>outside of</b> your village is:	More before	than	The same	Less before	than
Physical After clearance					
6.9 Your household's access to the district hospital and other health care is:	Better before	than	The same	Worse before	than
6.10 Your household's access market is:	Better before	than	The same	Worse before	than
6.11 Your household's access to phone, electricity is:	Better before	than	The same	Worse before	than
Finance After clearance					
6.12 Your household's ability to save money or invest (e.g. in a buffalo/goat) is:	Better before	than	The same	Worse before	than
6.13 Your household's ability to <i>keep</i> belongings (e.g. <i>no/less need to sell your belongings to pay</i> for an emergency (e.g. illness, accident, floods, drought, pests, not enough food, owe money, pay a fine) is:  Environment	Better before	than	The same	Worse before	than

After clearance					
6.14 The amount of water your household has for farming/vegetable/ fruit gardens is:	Better before	than	The same	Worse before	than
6.15 The amount of safe grazing land for animals is:	Better before	than	The same	Worse before	than

6.16 Overall, what is the <i>most significant</i> change for your family <i>because of</i> the UXO clearance (write the answer)
6.17 Could you tell us what factors (other than clearance) has helped family change compared wit before? (Write the answer)
6.81 Are there any factors that are negative changes for your family because of uxo clearance (Write the answer)

#### Section 7 Instructions to interviewer (CL)

Read to respondent (villager): 'Now I would like to ask you a few more questions about after clearance and how things are different. There is no right or wrong answer. Please answer as truthfully as you can'

Read all questions unless indicated. Do not read answers, circle answers unless indicated.

	T		Go to
7.1	Do you have any income from using the cleared	1	Yes —
	land? (e.g. community Land or AG)	2	No
	Circle one	3	Not sure J
7.2	How much has your income increased?	1	A little
	Circle one	2	The same
		3	About double
		4	A lot
		5	Not sure/don't know
7.3	What is the <i>main</i> thing you use the money for?	1	Food (staple)
		2	MSG, salt, chilli, sugar
	Circle one	3	Things for the house/
		4	Things for school (fees, uniforms,

	5 6 7	notebooks) Animals (buffalo/cows/goats) Farming/work equipment/tools Motorbike/vehicle/fuel/bicycle Other,
--	-------------	--

# Section 8 Instructions to interviewer (CL)

Read to respondent (villager): 'Now I would like to ask you a few questions about the current situation. There is no right or wrong answer. Please answer as truthfully as you can'

Read all questions unless indicated. Do not read answers, circle answers unless indicated.

8.1	Do you have land which you <i>are using</i> which has	1	Yes —	Go to	
	UXO?	2	No 7		
	Circle one	999	Not sure/don't know } →	Go to	
8.2	What is the main thing you using the land for?	1	Farming (shallow, e.g. hai)		
		2	Garden		
	Circle one	3	Farming (digging/ploughing)		
		4	Housing		
		5	School area		
		6	Other,	specify	
				. ,	
			<u> </u>	Go to Q. 8.3	
8.3	Is there land in this village which is <b>not</b> being	1	Yes	GO 10 Q. 8.3	
	used because of UXO/mines?	2	No 7	0.1.00	
	Circle one	999	Not sure/don't know   →	Go to Q 8.	
8.4	What is the <i>main effect</i> of UXO/mines?	1	Cannot farm land/loss of food production		
	Circle one	2	Cannot build community facilities (e.g.		
			schools, road, borehole, irrigation)		
		3	Feel unsafe/worry		
1		999	9 No effect		

8.5 Do you have any other comments?							

Thank respondent (villager) and close interview

# Questionnaire and Scale, Research Sites 1 and 2 (MAG Lao and MAG Iraq) Lao Version

ຄຳຖາມທີ່ຈະຖາມແຕ່ລະຄອບຄົວ: ດີ ກະສົກາ ໃຫ້ອ່ານຄຳຖາມພາກທີ່ 1 ທີ່ມີ 1 ຫາ 7 ຄຳຖາມກ່ອ ທີ່ຈະສຳພາດ. ທຸກໆ ຄຳຖາມຈະຕ້ອງໄດ້ຖາມໝົດ ກະລຸ າຂຸງ ໃຫ້ ແລ້ວກ່ອ ສຳພາດ. ຖ້າບໍ່ດັ່ງນີ້ນຈະບໍ່ໄດ້ຜົນ. ໃຫ້ຂຸງນໂດຍບິກສືຟ້າ. ເມື່ອໄປເຖິງບ່ອ ສຳພາດແລ້ວ ໃຫ້ອ່າ ແບບຟອມຄຳປະຕິຍາ ຕີ ແລະເຫັ ດີໃຫ້ສຳພາດກ່ອນທີ່ຈະ ດຳເນີ ຕໍ່ພາກທີ່ 2.
พาภที่1
ถาน ะ ำเนียผู้ใช้เติมายาด
ກະລຸ າອ່າ ຂໍ້ຕຶກລົງດັ່ງຕໍ່ໄປນີ້ກ່ອ ເລີ່ມສາພາດ
ຂ້າພະເຈົ້າຊື່(ຊື່ຂອງຜູ້ສຳພາດ)ພວກຮົາກຳລັງເກັບກຳຂໍ້ມູນທີ່ຈະຊ່ວຍພວກເຮົາເຂົ້າໃຈເຖີງຜົ ກະທົບຂອງກາ ເກັບ
ກູ້ລະເບີດທີ່ຍັງບໍ່ຫໍ ແຕກ. ຂ້າພະເຈົ້າຢາກເຊີ ທ່າ ເຂົ້າຮ່ວມເປັນເທື່ອລະຄົນການສຳພາດຈະໃຊ້ເວລາປະມາ 45 າທີ
ເຖີງ1 ຊື່ວໂມງ. ກະລຸ າຕອບຄຳຖາມຕາມຄວາມເປັ ຈິງ. ຄຳຕອບຂອງທຳ ຈະບໍ່ຜິດຫຼືຖືກ ແລະ ກາ ສຳພາດ ທີ່ຜິດຂ້າພະ
ເຈົ້າຈະຮັກສາທຸກຄາຕອບຂອງທ່າ ໄວ້ເປັ ຄວາມລັບ.
ກາ ສຳພາດຄັ້ງນີ້ ທຳ ຈະບໍ່ໄດ້ຮັບຜີ ປະໄຫຍດຕອບແທ ໃດໆໃ ກາ ປະກອບສ່ວ ຂອງທຳ .
ເຖິງຢ່າງໃດກໍ່ຕາມ, ພວກເຮົາຫວັງວ່າກາ ເກັບກາຂໍ້ມູ ໃ ຄັ້ງນີ້ຈະເປັ ຜີ ປະໂຫຍດຕໍ່ຜູ້ທີ່ດຳລົງຊີວິດໃ ພື້ນທີ່ທີ່ມີລະເບີດ/
ມິ ຫຼາຍ. ກາ ເຂົ້າຮ່ວມຂອງທ່າ ແບບສະໝັກໃຈ, ທ່າ ອາດປະຕິເສດບໍ່ຕອບຄຳຖາມແລະ ສາມາດເລືອກຢຸດກາ ສຳ
ພາດໄດ້ທຸກເວລາ ກາ ປະຕິເສດບໍ່ເຂົ້າຮ່ວມຈະບໍ່ເປີ ຜີ ເສຍຫາຍຕໍ່ຫ່າ ແລະ ຄອບຄົວ ຫຼື ຕອບສະໜອງວຸງກງາ ເກັບກູ້
ລະເບີດໃ ພື້ນທີ່ນີ້. ຖ້າຫາກທ່າ ມີຂໍ້ຂ້ອງໃຈກາ ສາພາດໃ ຄັ້ງນີ້ກະລຸ າຕິດຕໍ່ຫ້ອງກາ ແຮງງາ ແລະ ສະຫວັດດີກາ
ເມືອງ. ທ່າ ມີສິ່ງໃດຢາກຖາມພວກເຮົາບໍ່? ທ່າ ສາມາດຖາມສຳຖາມກຸ່ງວກັບກາ ສຶກສາຄັ້ງນີ້ໄດ້ທຸກເວລາ.
ຂ້າພະເຈົ້າເລີ່ມກາ ສຳພາດດໆວນີ້ໄດ້ບໍ່?
ໄດ້
ບໍ່ໄດ້
ລາຍເຮັ /ຈຳ້ໂປ້ມີຂອງຜູ້ຖືກສຳພາດ
The state of the s
ผู้ถุมๆ ต้อาลุן ใช้เลาเล็ก
ລາຍເຊັ ຂອງຜູ້ຄຸມງາ
ລະຫັດຂອງຜູ້ຄຸມງາ :
ຈຳ ວ ແບບຄຳຖາມ:

#### ຄຳຖາມທີ່ຈະຖາມແຕ່ລະຄອບຄົວ: ດ ກະສິກຳ

ໃຫ້ອ່ານຄຳຖາມຍາກທີ່ 1 ທີ່ມີ 1 ຫາ 7 ຄຳຖາມກ່ອ ທີ່ຈະສຳພາດ. ທຸກໆ ຄຳຖາມຈະຕ້ອງໄດ້ຖາມໝິດ ກະລຸ າຂຸງ ໃຫ້ ແລ້ວກ່ອ ສຳພາດ. ຖ້າບໍ່ດັ່ງນັ້ນຈະບໍ່ໄດ້ຜິນ. ໃຫ້ຂຸງນໂດຍບິກສີຟ້າ. ເມື່ອໄປເຖິງບ່ອ ສຳພາດແລ້ວ ໃຫ້ອ່າ ແບບຟອມຄຳປະຕິບາ ຕີ ແລະເຫັ ດີ ໃຫ້ສຳພາດກ່ອນທີ່ຈະ ດຳເນີ ຕໍ່ພາກທີ່ 2.

#### พาภทิ่1

#### ຄຳແ ະ ຳເຖິງຜູ້ໃຫ້ສຳພາດ

#### ກະລຸ າອ່າ ຂໍ້ຕົກລົງດັ່ງຕໍ່ໄປນີ້ກ່ອ ເລີ່ມສຳພາດ

ຂ້າພະເຈົ້າຊື່ເຊື້ຂອງຜູ້ສຳພາດ) ....ພວກເຮົາກຳລັງເກັບກຳຂໍ້ມູນທີ່ຈະຊ່ວຍພວກເຮົາເຂົ້າໃຈເຖິງຜິ ກະທົບຂອງກາ ເກັບ ກູ້ລະເບີດທີ່ຍັງບໍ່ທ້ ແຕກ. ຂ້າພະເຈົ້າຢາກເຊີ ທຳ ເຂົ້າຮ່ວມເປັນເທື່ອລະຄົນການສຳພາດຈະໃຊ້ເວລາປະມາ 45 າທີ ເຖີງ1 ຊື່ວໂມງ. ກະລຸ າຕອບຄຳຖາມຕາມຄວາມເປັ ຈິງ. ຄຳຕອບຂອງທຳ ຈະບໍ່ຜິດກູ້ຖືກ ແລະ ກາ ສຳພາດ ທີ່ຜິດຂ້າພະ ເຈົ້າຈະຮັກສາທຸກຄຳຕອບຂອງທຳ ໄວ້ເປ້ ຄວາມລັບ.

ກາ ສຳພາດຄັ້ງນີ້ ທຳ ຈະບໍ່ໄດ້ຮັບຜີ ປະໂຫຍດຕອບແທ ໃດໆໃ ກາ ປະກອບສ່ວ ຂອງທຳ

ເຖິງຢ່າງໃດກໍ່ຕາມ, ພວກເຮົາຫວັງວ່າກາ ເກັບກຳຂໍ້ມູ ໃ ຄັ້ງນີ້ຈະເປັ ຜີ ປະໂຫຍດຕໍ່ຜູ້ທີ່ດຳລົງຊີວິດໃ ພື້ນທີ່ທີ່ມີລະເບີດ/ ມີ ຫຼາຍ. ກາ ເຂົ້າຮ່ວມຂອງທ່າ ແບບສະໝັກໃຈ, ທ່າ ອາດປະຕິເສດບໍ່ຕອບຄຳຖາມແລະ ສາມາດເລືອກຢຸດກາ ສຳ ພາດໄດ້ທຸກເວລາ. ກາ ປະຕິເສດບໍ່ເຂົ້າຮ່ວມຈະບໍ່ເປັ ຜີ ເສຍຫາຍຕໍ່ທ່າ ແລະ ຄອບຄົວ ຫຼື ຕອບສະໜອງວຸງກງາ ເກັບກູ້ ລະເບີດໃ ພື້ນທີ່ນີ້. ຖ້າຫາກທ່າ ມີຂໍ້ຂ້ອງໃຈກາ ສຳພາດໃ ຄັ້ງນີ້ກະລຸ າຕິດຕໍ່ຫ້ອງກາ ແຮງງາ ແລະ ສະຫວັດດີກາ ເມືອງ. ທ່າ ມີສິ່ງໃດຢາກຖາມພວກເຮົາບໍ່? ທ່າ ສາມາດຖາມຄຳຖາມກຸ່ງວກັບກາ ສຶກສາຄັ້ງນີ້ໄດ້ທຸກເວລາ. ຂ້າພະເຈົ້າເລີ່ມກາ ສຳພາດດຸງວນີ້ໄດ້ບໍ່?

ໄດ້	
ບໍ່ໄດ້	
ລາຍເຊັ /ຈຳໂປີມື	ມີຂອງຜູ້ຖືກສາພາດ
<i>ຜູ້ຄຸມງາ ຕ້ອງຂຸງ</i> ລາຍເຊັ ຂອງຜູ້ຄຸເ	
ລະຫັດຂອງຜູ້ຄຸມງ	วา :  _ _
ຈຳ ວ ແບບຄຳເ	ກາມ:
F F F T	

ກະລຸ າຂຽ ໃຫ້ແລ້ວກ່ອ ສຳພາດ.

1.1 ລະຫັດຜູ້ສຳພາດ:		
1.2 ວັ ທີ່ສຳພາດ:		_ _ /_  /2  0  0  9
1.3 ລະຫັດແຂວງ:		
1.4 ລະຫັດເມືອງ:		
1.5 ລະຫັດບ້າ :		
1.6 ລະຫັດຄິວເຮືອ :		
1.7 ທີ່ຕັ້ງຖິ່ນຖາ	1	บ้า
ໃຫ້ໝາຍເອົາຄາຕອບດງວ	2	ຊາ ເມືອງ
	3	ໃ ເມືອງ
1.8 ດິນທີ່ເກັບກູ້ລະເບີດເພື່ອເປັນດິນປູກຝັງບໍ່?	1	ແມ່
( ຳໃຊ້ບໍລິໂພກເປັ ຂεງຕີ ເອງ, ຂາຍ, ເງິ ສິດຈາກກາ ຂາຍ	2	ບໍ່ແມ່
ຕີ ລະປູກ, ສັດລັງງ)	999	ບໍ່ຮູ້/ບໍ່ແ 'ໃຈ
ໃຫ້ໝາຍເອົາຄາຕອບດຸງວ		
1.9 ດິ ທີ່ເກັບກູ້ລະເບີດເພື່ອສ້າງຫີ ທາງບໍ່?	1	ແມ່
1111 24 111 42511118	2	ບໍ່ແມ່
ໃຫ້ໝາຍເອົາຄາຕອບດຸງວ	999	ບໍ່ຮູ້/ບໍ່ແ 'ໃຈ
1.10 ດິນທີ່ເກັບກູ້ລະເບີດແມ່ນເພື່ອສ້າງສິ່ງອຳນວຍຄວາມສະດວກ	1	ແມ່
ໃຫ້ແກ່ຊຸມຊີ ບໍ່?( ໂຮງຮຸງ , ດິ ສາສະໜາ/ດິ ປຸກສ້າງ, ວິດຖ່າຍ,	2	ບໍ່ແມ່
ເຮືອ ,ຊີ ລະປະຫາ , ຳ້ສ້າງ)	999	ບໍ່ຮູ້/ບໍ່ແ 'ໃຈ
ໃຫ້ໝາຍເອົາຄາຕອບດຸງວ		1000
1.11 ດິນທີ່ເກັບກູ້ລະເບີດເພື່ອເປັ ສວ ໝາກໄມ້ ຫລື ສວ ຜັກ?	1	ແມ່
ໃຫ້ໝາຍເອົາຄາຕອບດຸງວ	2	ບໍ່ແມ່
(¥	999	ບໍ່ຮູ້/ບໍ່ແ ່ ໃຈ
1.12 ລະດັບຄວາມຮຸ ແຮງຂອງກາ ມີລະເບີດຕົກຄ້າງ	1	ສູງ
ແມ່ ລະດັບໃດ?	2	ກາງ
ໃຫ້ CL ຕື່ມ ໃຫ້ແລ້ວກ່ອນການສຳພາດ	3	ch ch
1.13 ແມ່ນບ້ານທີ່ທຸກຍາກຫຼາຍບໍ່?	1	ແມ່
ໃຫ້ CL ຕື່ມ ໃຫ້ແລ້ວກ່ອນການສຳພາດ	2	ບໍ່ແມ່

## พาภทิ่ 2

ลา์แ ะ า์ใ กา สาพาก.

ຳສະເໜືອດປະສິງໃຫ້ຜູ້ເຂົ້າຮ່ວມ ຂ້າພະເຈົ້າຂໍຖາມກ່ຽວກັບຄອບຄົວຂອງທ່າ ໃ ຄຳຕອບຂອງທ່າ ຈະບໍ່ຕິດ ຫຼື ຖືກ ກະລຸນາຕອບຄຳຖາມຕາມທີ່ເປັນຈິງ ຕາມທີ່ທ່ານສາມາດຕອບໄດ້ (ກຸ່ມຄົນທີ່ອາໃສ ແລະ ກິ ຢູ່ ຳກັ ພາຍໃຕ້ຫຼັງຄາ ເຮືອ ດຽວກັ )

ອ່າ ແຕ່ລະຖາມ. ບໍ່ຕ້ອງອ່າ ຄຳຕອບ, ໝາຍເອົາຄຳຕອບ

ອາ ແຕລະຖາມ. <b>ບຕອງອາ ຄາຕອບ, ໝາຍເອາຄາຕອບ</b> 2.1 ເພດຜູ້ຕອບ	1	ลาย
ບໍ່ໃຫ້ຖາມ ໃຫ້ ໝາຍເອົາຄຳຕອບ ດງວ	2	ຍິງ
2.2 ຫີວໜ້າຄອບຄີວແມ່ ເພດຫຍັງ?	1	ຍິງ
ໃຫ້ໝາຍເອົາຄາຕອບດຽວ	2	ลุาย
2.3 ທ່າ ແມ່ ຊີ ຊາດຫຍັງ?	1	ລາວສູງ
ໃຫ້ໝາຍເອົາຄາຕອບດຽວ	2	ລາວເທິງ (ມະກອງ)
	3	ລາວລຸ່ມ
2.4 ທ່າ ຈະແ ະ ຳຕົວຂອງທ່າ ແ ວໃດ?	1	ສ້າງຖິ່ນຖາ ຄື ໃໝ່ (ກາໂດໂດຍລັດຖະບາ )
ອ່າ ຄຳຕອບ ແລະ ໝາຍເອົາຄຳຕອບດຽວ	2	ຍ້າຍມາຫວ່າງບໍ່ດີ (ກຳົດດ້ວຍຕີວເອງ)
•	3	ທ້ອງຖິ່ນ (ເກີດໃ ທ້ອງຖິ່ນນີ້/ໄດ້ອາໃສຢູ່ໃ ທ້ອງຖິ່ນນີ້
		ມາດີ ແລ້ວ)
2.5 ໃ ຄອບຄົວຂອງທ່າ ມີຈັກຄີ ? <i>ຊາ ຄຳຕອບ</i>		1
2.6 ຄົນອາຍຸ 15 - 64ປີ ໃ ຄອບຄົວຂອງເຈົ້າມີຈັກຄົ ທີ່ບໍ່ສາມາດ	1	ບໍ່ມີຈັກຄົ
ຮັດວຸງກໄດ້ເນື່ອງຈາກເປັ ພະຍາດ, ປ່ວຍຊາ້ເຮື້ອ ຫຼື ພິກາ ?	2	ໜຶ່ງຄີ
ໃຫ້ໝາຍເອົາຄາຕອບດຸງວ	3	ສອງຄີ
	4	ສາມ ຫຼື ຫຼາຍກວ່າສາມຄົ
	999	ข้น 'ใจ
2.7 ມີຈັກຄົນທີ່ສາມາດເຮັດວຸງກໄດ້ໃ ຄອບຄົວຂອງທ່າ	1	ບໍ່ມີຈັກຄົ
ອາຍຸລະຫວ່າງ15 - 64ປີ?	2	ໜຶ່ງຄົ
ໃຫ້ໝາຍເອົາຄາຕອບດຸງວ	3	ສອງຄີ
•	4	ສາມ ຫຼື ຫຼາຍກວ່າສາມຄົ
	999	ข้น "ใจ
2.8 ລະດັບກາ ສຶກສາຂອງຫົວໜ້າຄອບຄິວແມ່ ລະດັບໃດ?	1	ບໍ່ໄດ້ເຂົ້າໂຮງຮຸ
ໃຫ້ໝາຍເອົາຄາຕອບດງວ	2	ເຂົ້າໂຮງຮຸງ ປະຖິມ
·	3	ເຂົ້າໂຮງຮຸງ ມັດທະຍົມຕົ້
	4	<u>ท</u> ู่บณะถู่ทฤงถ
	999	ข้น "ใจ
2.9 ໃ ຄອບຄົວຂອງທ່າ ມີຈັກຄົນທີ່ປະກອບສ່ວນວຽກງານ	1	ບໍ່ມີ
ກັບບ້າ : ເຊັ່ນວ່າ ສະຫະພັ ແມ່ຍິງ ກອງຫຼອ ບ້າ ຫຼື າຍບ້າ ?	2	<b>ឆិ</b> 1 តិ
ໃຫ້ໝາຍເອົາຄາຕອບດຸງວ	3	ມិខតិ
-	4	ມີຫຼາຍກວາ 3 ຄົ
	999	ข้น "ใจ
2.10 ເຮືອ ຂອງທ່າ ມຸງດ້ວຍຫຍັງ?	1	ิขย้า
ສັງເກດ ແລະ ບັ ທຶກ. ບໍ່ຕ້ອງ ຖາມຄຳຖາມ	2	อ่านั้ว
ໃຫ້ໝາຍເອົາຄາຕອບດຽວ	3	ສັງກະສີ/ໄມ້
-	4	ມຸງກະເບື້ອງ
	999	ບໍ່ແ "ໃຈ

2.11 ຝາເຮືອ ຂອງເຈົ້າແອັມດ້ວຍຫຍັງ?	1	ช่าน้า
ສັງເກດ ແລະ ບັ ທຶກ. ບໍ່ຕ້ອງ ຖາມຄຳຖາມ	2	ດ້ວຍໄມ້
ໃຫ້ໝາຍເອົາຄາຕອບດຽວ	3	ด้อยดี จิ๋
45 to 0 455 to 150 to 1	4	ດ້ວຍຫີ
	999	ข้น 'ใจ
2.12 ຄື ໃ ຄອບຄົວຂອງທ່າ ໄປຖ່າຍຢູ່ໃສ?	1	ບໍ່ມີບ່ອ ຖ່າຍ/ຖ່າຍຢູ່ຟຸ່ມໄມ້/ຖາຍຢູ່ປ່າ
ໃຫ້ໝາຍເອົາຄາຕອບດຸງວ	2	ໃຊ້ຫ້ອງ ຳ້ລວມ
	3	ວິດຂຸມ
	4	ວິດຖ່າຍໃຊ້ ຳ້ລ້າງ
2.13 ທ່າ ໃຊ້ຫຍັງດັງໄຟຄິວກິ ?	1	ຂີ້ເລື່ອຍ
ໃຫ້ໝາຍເອົາຄາຕອບດຸງວ	2	<b>a</b>
•	3	ทุ่า
	4	แท้ล/ไฟฟ้า
	999	ข้น 'ใจ
	6	ແລະອື່ນໆ ໃຫ້ລະບຸລິງ
2.14 ລິດສາມາດເຂົ້າມາບ້າ ຂອງທ່າ ໄດ້ຕະຫຼອດປີບໍ່?	1	ໄດ້
ໃຫ້ໝາຍເອົາຄາຕອບດຸເວ	2	ບໍ່ໄດ້
2.15 ຈັກເດືອ ໃ ປີໜຶ່ງຄອບຄົວຂອງທ່າ ຂາດເຂົ້າກິ ?	1	ຫຼາຍກ່ວາ 8 ເດືອ
ໃຫ້ໝາຍເອົາຄາຕອບດຸງວ	2	5 - 7 ເດືອນ
	3	1 - 4 ເດືອນ
	4	ມີເຂົ້າກິ ໝົດປີ
	999	ข้น 'ใจ
2.16 ຕະຫຼາດຢູ່ເມືອງໄກປາ ໃດຈາກບ້າ ຂອງທ່າ ?	1	ໄກກ່ວາ 20 ຫຼັກ
ໃຫ້ໝາຍເອົາຄາຕອບດຸງວ	2	10 - 20 ຫຼັກ
·	3	5 - 10 ຫຼັກ
	4	ໄກ້ກ່ວາ 5 ຫຼັກ
2.17 ທ່າ ໄປຕັກເອົາ ຳົກິ ຈາກໃສ?	1	ແມ່ນ້ຳ, ເຄື່ອນ, ຫ້ວຍ
ໃຫ້ໝາຍເອົາຄາຕອບດຸງວ	2	ນ້ຳສ້າງນ້ຳບາດານທີ່ບໍ່ມີອັ ມຸງ
·	3	ນ້ຳສ້າງ ນ້ຳບາດານທີ່ມີອັນມຸງ
	4	มาจากพู, วัล
	5	ແລະອື່ນໆ ໃຫ້ລະບຸລີງ

พากที่ 3 ใช้ฤามตู้ที่เลิ้าร่อมอ่าใบ 3 กิดจะกำดิ้มต์ที่ปะติบัดใ ปีช่า มา, กิดจะกำที่ลักๆลายธับ

## (ບໍ່ໃຫ້ອ່າ ຄຳຕອບ ໃຫ້ໃຊ້ລະຫັດຄຳຕອບ)

	3.1 ລຸງກ 3 ຢ່າງຕື້ ຕໍ່ທີ່ສ້າງລາຍຮັບໃຫ້ ຄອບຄີວຂອງທ່າ ແມ່ ຫຍັງ?
1. ສຳຄັ ຕື່ ຕໍ	
2. ສຳຄັ ທີ່ສອງ	
3. <b>สำถั</b> ชิ์สาม	

#### ລະຫັດກິດຈະກຳທີ່ສ້າງລາຍຮັບ

West 1161 461 188 178 1660	
1 = ຊາວ າ (ເຮັດ າ,ເຮັດໄຮ່)	11 = ລ່າສັດ (ລວມທັງົກປະເພດຕ່າງໆ)
2 = ສັດລັງງ ແລະ /ຫຼື ຂາຍ	12 = ຄ້າຂາຍຍ່ອຍ (ຮ້າ ້ອຍ )
3 = ສິ່ງທີ່ຕົ້ມຂື້ນເຊັ່ນ:ຊາ,ກາແຟ, ຳົຕົມຢາ,ເຫຼົ້າຂາວ	13 = ພໍ່ຄ້າ/ແມ່ຄ້າ, ເຮັດກາ ຄ້າ (ພໍ່ຄ້າຄື ກາງ)
4 = ภา ซาปา	14 = ໄດ້ຮັບເງີ ຝາກຈາກພີ່ ້ອງ
5 = ຫາສັດນຳ້ອື່ນໆທີ່ບໍ່ແມ່ ປາ	15 = ເງີ ເດືອ ,ເງີ ຄຳຈ້າງ(ພະັກງາ , ຮັບຈ້າງໄລຍະຍາວ)
6 = ບໍ່ມີຄວາມສຳ າ ໃ ກາ ຮັບຈ້າງແຮງງາ — ກາ ກະສິກຳ	16 = ເກັບເຫຼັກເຂດ/ໝື້ລະເບີດ
7 = ບໍ່ມີຄວາມສຳ າ ໃ ກາ ຮັບຈ້າງແຮງງາ — ບໍ່ແມ່ ກາ ກະສິກາ	17 = ເບັຍລັງງຈາກລັດຖະບາ (ເງີ ບຳ າ , ເງີ ເສຍອີງຄະ)
8 = ມີຄວາມສຳ າ ໃ ກາ ຮັບຈ້າງແຮງງາ (ຮັບເໝົາ)	18 = ເຮັດສວ ຜັກ
9 = ຫັດຖະກຳ,ງາ ສີມື/ຊ່າງຄວັດ	19 = ພືດທີ່ປູກເນືອຂາຍ
10 = ຫາເກັບ ແລະ /ຫຼື ຂາຍເຄື່ອງປ່າຂອງດິງຫີເປັນພືດ(NTFPs)	20 = ອື່ນໆ, ໃຫ້ບອກແຈ້ງ

#### พาภทิ 4 A: LAND

#### ຄຳຖາມສຳລັບແຕ່ລະຄິວເຮືອ

## กาน ะมาสาลัยผู้ที่ลิวสาขาก

ອ່ານໃຫ້ຜູ້ເຂົ້າຮ່ວມຟັງ, ຂ້າພະເຈົ້າຂໍຖາມກ່ຽວກັບເຖິງດິນທີ່ໄດ້ກວດລະເບີດໃຫ້ຄອບຄົວຂອງທ່າ , ຄຳຕອບຂອງທ່າ ຈະບໍ່ຜິດຫຼືຖືກ. ກະລຸນາຕອບຕາມຄວາມເປັນຈິງ ຕາມທີ່ທ່ານສາມາດຕອບໄດ້.

ອ່າ ຄຳຖາມ ຫຼືເອົາໃຫ້ເບິ່ງ . ຫ້າມອ່າ ຄຳຕອບ ໃຫ້ໝາຍວົງມີ ເອົາ

4.1 ດິ ຂອງທ່າ ໄດ້ເກັບກູ້ມິ /ລະເບີດທີ່ຍັງບໍ່ທັ ແຕກແລ້ວບໍ່?	1	ໄດ້ເກັບກູ້ແລ້ວ
ໃຫ້ໝາຍເອົາຄາຕອບດຸງວ	2 999	ບໍ່ໄດ້ເກັບກູ້ ບໍ່ແ ່ໃຈ } — ໃຫ້ໄປພາກ 4B
4.2 ກ່ອ ກາ ເກັບກູ້ ດີ ໄດ້ ຳໃຊ້ເປີ ດີ ປູກຝັງ? ( ຳໃຊ້ບໍລິໄພກເປີ ຂອງຕີ ເອງ, ຂາຍ, ເງີ ສິດຈາກກາ ຂາຍຕີ ລະປູກ, ສັດລັງງ) ໃຫ້ໝາຍເອົາຄຳຕອບດງວ	1 2 999	ແມ່ ບໍ່ຮຸ <sub>້</sub> /ບໍ່ແ ີ ໃຈ
4.3 ກ່ອ ກາ ເກັບກູ້ລະເບີດດີ ໄດ້ ຳໃຊ້ເພື່ອເປັ້ ສວ ໝາກໄມ້ ຫລື ສວ ອັກ ຫຼື ໄຮ່? <i>ໃຫ້ໝາຍເອົາຄຳຕອບດຸງວ</i>	1 2 999	ແມ່ ບໍ່ແມ່ ບໍ່ຮູ້/ບໍ່ແ 'ໃຈ

4.4 ແມ່ ໃຜສະເໜີກາ ເກັບກູ້?	1	ຕີ ເອງ/ເຈົ້າຂອງດິ
ໝາຍວົງມີ ໃສ່ຄາຕອບຫຼາຍກ່ວາໜື່ງຄາຕອບ	2	ອາ າດກາ ປົກຄອງບ້າ
	3	ອາ າດກາ ປົກຄອງເມືອງ
	4	ອີງກາ ທີ່ບໍ່ຂື້ນກັບລັດທະບາ /ອີງກາ ຊ່ວຍເຫຼືອ
		พัดพะ ารุมธิ
		ອື່ນໆ, ໃຫ້ບອກແຈ້ງ
	999	บ้รู้
	6	
4.5 ໃ ເວລາເກັບກູ້ໄດ້ພົບເຫັ ລະເບີດບໍ່?	1	য়েঁ
ໃຫ້ໝາຍເອົາຄາຕອບດຸງວ	2	ຍໍ່ເຫັ
· ·	999	ข้ฐ/ข้จิ
4.6 ໄດ້ນຳໃຊ້ຫລາຍປານໃດດິນທີ່ເກັບກູ້ແລ້ວ?	1	ย์เด้ าใช้ → โปลาทาม 4.9
ໃຫ້ໝາຍເອົາຄາຕອບດຽວ	2	ນາໃຊ້ໜ້ອຍກວ່າເຄິ່ງໜຶ່ງ]
<b>U</b>	3	ນາໃຊ້ຫລາຍກວ່າເຄິ່ງໜຶ່ງ > 💛 ໄປຄຳຖາມ 4.7
	4	າໃຊ້ທັງໝົດ
4.7 ຫລັງຈາກກາ ເກັບກູ້ລະເບີດ ດີ ໃຊ້ເປີ ດີ ປູກຝັງບໍ່?	1	ແມ່
( ຳໃຊ້ບໍລິໂພກເປັ ຂອງຕີ ເອງ, ຂາຍ, ເງິ ສິດຈາກກາ ຂາຍຜີ ລະປູກ,	2	ບໍ່ແມ່
ສັດລັງງ)	999	ข้ฐ/ข้น 'ใจ
ໃຫ້ໝາຍເອົາຄາຕອບດຽວ		part of the second
4.8 ຫລັງຈາກກາ ເກັບກູ້ລະເບີດ ດິ ໃຊເພື່ອເປັ້ ສວ ໝາກໄມ້ ຫລື ສວ	1	ແມ່
ຕັກ ຫຼື ໄຮ່ບໍ່?	2	ູ້ ແມ່
ໃຫ້ໝາຍເອົາຄາຕອບດຽວ	999	ບໍ່ຮູ້/ບໍ່ແ ່ໃຈ
4.9 ຖ້າບໍ່ໄດ້ ຳໃຊ້ແມ່ ຍ້ອ ຫຍັງ?	1	ຂາດແຮງງາ / ເຈັບປ່ວຍ, ຖືພາ
ອາດຈະໝາຍວົງມີ ຫຼາຍກ່ວາໜື່ງຄຳຕອບ	2	ຂາດອຸປະກອ ອອກແຮງງາ /ບໍ່ມີເງີ
	3	ຍ້ອ ດິ ຟ້າອາກາດ( ຳ້ຖ້ວມ,ແຫ້ງແລ້ງ,ຝີ ຕີກບໍ່ຖືກກັບ
		ລະດູກາ )
	4	ເກັບກູ້ບໍ່ທັ ລະດູກາ /ເກັບກູ້ໃ ລະດູກາ ປູກຝັງ
	999	ນໍ່ຮູ້
4.10 ທ່າ ມີຄວາມພໍໃຈຫຼາຍບໍ່ ຕໍ່ກາ ເກັບກູ້ລະເບີດ?	1	พ์ใจ
ໃຫ້ໝາຍເອົາຄາຕອບດຽວ	2	ບໍ່ພໍໃຈ
ū	999	ย่น 'ใจ/ข่มิลาเซ
4.11 ຫຼັງເກັບກູ້ລະເບີດແລ້ວ ໄດ້ມີພາກສ່ວນໃດແດ່ ທີ່ຊ່ວຍ	1	ສະໜັບສະໜູ ຈາກລັດຖະບາ
ຕໍ່ການຮັບຊ່າວທີ່ດິນຂອງທ່ານ?	2	ສະໜັບສະໜູ ຈາກອົງກາ ທີ່ບໍ່ຂື້ນກັບລັດຖະບາ
ໃຫ້ອ່າ ຄຳຕອບ ແລະ ອາດຈະໝາຍວົງນີ ຫຼາຍກ່ວາໜຶ່ງຄຳຕອບ	3	ละพับละพู จากบ้า
	4	ละพับละพู จากลอบถิ่ว/บํ่มีภา รุ่วยเทือจาก
		ທາງອື່ນ
	5	ອື່ນໆ, ໃຫ້ບອກແຈ້ງ_
	999	ข้รู้, ข้น 'ใจ
4.12 ທ່າ ໄດ້ພິບເຫັ ລະເບີດຢູ່ດີ ຂອງທ່າ ຫຼັງກາ ເກັບກູ້ບໍ່?	1	ກີບເກັ

ໃຫ້ໝາຍເອົາຄາຕອບດງວ	2	ບໍ່ພິບເຫັ
•	999	ບໍ່ຮູ້, ບໍ່ແ ່ໃຈ
4.13 ໃນຄອບຄົວຂອງຫ່ານມີສິ່ງປຸ່ງນແປງທີ່ສຳຄັນຫັຍງແດ່ ຫຼັງຈາກທີ່ດິນຂອງເ <i>ສຸງ ຄຳຕຣ</i>		້ການກວດກູ້ລະເບີດແລ້ວ?
<i>ພາກທີ່ 4 B :</i> ດິ ລວມບ້າ		
ອ່າ ແຕ່ລະຖາມ. <b>ບໍ່ຕ້ອງອ່າ ຄຳຕອບ, ໝາຍເອົາຄຳຕອບ</b> .		
<u>ຄຳແນະນຳສຳລັບຕູ້ທີ່ລົງສຳພາດ</u>		
ອ່ານໃຫ້ຜູ້ເຂົ້າຮ່ວມຟັງ, ຂ້າພະເຈົ້າຂໍຖາມເຖິງດິນລວມບ້ານທີ່ໄດ້ກວດລະເບີດໃ	ໃຫ້ບ້ານຂ	ອງທ່ານ ສຳລັບກິດຈະກຳໃນບ້ານເຊັ່ນ:
ໂຮງຮຽນ,ດິນວັດ,ນຳ້ສ້າງ,ຝາຍ,ເສັ້ນທາງ,ສວ ລວມບ້າ ,ຕະຫລາດ ແລະ ເຮືອ		
ກະລຸນາຕອບຕາມຄວາມເປັນຈິງ ຕາມທີ່ທ່ານ ສາມາດຕອບໄດ້.		
ອ່ານຄາຖາມ ຫຼື ເອົາໃຫ້ເບິ່ງ .ຫ້າມອ່ານຄາຕອບ ໃຫ້ໝາຍວົງມິນເອົາ		
4b.1 ດີ ລວມໃ ບ້າ ຂອງທ່າ ໄດ້ຮັບກາ ເກັບກູ້ລະເບີດ	1	ເກັບກູ້ແລ້ວ ໄປຄຳຖາມ 4.2
ໜື່ອກິດຈະກຳຂອງບ້ານແລ້ວບໍ່?		ຳ. ຖ້າເຮັດພາກທີ4ແລ້ວ (AG LAND)
(ໂຮງຮຽ ,ດິນວັດ,ນ້ຳ,ຝ່າຍ,ເສັ້ນທາງ,ສວນລວມບ້ານ,ຕະຫລາດ ແລະ	2	ບໍ່ໄດ້ເກັບກູ້ ໄປຄຳຖາມທີ5.
ເຮືອ ) <i>ໃຫ້ໝາຍເອົາຄ</i> າຕອບດງວ	999	ບໍ່ແ ໃຈ ຖ້າບໍ່ມີ AG LAND ຢຸດກາ ສຳພາດ
4b.2 ກ່ອ ກາ ເກັບກູ້ດີ ໄດ້ ຳໃຊ້ເປັ ດິ ປູກຝັງ?	1	αú
( ຳໃຊ້ບໍລິໂພກເປັ ຂອງຕີ ເອງ, ຂາຍ, ເງິ ສິດຈາກກາ ຂາຍຜີ ລະປູກ,	2	ບໍ່ແມ່
ສັດລັງງ) <i>ໃຫ້ໝາຍເອົາຄຳຕອບດຽວ</i>	999	ข้รู้/ข้น 'ใจ
4b.3 ກ່ອ ກາ ເກັບກູ້ລະເບີດດີ້ ໄດ້ ຳໃຊ້ເພື່ອສ້າງຫົ ທາງບໍ່?	1	«n
	2	ข้นม <u>่</u>
ໃຫ້ໝາຍເອົາຄາຕອບດຽວ	999	ข้รู้/ข้น 'ใจ
4b.4 ກ່ອ ກາ ເກັບກູ້ລະເບີດດີ ໄດ້ ຳໃຊ້ເພື່ອ	1	άņ
ສິ່ງອຳນວຍຄວາມສະດວກໃຫ້ແກ່ຊຸມຊີນ?(ໂຮງຮູງ , ດິ ສາສະໜາ/ດິ ປຸກ	2	ບໍ່ແມ່
ສ້າງ,ວິດຖ່າຍ,ເຮືອ ,ຊີ ລະປະທາ , ຳ້ສ້າງ)	999	ข้รู้/ข้น 'ใจ
ใต้หมายเอ๊าลาตอบดูร		
4b.5 ກ່ອ ກາ ເກັບກູ້ລະເບີດດິ ໄດ້ ຳໃຊ້ເພື່ອເປັ ສວ ໝາກໄມ້ຫລືສວ	1	ά.
ຕັກ ຫຼື ໄຮ່?	2	ບໍ່ແມ່
ໃຫ້ໝາຍເອົາຄາຕອບດຸງວ	999	ບໍ່ຮູ້ເບໍ່ແ 'ໃຈ
4b.6 ແມ່ ໃຜສະເໜີກາ ເກັບກູ້ລະເບີດໃ ບ້າ ຂອງທ່າ ?	1	ອາ າດກາ ປົກຄອງບ້າ
ອາດໝາຍວົງມີ ໃສ່ຫຼາຍກ່ວາຄາຕອບດຸເວ	2	ອາ າດກາ ປົກຄອງເມືອງ
	3	ອົງກາ ຊ່ວຍເຫຼືອທີ່ບໍ່ຂື້ນກັບລັດຖະບາ
	4	ບໍ່ຮູ້/ບໍ່ແ ່ໃຈ
	999	ອື່ນໆ,ໃຫ້ບອກແຈ້ງ
H 79 X 20 A A	1	cři
4b.7 ໃ ເວລາເກັບກູ້ໄດ້ພົບເຫັ ລະເບີດບໍ່?	1	LOI

ໃຫ້ໝາຍ ໃສ່ຄາຕອບດຸງວ	2	ບໍ່ເຫັ
·	999	ข้รู้/ข้จ๊
4b.8 ດິນທີ່ໄດ້ກວດກູ້ໄດ້ນຳໃຊ້ຫຼາຍປານໃດ?	1	ບໍ່ເດັ່າໃຊ້ → ໄປຄຳຖາມ 4.13
ໃຫ້ໝາຍໃສ່ຄຳຕອບດຽວ	2	ນາໃຊ້ໜ້ອຍກວ່າເຄິ່ງໜຶ່ງ
	3	ນາໃຊ້ຫລາຍກວ່າເຄິ່ງໜຶ່ງ
	4	ຳໃຊ້ທັງໝົດ
	999	ບໍ່ຮູ້/ບໍ່ແ ່ ໃຈ
4b.9 ຫລັງຈາກກາ ເກັບກູ້ລະເບີດ ດິ ໃຊ້ເປັ ດິ ປູກຝັງບໍ່?	1	αú
( ຳໃຊ້ບໍລິໂພກເປັ ຂອງຕີ ເອງ, ຂາຍ, ເງິ ສິດຈາກກາ ຂາຍຜີ ລະປູກ,	2	ບໍ່ແມ່
ສັດລັງງ)	999	ບໍ່ຮູ້/ບໍ່ແ 'ໃຈ
ໃຫ້ໝາຍເອົາຄາຕອບດຸງວ		
4b.10 ຫລັງຈາກກາ ເກັບກູ້ລະເບີດ ດີ ໃຊກໍ່ສ້າງທາງບໍ່?	1	αú
- III	2	ວໍ່ແມ່
ໃຫ້ໝາຍເອົາຄຳຕອບດຸງວ	999	บู้รู้/บู๋น ใจ
4b.11 ຫລັງຈາກກາ ເກັບກູ້ລະເບີດ ດິ ໃຊ້ເພື່ອສ້າງສິ່ງອຳນວຍ	1	αú
ຄວາມສະດວກໃຫ້ແກ່ຂຸມຊີ ບໍ່?(ໂຮງຮູງ ,ດິ ສາສະໜາ/ດິ ປຸກສ້າງ,	2	ບໍ່ແມ່
ວິດຖ່າຍ, ເຮືອ , ຊີ ລະປະທາ , ຳ້ສ້າງ) <i>ໃຫ້ໝາຍເອົາຄຳຕອບດຽວ</i>	999	ข้รู้/ข้น ใจ
4b.12 ຫລັງຈາກກາ ເກັບກູ້ລະເບີດ ດິ ໃຊ້ເພື່ອເປັ ສວ ໝາກໄມ້ ຫລືສວ	1	ແມ່
ຕັກບໍ່?	2	ບໍ່ແມ່
ໃຫ້ໝາຍເອົາຄຳຕອບດງວ	999	ี ข้รู้/ข้น ใจ
4b.13 ທ່າ ມີຄວາມໜໍໃຈແ ວໃດຕໍ່ກາ ເກັບກູ້ລະເບີດໃຫ້ບຳ ?	1	พ้ใจ
ໃຫ້ໝາຍເອົາຄາຕອບດຸງວ	2	ບໍ່ພໍໃຈ
140 Held (140 to 2.00 to 1.00	999	ข้มิถาเทั /ข้แ ่ใจ
4b.14 ຫຼັງກາ ເກັບກູ້ລະເບີດແລ້ວ, ພວກຫ່າ ໄດ້ຮັບຊ່ວຍເຫຼືອ ແລະ	1	ละพับละพู จากลักฤะบา
ສະໜັບສະໜູ ຕໍ່ກາ ຳໃຊ້ດິ ບໍ່?	2	ສະໜັບສະໜູ ຈາກອົງກາ ຊ່ວຍເຫຼືອທີ່ບໍ່ຂື້ນກັບ
ອາດຈະໝາຍວົງມີ ຫຼາຍກວ່າໜຶ່ງຄາຕອບ		ລັດຖະບາ
	3	ສະໜັບສະໜູ ຈາກບ້າ
	4	ບໍ່ມີກາ ຊ່ວຍເຫຼືອຈາກພາຍ ອກ
	5	ອື່ນໆ ໃຫ້ບອກແຈ້ງ
	999	ข้รู้/ข้น 'ใจ

ມີກິດຈະກຳຕ່າງໆເກີດຂື້ນ ເຊັ່ນ:	- Control - Cont	
ມີໂຮງຮູງ)		
	9.50 stand	
พาภทิ์ 5	ใช้เรา กำตอบ	

## ຄຳແ ະ ຳສຳລັບພະ ັກງາ ທີ່ລົງສຳພາດ

ໃຫ້ອ່າ ໃຫ້ຜູ້ເຂົ້າຮ່ວມຟັງ, ບັດນີ້ຂ້າພະເຈົ້າຈະອ່ານໃຫ້ທ່ານຟັງເປັ ແຕ່ລະຄຳຖາມໄປ, ແລະຕອບຂ້າພະເຈົ້າ, ຖ້າທຳ ຄິດວ່າມັ ແມ່ ,ບໍ່ແ ່ໃຈ ບໍ່ມີຄຳຕອບ,ບໍ່ແມ່ ແລະ ຄຳຕອບຂອງທຳ ຈະບໍ່ຖືວ່າຜິດ ຫຼື ຖືກ. ກະລຸ າຕອບຕາມຄວາມເປັນຈິງຕາມທີ່ທ່ານສາມາດຕອບໄດ້.

#### ໃຫ້ວ່າ ແຕ່ລະປະໂຫຍກໄປ.

5.1 ທຳ ໄດ້ເຂົ້າຮ່ວມກອງປະຊຸມໃ	1	แม่ → โปลำทาบ 5.2
ການຂັດເລືອກດິນທີ່ຈະຖືກເກັບກູ້ລະເບີດ	2	ບໍ່ແມ່ ງ
ໃຫ້ໝາຍເອົາຄຳຕອບດຽວ	999	ບໍ່ແນ່ໃຈ/ບໍ່ຈື່ 😝 ໂປພາກທີ 6
5.2 ທ່າ ເຂົ້າໃຈວ່າ ເປັ ຫຍັງກິດຈະກຳ ແລະດີ ຈຶ່ງໄດ້ຖືກຂັດ	1	«n
ເລືອກເກັບກູ້ລະເບີດ	2	ບໍ່ແມ່
ໃຫ້ພາຍເອົາຄາຕອບດຸງວ	999	ບໍ່ແ 'ໃຈ/ບໍ່ຈື່
5.3 ທ່າ ໄດ້ໃຫ້ຄຳຄິດໜ້ ໃ ກອງປະຊຸມ	1	αή
ໃຫ້ໝາຍເອົາຄາຕອບດຸງວ	2	ບໍ່ແມ່
•	999	ບໍ່ແນ່ໃຈ/ບໍ່ຈື່
5.4 ທ່າ ດີໃຈກຸ່ງວກັບກອງປະຊຸມ	1	αή
ໃຫ້ໝາຍເອົາຄຳຕອບດງວ	2	ບໍ່ແມ່
	999	ບໍ່ແນ່ໃຈ/ບໍ່ຈື

## พาภทิ่ 6

#### ຄຳແ ຮ ຳກາ ສຳພາດສຳລັບຜູ້ລົງສຳພາດ

ອ່າ ໃຫ້ຜູ້ເຂົ້າຮ່ວມສາພາດຟັງ. ບັດນີ້ຂ້າພະເຈົ້າຈະຂໍຖາມວ່າຫຼັງຈາກເກັບກູລະເບີດແລ້ວ ມີກາ ບຸ່ງ ແປງແ ວໃດ ແລະແມ່ ໃຜໄດ້ຮັບປະໄຫຍດ. ຄຳຕອບຂອງທ່າ ຈະບໍ່ຖືວ່າ ຖືກ ຫຼື ຜິດ ,ຂໍໃຫ້ເວົ້າຄວາມຈິງ ຕາມທີ່ສາມາດເວົ້າໄດ້ ຫຼັງຈາກາ ເກັບກູ້ລະເບີດແລ້ວຄອບຄົວຂອງທ່າ ໄດ້ມີຄວາມແຕກຕ່າງແ ວໃດ?

## ໃຫ້ຕຶກເອົາຫ້ອງໃດໜຶ່ງໃ 5 ຄໍລຳ

ອ່າ ໃຫ້ຊາວບ້າ ຟັງ (ຂ້ອຍຂໍຖາມບາງສິ່ງ, ຫລັງຈາກເກັບກູ້ລະເບີດແລ້ວມີຫຍັງແຕກຕ່າງຈາກເມື່ອກ່ອ )

ໄດ້ມີກາ ປຸ່ງ ແປງ.	1	2	3
	+	0	-
รุ้บพะกอ ตลัງจากเทับกุ้ละเบิดแล้ว ถ่าๆจากเมื่อก่อ « จใด?			
6.1 ຈຳ ວ ເດັກ້ອຍ ຄອບຄີວຂອງ ທ່ານ ໄດ້ຈີດຊື້ເຂົ້າ ໂຮງຮຸນ	ຫຼາຍກວ່າ ແຕ່ກ່ອ	ຄືເກົ່າ	ໜ້ອຍກວ່າ ແຕ່ກ່ອ
6.2 ຈຳວ ເດັກ ້ອຍໂ ຄອບຄົວ	ຫຼາຍກວ່າ	ຄືເກົ່າ	ໜ້ອຍກວ່າ

ຂອງທຳ ໄປ ໂຮງຮຸ ກຸກໆມື້	ແຕ່ກ່ອ		ແຕ່ກ່ອ
6.3 ຈຳ ວ ຂອງອາຫາ ກາ ກິ ໃ ຄອບ ຄິວທີ່ຈະກິນ (ເຊັ່ນ: ຜັກເຊັ້ນ ແລະໝາກໄມ້)	ຫຼາຍກວ່າ ແຕ່ກ່ອ	ຄີເກົ່າ	ໜ້ອບກວ່າ ແຕ່ກ່ອ
6.4 ທ່ານມີເວລາເຮັດວູເກອື່ນໆ	ຫຼາຍກວ່າ ແຕ່ກ່ອ	ຄືເກົ່າ	ໜ້ອຍກວ່າ ແຕ່ກ່ອ
6.5 ທ່າ ຮູ້ສຶກພູມໃຈຕໍ່ຄອບຄົວຂອງທ່າ	ຫຼາຍກວ່າ ແຕ່ກ່ອ	ຄືເກົ່າ	ໜ້ອຍກວ່າ ແຕ່ກ່ອ
6.6 ຢ້າ ເດັກ ້ອຍ ໃ ຄອບຄົວເກີດອຸປະຕິ ເຫດຈາກລະເບີດ	ໜັອຍກວ່າ ແຕ່ກ່ອ	ຄິເກົ່າ	ຫຼາຍກວ່າ ແຕ່ກ່ອ
ດ້າ ສັງຄົມ ຫລັງຈາກເກັບກຸ້ລະເບີດແລ້ວຕ່າງ ຈາກເມື່ອກ່ອ ແ ວໃດ?			
6.7 ເຂົ້າຮ່ວມໃ ງາ ດອງ, ບຸ ປະເພີ ອື່ນໆ	ຫຼາຍກວ່າ ແຕ່ກ່ອ	ຄືເກົ່າ	ໜ້ອຍກວ່າ ແຕ່ກ່ອ
6.8 ໄປຢັ່ງມຢາມໝູ່ຄູ່ ແລະ ຍາດຕິໝີ້ ອງຢູ່ ນຳ ອື່ນ	ຫຼາຍກວ່າ ແຕ່ກ່ອ	ຄືເກົ່າ	ໜ້ອບກວ່າ ແຕ່ກ່ອ
ດຳ ພາຍ ອກ ຫລັງຈາກເກັບກຸ້ລະເບີດແລ້ວ .ຕ່າງຈາກເນື້ອກ່ອ ແ ວໃດ?			
<ol> <li>6.9 ສາມາດໄປໂຮງໝໍເມືອງແລະໄປຮັບ ການປິ່ນປົວສຸຂະພາບ ອື່ນໆ</li> </ol>	ດີກວ່າ ແຕ່ກ່ອ	ຄຶເກົ່າ	ໜັອຍກວ່າ ແຕ່ກ່ອ
6.10 ກາ ໄປຕະຫຼາດ	ດີກວ່າ ແຕ່ກ່ອ	ຄຶເກົ່າ	ໜ້ອຍກວ່າ ແຕ່ກ່ອ
6.11 ມີໂທລະສັບ, ໄຟຟ້າ	ດີກວ່າ ແຕ່ກ່ອ	ຄຶເກົ່າ	ໜັອບກວ່າ ແຕ່ກ່ອ
ດ້າ ກາ ເງິ ຫລັງຈາກເກັບກຸ້ລະເບີດແລ້ວ ຕ່າງຈາກເນື້ອກ່ອ ແ ວໃດ?			
6.12 ສາມາດສະສົມເງີ ມີເງີ ແຮ	ຫຼາຍກວ່າ ແຕ່ກ່ອ	ຄືເກົ່າ	ໜ້ອຍກວ່າ ແຕ່ກ່ອ
<ol> <li>6.13 ສາມາດຮັກສາສັບສິ ມີຄ່າຂອງ</li> <li>ຄອບຄົວໄວ້ ບໍ່ຂາຍຢາມຈຳເປັ</li> </ol>	ຫຼາຍກວ່າ ແຕ່ກ່ອ	ຄືເກົ່າ	ໜ້ອຍກວ່າ ແຕ່ກ່ອ
ສະພາບແວດລ້ອມອື່ນໆ ຫລັງຈາກເກັບກຸ້ລະເບີດແລ້ວຕ່າງ ຈາກເມື່ອກ່ອ ແ ວໃດ?			
6.14 ມີ ໂສະດວກໃກາ ເຮັດ າ/ເຮັດ ສວ ຜັກ/ສວ ໝາກໄມ້	ດີກວ່າ ແຕ່ກ່ອ	ຄຶເກົ່າ	ໜັອຍກວ່າ ແຕ່ກ່ອ
6.15 ມີບ່ອ ທີ່ປອດໄພໃຫ້ແກ່ສັດລັງງ	ດີກວ່າ	ຄຶເກົ່າ	ໜ້ອຍກວ່າ

ແຕ່ກ່ອ	ແຕ່ກ່ອ

6.16 เมลอบลอຂອງทามมพยๆทลาลมแตกตาฐจากเมอกอม?	

6.17 ມີປັດໃຈຫຍັງແດ່ທີ່ເຮັດໃຫ້ຄອບຄົວຂອງທ່າ ປຸ່ງ ແປງຖ້າປຸງບທງບກັບ ເມື່ອກ່ອນ? (ຕົວຢ່າງ:ຫີນທາງ, ກິດຈະກາການພັດທະນາ, ມີວຽກ:ຮັດຫຼາຍຂຶ້ນ ເຊັ່ນນາ໌ເທີ 2)

6.18 ມີປັດໃຈຫຍັງແດ່ທີ່ເຮັດໃຫ້ຄອບຄົວຂອງທ່າ ປຸ່ງ ແປງໄປໃນທາງທີ່ບໍ່ດີຍ້ອນການເກັບກູ້ລະເບີດ?

#### พาภทิ์ 7

ຄຳແ ະ ຳກາ ສຳພາດສຳລັບຜູ້ລົງສຳພາດ

ອ່າ ໃຫ້ຜູ້ເຂົ້າຮ່ວມສາພາດຟັງ. ບັດນີ້ຂ້າພະເຈົ້າຈະຂໍຖາມວ່າຫຼັງຈາກເກັບກູລະເບີດແລ້ວ ມີການປຸ່ງ ແປງແ ວໃດ ແລະ ຄຳຕອບຂອງທຳ ຈະບໍ່ຖືວ່າ ຖືກ ຫຼື ຜິດ ຂໍໃຫ້ເວົ້າຄວາມຈິງ ຕາມທີ່ສາມາດເວົ້າໄດ້

ອ່າ ທຸກໆຄຳຖາມ ຫຼື ເອົາໃຫ້ເບິ່ງ, ຫ້າມອ່ານຄຳຕອບ ໃຫ້ໝາຍເອົາ

<ol> <li>7.1 ທ່ານມີລາຍໄດ້ເພີ່ມຂື້ນຫຼັງຈາກ ຳໃຊ້ດີ ທີ່ເກັບກູ້ລະເບີດແລ້ວ?</li> <li>(ລວມທັງດີ ຕີ ເອງ ແລະ ດີ ລວມບ້າ )</li> <li>ໃຫ້ໝາຍເອົາຄຳຄອບດຸງວ</li> </ol>	1 2 999	ໝໍມ ໄປຄຳຖາມ 7.2 ບໍ່ແມ່ ບໍ່ແ ໃຈ ໄປຄຳຖາມ 8.1
7.2 ລາຍໄດ້ຂອງທ່ານເພີ່ມຂື້ນຫຼາຍປານໃດ? <i>ໃຫ້ໝາຍເອົາຄາດອບດຽວ</i>	1 2 3 4 999	ໜ້ອຍໜຶ່ງ ຄືເກົ່າ ໜຶ່ງຫີບ ຫຼາຍ ບໍ່ແໍ່ໃຈ
7.3 ທ່າ ຳໃຊ້ເງິ ນີ້ໄປຊື້ຫັຍງເປັ ສ່ວ ໃຫ່ຍ? <i>ໃຫ້ໝາຍເອົາຄາດອບດຽວ</i>	1 2	ເຂົ້າ ແບ້ງົວ,ເກືອ,ໝາກເພັດ, ຈົຕາ

	3 ເຄື່ອງເຮືອນ	
	4 ເຄື່ອງໃຫ້ລູກໄປໂຮງຮຸ	
	5 ສັດລັງງ(ງິວ, ຄວາຍ, ແບ້, ເປັດ, ໄກ່)	
	6 ອຸປະກອ ເຮັດ າ	
	7 ພາຫະ ະ(ລິດຖີບ, ລິດຈັກ, ລິດໃຫຍ່	١.
		,
	8 ອື່ນໆໃຫ້ບອກແຈ້ງ	_
		_
ພາກທີ່ 8		
8.1 ດິນທີ່ເຈົ້ານຳໃຊ້ຢູ່ມີລະເບີດບໍ່?	1 ມີ 🔭 ໄປຄຳຖາມ 8.2	
	2 ບໍ່ມີ ງ	┪
	999 เมื่อ 👉 👉 ไปกำกาม 8.3	3
8.2 ຖ້າມີ ແມ່ນເຈົ້ານາໃຊ້ດິນນັ້ນເຮັດຫັຍງເປັ ຫຼັກ?	1 ເຮັດໂຮ່	_
ໃຫ້ໝາຍເອົາຄຳຕອບດຽວ	2 ເຮັດສວ	
3	3 ເຮັດ າ	
	4 ອື່ນ	
8.3 ທ່າ ຍັງມີດີ ອື່ນໆອີກບໍ່ທີ່ບໍ່ໄດ້ ຳໃຊ້ຍ້ອ ມີລະເບີດ?	1 ມີ 💮 ໄປຄຳຖາມ 8.4	
ໃຫ້ໝາຍເອົາຄຳຕອບດຽວ	2 ບໍ່ມີ ]	_
icide icide iai nicosofe	999 ขึ้น ใจ	8.5
8.4 ຜິນກະທິບຈາກດິນທີ່ມີລະເບີດເຮັດໃຫ້ທ່ານບໍ່ສາມາດ ຳ	1 ບໍ່ສາມາດຫຳກາ ພະຫຼິດ/ຂາດເຂົ້າກິ	
ໃຊ້ດີ ເຮັດຫັຍງ?	2 ບໍ່ສາມາດສ້າງສິ່ງອຳນວຍຄວາມສະ	
ໃຫ້ໝາຍເອົາຄຳຕອບດງວ	ດວກໃຫ້ແກ່ຊຸມຊີ (ໂຮງຮຸ , ຫີ ທ	อา
iona poro la laborije	ຊີ ລະປະທາ)	٠,,
	1 12 12 13	
	3 ຮູ້ສຶກບໍ່ປອດໄໝ/ອຸກໃຈ	
	999 ບໍ່ມີຜີ ກະທິບທັຍງ	

3.5 เจ๊ามิถาแมะมาตัยๆ	ງຕື່ມບໍ່?		

ຂອບໃຈ ຳຜູ້ຕອບ ແລະ ປິດກາ ສຳພາ

# Questionnaire and Scale, Research Sites 1 and 2 (MAG Lao and MAG Iraq) **Kurdish Version**

رِاثرسی خیزان ( زقوی کشتوکائی) رِاثرسی خیزان ( زقوی کشتوکائی)

رِينماي بؤ ضاو تْيَكةوتن كةر ( ئةو كةسةي كة ضاو ثي كةوتنة كة ئةنجام دةدات) تَاكايةبةشي يةك تا ثرسياري 1,7 تقواو بكة ثيَش شَّاو ثيَكةوتن هِلمُّموو ثرْسيارةكان دةثرسيَت تا وةلأم دةدريَتْهُوة قِقَلَةُم جافي رِقْش بَهَكَارُبهيَنَةً لَة شُويَني دةست تْيَكردَنت بة ضاو تْيَكةُوتن فِؤرمي رِازي بوون بخؤيَنةُوة وة رِقزامةندي وةلأمدةر

(طوندنشین ) و قربطرة ثیش ئقوةی بضیت بؤ بةشی 2 لة ثرسیارة کان .

		بتشي : يةكةم
، ثبَكةو تنةكة تقواو بكة .	تكاية ئةمةي خوارةوة لةثيش ضاو	رینمای بؤ ضاو ٹیکفتن کفر هکة
	1.1 كؤدى ضاو ثيَكةتن كةر.	تكاية فؤرمي رازيبوني خوارةوة بخوينةرةوة ثيش دةست
	1.2 كؤدى ضاو ثيكة تن .	ثيكردن بقضاويكةوتنةكة" من كقناوم
	1.3 كؤدى ثاريزطا .	زانیاری کؤدةکةمةوة لةطوندی (ناوی طوندةکة) بوئةوةی
	1.5 كودى قةزا.	يارمةتيمان بدات بؤ تيطةيشتن لة كاريطةرى ثاككردنةوةى
	1.4 كودى طوند.	ناوضه که له تققه متنی من داوات لی ده کهم بؤ به شداری
	1.5 كودى كوت. <u>     </u> 1.6 كؤدى خيزان .	كردنت لة يقك بة يقكي ثرسيارةكاندا.
طوند	·-·-·	مردیت دیات به پهتی ترسیر مصدر ا
طوند كؤمةلئطا	1,7 جۇرى نىشتة جىيبون 2	معنوسيت ولل و تربيع على جولت بو يت كات تمير المنافكان ال
ناحية		
فقزا		بقراستی و وقك خؤی بدقرقوة و هیض وةلأمیك بةهقلّة
شار بقلی	8 ائایا زقوی ثاکراوة بؤ مقبةستی 1	دانانریَت ( مَقْبَقُست وةَلاَمِي طُوند نَشْینةَکَقَیة)
نةخير	كشت و كان بة كارديت 2	وة لأمة كانت ثاريز راو دةبن و ناوت تؤمار ناكريَت وة ئةطةرى
نازانیَت / دَلَنیا نیهٔ	(به کار هینانی خوی فرؤشتنی , 3	ئەرەتشى نىية كەتئۇ بناسىنرىت (لەتبەر بوارى ئەمنى) تۇ
	عقلقف ,	راستة وخو سودمةند نابيت لقم ليكؤلينة وةية (زايارى ثيدانة دا
		كة كةسى طوند نشين يان هند. دةيدات)ئيمة هيوادارين ئةم
بةلَيَ	1,9 ئايا زةوى ثاكراوة بؤ رِيَطاية	ليكؤلينة وةية سود بقو خالكة بطاقيةنيت كة لاناوضة بة
نهّخيَر ناز انيَت / دلّنيا نية	2 3	تةقةمةنى(Mine& UXO) ثيس بوة كاندا دةذين, بةشدار
در البيت الدنيا ليا-		بونى تۇ خۇبةخشانةية و دەتوانىت وەلامى ھەرئرسيارىك
بةلَىَ	1.8 ئايا زةوى ثاكراوة بؤ ذيرخاني 1	نة ديتة وة كاناتة ويَت و دانتوانيت ضاو ثيكوتنة كة رابطريت لة
نةخير	ئابُورى بۇ نمونة (قوتابخانة , 2	هقر كاتيكدا, رِقت كردنةوةى ئةم ضاوتَيكةوتنة كاريطقرى
نازانیَت / دَلَنیا نیهٔ	شویّنی ئاینی بِئاودةست بِ خانوو بِ	لقسةر خؤت و خيزانةكةت نابيَت ( واتا لقروى خزمةت
	ئاوديرى, ئاو)	طوزاری که بدریت به خهلکانی تری طوندهکه و نهدریت به
		لَيُوة) هقروةها كارناكاتة سقر ئقو خزمةت طوزاريانةي
F		لةبوارى مين و تةقةمةنى تُش كةش دةكريت
بةلئ نةخير	1,11 ئايا زةوى ثاكراوة بؤ سةوزة 1 و ميوةهات بةكارديّت	لةناوضةكةدا بنقطةر هقر رةخنةو سقرنجيكت هقية دةربارةي
ت میر ناز انیَت / دلَنیا نیهٔ	3	ئةم ليكؤلَينةوةية دةتوانيت تتيوةندي بقفةرمانطةي حكومي
		ناوضةكةتقوة بكةيت يان سقرداني نوسنطةيةكي MAG
		بكُّتيت 0(ئةُطُّةر رَمْخَنْقَيْقُكُ هَتَّيَّة لَقَكَارُمْقَنْدَى رَيْكُ خَرَاوَمْكَةً)
		نُاية هيضُ ثرسياريكت هنية ؟ دةتوانيت ثرسيار دةربارةي ئةم
	l	ليكو لينة و هنه بكتيت له هتر كاتيكدا كتبتة ويت بستا دهست
		بةُرُوسْيارُ ةَكَانَ بِكَتَّم ؟ "
		. ر در از
		الميمزا ـ يان ثةنجةمؤر (ئةوكةسة ي كة
		صاويكة وتنةكةت لقطقل ئةنجامداوة ئيمزا دةكات بة بقلي يان
		ب عي يا الله الله الله الله الله الله الله
		ب تحیر) نةخیر
		ك مير ئيمزا - يان ثةنجةمؤر
		میمرا - یان د مب مور ئیمزای ضاو تیکهوتن کهر (کارمهندی ریکخراوهکه)
		ليمر، في محدوليك ولن كار (كاركاكاني ريستر، ولك ) له لايةن سفر ثقر شتيار ةوة تقواو بكريك
		ته دیال معارف رهمیورده و و بعریت اینما ای سهر ثهر شتیار

كؤدى سةر ثقر شتيار .  _  ذمارةى راثرسى  _ _			
I_ L			

بةرز	1	ئاستى (ليظل) ئيس بوون بة UXO ضؤنة	1,12
مام ناوةند	2		
نزم	3		

بةشى :دووةم رِينماى بو طرووثى ثقيوةندى كردن بةكؤمةلةوة(CL):

بخُويَنةوة بُو ئُةُوةى وةلاُّم دةداتةُوة (طوندنشين ) :" دةمةويَت ضةند ثرسياريَكت لي بكةم دةربارةي خيزانةكةت)" وةلاَمي رِاستُ يانَ هلَمَاةُ نية ٰ بنزةحمَاتُ بهُ ثَيَى تُواناْ وةلاَمي رِاستةقينة بدةرُةوة ۗ . خيزان بريتي ية له كؤمةليك كةس كةبةيةكةوة دةنين و نان دةخؤن" لةناو هةمان مالدا" وقك

هةموو ثرسيارةكان بخوينةوة, وةلأمةكان مةخوينةوة هاتناوةكو ثرسيارةكان وةلأم دةدرينةوة دواتر وةلأم بكةرة ناو بازنةيةكةوة.

نیَر	1	2,1 رِةَطَةَرْى وَةَلاَم دَةَرَةُوةَ
می	2	ا ثرسیار مقکة
		يةكيك بكقرة بازنقوة
نیَر	1	2,2 ئايا رِةطةزى سةرؤك خيَزان ضية ؟
ميَ	2	يةكيّك بكةُرة بازنةوة
مةسيحي	1	2,3 ئاية سةر بة ض نةتةوةيةكي
توركمان	2	يةكيك بكةرة بازنةوة
عةرةب	3	
کورد	4	
وةلأم ناداتةوة	999	
ئاوارة IDP	1	2,4 ضؤن باسى خؤت دةكيت وةلأمةكان بخوينةرةوة
دووبارة نيشتة جيَ بونةتةوة (بةويستي	2	يةكيك بكةرة بازنةوة
وبریاری حکومةت)	3	
بةم دواية نيشتةجي بون (بةويستي	4	
خؤيان)	999	
ناوخؤيي (لقو شويَنة لقدايك بوون هقر		
لةويَش بؤمّاوةيةكي زؤر ذياون)		

	2,5 خيزانةكة لة ضةند كةس ثيك هاتووة
	وةللأمةكة بنوسة
1	2,6 ضنةند كةس لة خيَزانةكةت لة تةمةني 15-64 سالَ ناتوانيَت بة تقواوي
2	ئیش بکات (بؤ نمونة ناتوانیت رؤذیکی تقواو ئیش بکات یان 5 رؤذ لة
3	هةفقةيةكدا رِ نَهْخؤشي هةميشةي يانَ بيَ تواناي
4	يةكيَك بكقرة بازنقوة
999	
1	2,7 ضةند كةس لة خيزانةكةت لة تةمةني 15-64 سال دةتوانيت بة تةواوي
2	ئیش بکات (بؤ نمونة دةتوانیَت رؤذیکی تقواو ئیش بکات یان ماوةی ئاسای بؤ
3	کارکردن )؟
4	يةكيك بكفرة بازنقوة
999	
1	2,8 ئايا سةرؤك خيزان لة ض ثلةيةكي خويندةواربية
2	يةكيَك بكةرة بازنةوة
3	
4	
999	
	2 3 4 999 1 2 3 4 999 1 2 3 4

ضينكؤ <sub>و</sub> قاميش و حةسير	1	2,9 ثالية ئةو مادة سقركيةى لقدروست كردنى سقربانى خانوةكة بقكار هاتووة
تةختقو طلَ	2	ضى ية؟
خشت و ضيمةنتؤ	3	
شتى تر	4	
بلؤك	1	2,10 ئاية مادةى سةرةكى ديوارةكان ضى ية سةيرى بكةو بينوسة
بةرد	2	الرسيار مةكة يةكيك هةلبذيرة
خشت		
<b>ج</b> ؤرى تر		
طشتی / ئاودةستی شةعبی	1	2,11 ئاية زۇربةى كات خةلك روو لةكوى دةكةن كاتيك دةضن بؤ ئاودةست ـ
ئاودةستى بيرى (سث تانك )	2	
ئاودةست كة بةسترابيت بة سويضى	3	يةكيك هةلَبذيَرة
سةرةكى (بونى زيراب)	4	
هی تر <sub>ب</sub> دیا <i>ری</i> بکة		
دار , خةلوز	1	2,12 ئاية ئةو سوتةمةنية سةرةِكية ضى ية كة بؤنان و خواردن دروست
طازؤلین (نةوت) طاز (بتلی طاز)	2	كردن بةكارى دةهينن ـ يةكيك هةلبذيرة (دةتوانيت بطؤر نبؤ طقرمي)
کار ةبا	3	
دأنيانية	4	
جؤرى تر	999	
ضةورِيَذ نية	1	2,13 ض جؤريَّلة رِيَطا دةضيَّت بؤ طوندةكةت ؟
ضىةورِيَذ	2	يةكيَك بكة بازنةوة
جؤرى تر	3	
دو و جار	1	2,14 لة دوو هةفتةى ثيشودا ضةند جار لة رؤذيكدا تؤو خيزانةكةت بة
يةك جار	2	بةردةوامي برنجتان خواردوة ؟
هيض	3	ـ يةكيَك هقلَبدَيرة
دلَّنيا نيية	4	
1-15 خولةك	1	2,15 نزیکترین بازار ضةند دوورةبة سةیارة کة تؤ ثیّداویستی رؤذانةی
30-15 خولةك	2	ليَدةُكُريتَ ؟
30خُولُةكُ بُو 1 كاتذمير	3	ـ يةكيَّكُ هةلَبذيَرة

زیاتر لهٔ 1 کاتذمیر دلنیا نیهٔ	4 999	
1-15 خولةك	1	2,16 نزیکترین بازارِ ضةند دوورة بة سةیارة کة تؤ دةتوانیت زؤربةی
15-30 خولةك	2	بةروبوومةكةتى لندةفرؤشى ؟
30خولةك بؤ 1 كاتذمير	3	
زیاتر لهٔ 1 کاتذمیر	4	
دلَنيا نية	999	
روبار جؤطة يان بةنداو	1	2,17 له کوی به شیوه نیه کمی سهر هکساوی خوار دنهوهت دهست هکهویت
بیر ثاریزراو (ناعور )	2	
بير نةثاريزراو ( ناعور )	3	
سةر ضاوةي شاخي	4	
هی تر دیاری بکة	5	

بة شي : سي ةمم ريّنمای بو طرووڻي ثةيوةندی كردن بةكؤمة لَقوة (CL) : ترسيار بؤ كةسي وة لأم دةر ( سي كاری سترةكي سالًي رِابردووت ضي بووة كة داهاتي خيرَ انةكةي لة سقر بووة ),

(وة لَامة كان مةخوينة و كود بة كاربهينة)

	( <u> </u>
ایة ئةو سی کارة سقرةکییة ضین کة داهاتی خییزانی لةسةر بووة سالی	
_ هبر دو و	
	1
	کار <i>ی</i> سةر ةکی
	2
	کاری دووةم
	3
	کاری سنیةم

#### كوري ئةو كار انةي كة داهاتيان لةسةرة

		) کافی خار انگی خام دا هالیان کاسکاره.	بر-و
رِ اوكر دن (بةبالندةشةوة)	11	جوتيار	2 1
دووكاني بضووك.		بةخيوكردنى ئاذةل يان فروَشتنيان.	4 3
فروَشیاری کةلوثةلی بازرطانی.	12	در وستكردني مةشر وباتي كحولي.	6 5
ثارة بة قةرزدان.		رِاوة ماسى و كوَكردنـةوةى ئـاذةَلَى ئـاوى.	8 7
مووضة خور.	13	كؤكر دنةوةي طيانةو ةرًى سقر ضاوة ئاويةكان جطة لة ماسي	9
كوَكردنةوةى ئاسنى شكاو يان		کریکاری نا شارةزا _ بواری کشتوکالی 🔍	10
بارووتى تةقةمةني.	14	کریکاری نا شار ةزا _ بواری کشتوکالی نةبیضت.	
دةرمالةى حكومى (خانةنشيني,		 کریکاری شار قزا <sub>.</sub>	
كةُم ئةندامي).	15	دةست رةنكين يان وةستا	
بةر هةم هيَناني ميوةو سقوزة.	16	كوَكر دنةوة و/ يان فروَشتني بقر هقَمةكاني دارستان.	
جوتياري عقلقف			
کاری تر دیاری بکة	17		
	18		

	19	
2	20	

همموو ثرسيار ةكان بخوينة رةوة ، و و الأمةكان مةخوينة رةوة ، وة لأمةكان بكفرة بازنة وة

		3, 3 3 13 2 3, 3 3 13 12 3 1 3 3	
بتلَی ب	1	ئاية زةوية كشتوكليةكةت تاككراوةتقوة لة مين و	4,1
بؤثرسيارى 4,2	2	تةقةمةنى؟	
نةخير } برؤ بؤ ثرسيارى	3	يةكيك بكقرة بازنةوة	
دلنیا نییة / لة بیری نییة			
بقلی	1	ثَيَشِ ثَاكسازی بِئايا زةويَكة بةكار هاتووة بؤ كشت و	4,2
نةخير	2	كالَّى (بةكار هيّناني خؤي فرؤشتني عقلقف طاوطاتؤل)	
ناز انیَت /دَلنیا نبیة	3		
ناطونجيَت	999		
بةلَىَ	1	ثَيَش ثاكسازى ئايا زوةي يةكة بةكارهاتووة	4,3
نةخيَر	2	بؤسةزةو ميوةهات	
ناز انیَت /دلَنیا نبیة	3		
ناطونجيت	999		
خودي خوَي/ خاوةنةكةي.	1	كى داواي ثاككر دنةوةكةي كرد؟	4,4
بةر ثرساني طوندةكة.	2	لفوانةية زياتر لة وةالأميك بكةيتة بازنقوة	ŕ
بةرثرساني شاروضكةكة.	3		
ريكخراوة ناحكوميةكان.	4		
ناز انم	5		
کةسانی تر, دیاری بکة	6		
ناطونجيت	999		
بةلَىَ.	1	ئاية تةقةمةني و مين لةسةر رووى زةوييةكة	4,5
نةخيَر.	2	دوَزر انقوة كاتّيك كة ثاككر ايقوة؟	
نازانم يان بيرم نايات دلنيا نيية	3	يةكيك بكةرة بازنةوة	
ناطونجيت	999		
لة نيوة كةمتر م	1	ضةند لة زةوى ية ثاكر اوةكة ئيستا بة كاردة هينريت	4,6
بؤ ثرسیاری 4,7	2	يةكيك بكةرة بازنةوة	
لة نيوة زياتر ب	3		
ثرسيارى 4,7	4		
هةموو <i>ي</i> برِّؤ بؤ	5		
ثرسیاری 4,7	999		
هيض <u></u> هيض			
برِؤ بؤ ثرسیاری 4٫٩			
نازُ انیَت / دَلَنیا نییة برؤ			
بؤ ثرسياري 4,9 أ			

ناطو نجيَت			
بقلَىَ	1	دوای ثاکسازی ئایا ز قویکة بهٔکار هاتووة بؤ کشت و	17
بهلی نةخبر	1 2		4,7
J.:		كالحي( بةكار هيّناني خؤي فِرؤشتني , عقلقف , طاوطاتؤلَ) . تكناه كذات النات :	
ناز انیَت /دأنیا نییة	3	يةكيك بكةرة بازنةوة	
ناطونجيت	999		4.0
بقلَّيَ	1	ثَيْشُ ثَاكسازَى ئايا زوةي يَّهَكَةُ بِهُكَارِ هَاتُووة	4,8
نةخير	2	بؤسة زةو ميوة هات	
نازانیت /دلنیا نییة	3	يةكيك بكقرة بازنقوة	
ناطونجيت	999		
كةمى كريكار / نةخؤشى / سك ثرِي (بؤ	1	ئةطةر زةوى يقكة بةكارناهينزيت وهؤى سةرةكى	4,9
ئافرةت )	2	ضيية ؟بؤضى	
كةمى ئامير / ثارة /	3	يةكيك بكةرة بازنةوة	
ئاو و هةوا ( لافاو , ووشكى ,ئاوديَرى ,باران	4		
<sub>ب</sub> دةر دو نةخؤشى (ئافات) )	5		
درةنطی ثاکسازی ( مانطی روواندن )	6		
کیشةی زةوی و زار /خراثی باری ئاسایش	999		
(ئةمنى )			
نازانیَت / دَلَنیا نبیة			
ناطونجيَت			
خؤشحال	1	تا ض رادةيةك خؤشحال بوويت لة طةل ثرؤسةى	4,10
خؤشحال نةبوو	2	ثاكسازى	
هيض توانج نيية /دَلَنيا نيية	3	يةكيك بكةرة بازنةوة	
ناطونجيَت	999		
وةلأم ناداتةوة	997		
يار ماتنى لة الايةن حكومةت	1	دوای ثاکسازی پیارمةتی درایت بؤ به کار هینانی	4,11
يار مةتى لة لايةن ريكخراوةكان	2	زةوى يةكةت ؟ أُن	
يار متى لة لايةن طو ندةكة	3	وةلأمةكان بخوينةرةوة	
يار مةتى لة الايةن خيزانةكةمةوة / تشتطيري	4	لَّهُ وانية زياتُر لَّهُ وةَلاَميَك بكةيتة بازنةوة	
دةر ةكى نا	5		
ناز انیَت /دلَنیا نبیة/ بیری نیة	6		
هی تر دیاری بکة	999		
ناطونجيت			
3			
بقلَىَ	1	دوای ثاکسازی ، هیض مینیک یان تققةمةنیةکت	4,12
نةخير	2	دوز بيوة لة زقوى بة ثاكر او قكةدا ؟	.,
ناز انیّت /دلّنیا نبیة /بیری نبیة	3	رويير يةكيَك بكةرة بازنةوة	
ناطونجيت	999		
	,,,,		

4,13 طرنطترین طؤران ضیبوو کة روویدا لة ذیانی خیزانةکةت لة ئةجامی ثاکردنقوةی زةویکةت لة مین و تةقةمةنی ؟(وةلأمةکةت بنوسة )
و تحمی (وه محدد بوسه)
بةشي : ضوارةم/ ب : زقوي كوَمةلطا / بنةماي داراي / ثرؤذةي كؤمةلطا (نمونة قوتابخانة شويني ئايني و
 بةشى : ضوارةم/ ب : زةوى كوَمةَلطا / بنةماى داراى / ثرؤذةى كؤمةَلطا (نمونة قوتابخانة , شويَنى ئاينى , ئاو ,بةنداو ,ريَطا , باخضة بؤ كؤمةَلطا , بازار , خانوو )

رینمای بو طرووثی ثانیوةندی کردن به کؤمهٔ آموة (CL):

ئةَمَة بخُويَنَهُوة بَوْ طُوندنشَين ( نيستا دَهْمَةُويَت ثُرُسيارَتْ لَنبكةم دقربارةى ئةو زةوى يةى كة ثاكراوةتةوة لةم كؤمةلَطاية بؤ ضالاكيةكانى كؤمةلَطا, بازارِ , خانوو وةلأمى رِاست يان هقلَة نية بنزةحمةت به ثيَى توانا وةلأمى رِاستقينة بدقرقوة ..

هةموو ثرسيارةكان بخويَنةوة, وةلأمةكان مةَخويَنةوة هةتاوةكو ثرسيارةكان وةلأم دةدريَنةوة دواتر وةلأم بكةرة ناو

			بازنةيةكة
- به لم نام الله الله الله الله الله الله الله ال	1	لهم طوندةدا هيض زةوى يةك ثكراوةتةوة بؤ	4,1
نةخير ئةطةر بةشةكة	2	مبةستى ضالاكيكانى كؤمةلطا وةك (قوتابخانة	,
تةواو بوو وة زة <i>وى</i>	3	شوینی ئاینی ریطا , باخضه طشتی , بازار ,	
ناز انیَت /دلنیا نییه /بیری نییه کشت و کالی	999	خانوو )؟	
	)))	كىلوقى). يەككىك بكة بازنةوة	
بوو برؤ بؤ بةشى 5		يهديك بحه بار نهوه	
ناطونجيت ئطةر كشتو			
كاأى نتبوو			
ضاو ثيكة وتنةكة			
دابخة			
بةلَىَ	1	ثیّش ثاکسازی بنایا زةویکة به کارهاتووة بؤ	4,2
نةخير	2	کشت و کالمی( بتکارهیّنانی خوّی <sub>ب</sub> فروشتنی <sub>،</sub> عقلقف <sub>،</sub>	.,_
ت حیر ناز انیَت /دَلنیا نبیهٔ	3	طاوطاتول)	
ناطونجيت	999	ةكيك بكة بازنةوة	
بقلَىَ	1	ثیش ٹاکسازی ز قوی کة به کار هاتوة بؤ رِیطا ؟	4,3
نةخير	2	ةكيَك بكة بازنةوة	
نازانیّت /دلَنیا نبیة	3		
ناطونجيَتُ	999		
بقلی	1	ثَیَش ثاکسازی زةوی که به کارهاتوه بؤ	4,4
بعنی نةخیر	_		4,4
	2	ذیرخانی ئابوری( وةکو قوتابخانة , شوینی	
ناز انیّت /دلّنیا نبیة	3	ئاينى , ئاودةست , خانوو ,ئاوديَرى , ئاو	
ناطونجيت	999	هتد)	
		يةكيَك بكة بازنةوة	
بةلَىَ	1	ثَیَش ثاکسازی زةوی کة بةکار هاتوة بؤ باخی	4,5
نةخير	2	ستوزةوميوةهات؟	.,0
ـــــــــــــــــــــــــــــــــــــ	3	يةكيَك بكة باز نقوة	
		يحيث بك بارتحوه	
ناطونجيت	999		4.6
خودی خوکی/ خاوةنقکةی	1	کی داوای ثاککر دنةوةکةی کرد؟	4,6
بقر ثرسانی طوندةكة.	2	لةوانةية زياتر لة وةلأميك بكةيتة بازنةوة	
بةرثرساني شاروضكةكة.	3		
ريكخراوة ناحكوميةكان.	4		
ناز انم.	5		
کةسانی تر دیاری بکة	6		
ت ساعی کرد میرای به سامانی به ناطونجیت ناطونجیت	999		
	777	767 7 71 7 7474.7 14	4.7
بقلَی.	1	ئاية تةقةمةني و مين لةسةر رووى زةوبيةكة	4,7
نةخير.	2	دوَزر انةوة كاتيك كة ثاككر ايةوة؟	
نازانم یان بیری نایات دلنیا نییة	3	يةكيك بكةرة بازنةوة	
ناطونجيت	999		
لة نيوة كةمتر برو	1	ضةند لة زةوى ية ثاكراوةكة ئيستا بة	4,8
برِ ترسیاری4,9	2	کار دة هینزیت	.,5
	3	كاردىھىرىي يەككىك بكةرة بازنةوة	
		يحيك بمسره بارتسوه	
بؤ ترسياري 4,9	4		
هةم <u>ووي</u> برِؤ	5		
بؤ <b>ٹرسی</b> اری 4,9	999		
ھيض <b></b>			
برؤ بؤ ثرسیاری 4,13			
نَازُ انیت / دانیا نید			
برو ترسیاری 4,13			
/			
ناطونجيَت			

بةلَىَ	1	دوای ثاکسازی ئایا زةویکة به کارهاتووة بؤ	4,9
ب ہی نةخیر	2	کشت و کالی ( به کار هینانی خوی فروشتنی و عقاف و	7,7
ت حیر ناز انیَت /دَلَنیا نبیه	3	طاوطاتول)	
	_	\	
ناطونجيَت	999	يةكيَك بكفرة بازنقوة	4.10
بة <b>ل</b> َّىَ . ت	1	ثاش ثاکسازی زةوی که به کار هاتوه بؤ رِیطا ؟	4,10
نةخير	2	ةكيَك بكة بازنةوة	
ناز انیَت /دلنیا نبیة	3		
ناطِونجيَت	999		
بةلَىَ	1	ثاش ثاکسازی زةوی کة به کارهاتوه بؤ	4,11
نةخير	2	ذیرخانی ئابوری ( و قکو قوتابخانه ب شوینی	
ناز انیَت /دلَنیا نییة	3	ئاینی و ئاودةست و خانوو وئاودیری و ئاو	
ناطونجيت	999	هتد)	
		يةكيَك بكة بازنةوة	
بةلَىَ	1	ثاش ثاکسازی زةوی کة بةکار هاتوة بؤ باخی	4,12
نةخبر	2	سةوزةوميوةهات ؟	,
ناز انیّت /دلَنیا نبیة	3	يةكيَكُ بكة بازنةوة	
ناطونجيت	999		
خؤشحال	1	تا ض رادةيةك خؤشحال بوويت له طهل	4,13
خؤشحال نةبوو	2	ثرؤسةى ثاكسازى لة طوندةكةت ؟	
هيض توانج نبية /دلنيا نبية	3	يةكيك بكةرة بازنةوة	
ناطو نجبت	999	3 3 . 3	
,			
يارمةتي لة لايةن حكومةت	1	دوای ثاکسازی طونده که ت ض یار مهتیه ک در ا	4,14
يارمةتى لة لايةن ريكخراوةكان	2	بؤ بةكار هيناني زُ ةُو بكة	
يار متى لة لايتن طو ندةكة	3	وة لأمة كان بخو يَنقر ةوة	
يارمةتي لة لايةن خيزانةكةمةوة / تشتطيري	4	ري. لقو انية زياتر لة وةلاميك بكةيتة بازنةوة	
دةر ةكى نا	5		
ناز انیَت /دلَنیا نییة/ بیری نیة	6		
هی تر دیاری بکه	999		
ناطونجيَّت			
ا التاريخ و من المرادد		l National Anna Inc. 1885 - Anna Anna Anna Anna Anna Anna Anna An	

4.15 طرنطترين طؤران ضيبوو كة روويدا لة ذيانى خيَزانةكةت لة ئةجامى ثاكردنةوةى زةوي لة مين و تةقةمةنى	2
بؤ ضالاكيةكاني طوند ؟(وةلأمةكةت بنوسة )	
	•••
········	
	•••
	· • •
	· • •

بة شي : ثَيْنَجةم رِينهاى بو طرووثى ثةيوةندى كردن بةكؤمة أقوة (CL) : رينهاى بو طرووثى ثةيوةندى كردن بةكؤمة أقوة (CL) : بؤ طوندنشينة كة بيخوينة و ( ئيستا رستة كان دة خوينمة وة يقك بة دواى يقك بنزة حمة تثيم بلّى ئة طقر تؤ هة ست دة كةيت كة رستة كة بقلنية وراست نيية بؤ تؤ . وة لأمى راست يان هقلة نية بنزة حمة ت بة ثيّى توانا وة لأمى راستة ينة بدةرة و آ .

بةشداری کردن لهٔ تاسکهٔکهٔ /بهٔشداری کردن لهٔ کؤبونهٔوهٔی خیَزانی بؤ دهٔست نیشان کردنی ثاکسازی مین و تهقهٔمهٔنی

بهٔ نَی به	3	5,1 تۇ ضويت بۇ كۇبونوة بۇ ھةلبداردنى زقوىنىكة بۇ ئاكردنةوةى لة مين و تةقمةنى
بةأَىَ نةخيرَ دلنيا نبية /بيرى نبية	1 2 3	5,2 ئايا تۇ تىطةېشتىت كة بۇضى ئةو زةوى ية هقلبنىردرا بۇ ئقوقى كارى ئاكسازى مىن و تەتمەننى لىي ئەنجام بدرىت
بةَلَىَ دلنيا نيية /بيرى نيية نةخير	1 2 3	5,3 تۇ توانىت لة كۇبونةوةكةدا قسةبكةيت يان تىبىنى خۇت بدةيت
بةَلَىَ دَلَنيا نبية /بيرى نبية نةخير	1 2 3	5,4 تۇ دلخۇشبويت لة كۇبونةوةكةدا بة (كارى ئاكسازى /تاسكةكة/هةلبذاردنى خيزانى )

## بةشى: شةشةم

: ثرسیار بو وه َلام دهر (طوند نشین ): ئیستا ئهمهوی ههندی ثرسیارت ئاراسته بکهم دوای له ناوبردنی تههمه تنی نوانا وه لامی راست یان هه نه نیم توانا وه لامی راسته نوانا وه لامی راسته نوانا وه لامی راسته نوانا و نوانا و

ثُرُسيارُةكان بُخُوينة وة وةلأمةكان دةستكارى مةكة تةنيا وةلأمة راستة كانى طوراو بخقرة ناو بازنةيةك

		J . J J J G	<u> </u>	
	3	2	1	
				مروظايةتى
				دوای رامالینی مین و تةقةمةنیةکان
لة	كة متر	وةكو خوَى	زياترلة ثيَشو	6.1 ضنةند مندالت ناونوسكر اون لة قوتابخانة ?
	جاران			
لة	كة متر	وةكو خو <i>َى</i>	زياترلة ثيَشو	6.2 ذمارةى ئةومندالأنةت كة روزذانة ئةضن بو
	جاران			قوتابخانة؟
لة	كة متر	وةكو خوَى	زياترلة ثيَشو	6,3 بری خوراکی جوراوجوری خیزانةکةت
	جاران			ئةيخوات بؤنمونة سةوزةواتيكي زؤر طؤشت
				ميوةجات؟
لة	كة متر	وةكو خو <i>َى</i>	زياترلة ثيَشو	
	جاران			
لة	كة متر	و ةكو خو <i>َى</i>	زياترلة ثيَشو	6.5ضىقند ھةست بةسقربقرزى ئةكةى بقرامبقر
	جاران			خيَز انةكةت؟
				ترسناکی
				 دوای رامالین
لة	کة متر	وةكو خوَى	زياترلة ثيَشو	6.6 هةست بة نارحةتيكي ضورن ئةكةي بة بوني
	جاران	_3 3 3	3 . 3 .3	ورو مفترسی مین و تققمةنی له سفر مناله کانت?
				كومه لايه تي

				دوای رامالین
لة	كة متر	وةكو خوَى	زياترلة ثيشو	6.7دة توانى بة شدارى بكةى لة ئاهة نطة كانى بوك
	جاران			طواستنةوة وة ئاهةنطة ئاينيةكا,هةست ئةكةى
				بةشيكي لةوئاهةنطانة ?
لة	كة متر	وةكو خوَى	زياترلة ثيَشو	8.6تو يان خيزانةكةت ئةتوانن سقرةداني
	جاران			هاورية كانتان يان كةسوكارة كانتان بكةن لة
				دةرةوةى طوند?
	3	2	1	
	3	2	1	فیزیکی
				دوای رامالین
لة	كة متر	وةكو خوَى	زياترلة ثيَشو	6.9ئايا ئةندامانى خيزانةكةت دةتوانن سقرةدانى
	جاران			خةستةخانةى قةزا بكةن ياخود بنكةيةكي ترى
				تةندر وستى?
لة	كة متر	وةكو خوَى	زياترلة ثيشو	6.10ضون ئةندامةكانى خيزانةكةت ئةتوانن
	جاران			بضن بو بازار?
لة	كة متر	وةكو خوَى	زياترلة ثيَشو	6.11ضون ئةندامانى خيزانةكةت يارمةتيةكانى
	جاران			كارةبا وتلفون بة دةست دةهيَنن?
	3	2	1	سةرضاوةي وةدةستهيّنان(التمويل)
				دوای رامالین
لة	كة متر	وةكو خوَى	زياترلة ثيشو	6.12ئايا خيَزانةكةت تواناى عةمباركردن يان وة

جاران

جاران

3

کة

کة

جاران

جاران

متر

وةكو خوَى

وةكو خوَى

وةكو خوَى

2

كة متر

دةستهينان وة كردنةوةى ثرودة هقية وةك(

لقكاتى تةنطاوى ثيويست نةبى بو فروشتنيان

تايبةت كاتى نةخوَشي يان روداو يان لافاو يان

6.14ئايا خيزانةكةت دةتوانى ئاو بو ئاودانى

زةوى سةوزةوات يان زةوى ميوةجات يان

6.15ئايا خيزانةكةت دةتواني مةر و مالاتةكان

ببات بوشو يَنيكي سةلامةت بو لقوةر اندن ?

6.13 فَاللَّهُ عَلَمُ اللَّهُ عَلَمُ اللَّهُ عَلَمُ اللَّهُ عَلَمُ اللَّهُ اللَّهُ عَلَمُ اللَّهُ اللَّا اللَّهُ اللَّهُ اللَّهُ اللَّهُ اللَّا اللَّا

بةخيوكردني طاميش)?

هیشکاتی وهٔ نهخوشی<u>. ?</u> که ش یان دوروبةر

بيستانةكا بةدةست خوَى بيَنيَت .

دوای رامالین . . .

6.16هـ قرضونیک بیت طرنطترین طور انکاری ضی بو له سقر خیز انه کهت دوای رامالینی مین وه تهقهمهنی ؟ (وهٔ لأمه که ت بنوسهٔ )

1

زياترلة ثيشو

زياترلة ثيشو

ِ ناو	بو طورانکار	تتى دةربو	ینی مین)یارمهٔ	سطة لة راماً	هوكار انةبكةي(ض	ایا دفتوانی باسی ئو نت <sub>و</sub> لةطةل ثیَشتر؟ کهت بنوسة )	خيزانةكا
	قة <i>م</i> ةنى	بنی مین و ته	توة دوای رامالب	يَزانةكةت داه	، سلبی بة سةر خ	ایا ہیض طورانکاریةکی	?
						نت بنوسة )	وةلامةكا
							•••••

# بةشى حةوتةم

: ثرسیار بو وهٔ لام دهر (طوند نشین): ئیستا ئهمهوی ههندی ثرسیارت ئاراستهٔلی بکهم دوای خاوینکردنی زهوی له مین وهٔ ض کورانکاری ههبو وهٔ لامی راستهٔ نیه بنزه حمه تبه ثیّی توانا وهٔ لامی راستهٔ قینه بدر هو ه

ثرسيارةكان بخوينة وة وةلأمةكان دةستكارى مةكة تةنيا وةلأمة راستة كان بخةرة ناو بازنقيةك .

به الله به	1	زه ویه خاوینکراوه که هیج داهاتی بو تو هه یه ?	7.1
7.2	2	)کشتوکالیکه, زه وی به کار هاتی تری کومه ل(	
نةخير برؤبؤ	3	ولأمي راست بخةرة ناو بازنة.	
الرسياري 8.1			
دأنيا نيية /بيرى نيية برؤ بؤ	997		
ث 8.1			
وةلأم ناداتةوة			
که میك	1	داهاتت زیادبو دوای خاوینکردنه وه ی زه ویه	7.2
وه ك خويه تى	2	که?	
ر دوو وه ك جاران زياد بوو	3	ولأمى راست بخةرة ناو بازنة .	
_	4	و د سی راست بعدره دو بارده .	
زور دادان داداد	5		
دلنیا نیم/ نازانم			
ولام ناداته وه	997		
ناکر ی			
	999		
ثيداويستة كانسةرةكى مالةوةلة	1	داهاتی ئةم زةوية بةشيوةيةكي سةرةكي بوضي	7.3
خوراك(		بةكار دةهيَني?	
وردة ثيدايستي خوراك ,MSG) خي ,			
etc) شکر (chilli,	2	ولأمى راست بخةرة ناو بازنة	
رااااا,	_	و لا می راست بعاره دو بارد.	
	_		
ثیداویستی تری ناو مال	3		
ثيداويست قوتابخانة ( جلو			

بةرط بقرتوك )	4	
طیانةوةری كةورة طامیش ضیّل		
(	5	
كةلوثةلي كشتوكالي وةكاركردن	6	
ماتور/ئوتومبیل/بنزین/بایسکل شتی تر	7	
ستى تر	8	
و لام ناداته وه	007	
	997	
ناكرى	999	

به شي : هه شته م\*\* خاله كانى ضاو ثيكه وتن: ثرسيار بو وه لام دهر (طوند نشين): ئيستا ئه مه وي هه ندى ثرسيارت هه ندى ثرسيارت ئاراسته بكهم له سه ر بارو دوخى ئيستا. ولأمى ثرسيار به به لى و نه خير نه بي به لكو ولأميكى راسته قينه به ثي توانا

تُرسيارةكان بخوينة وة وةلاَمةكان دةستكارى مةكة تقنيا وةلاَمة راستة كان بخةرة ناو بازنقيةك .

مه رانسه کال بخهره دو بارنهیمت <u>.</u>	تحيب وه∡ه	حال بحویته وه وه <i>د</i> مهجال دهستجاری مهجه	*J***J*
ب <del>ه لیّ →</del> برو بو ثرسیاری 8,3	1		8,1
نه خ <del>یر →</del> ۲ برؤ بؤ ثرسیاری	2	تةقةمةنى تيداهةبيَت؟ولاَمى راست	
دانیا نی <u>مه/ناز ان</u> م	3	بخقرة ناو بازنة .	
كشتوكال) به الودان (	1		8.2
باخجه	2	ضى بةكارديَت ؟ ولأمى راست بخةرة	
کشتوکال)کیلانی زه وی دیم(	3	ناو بازنة .	
خانوبه ره	4		
قو تابخانه	5 6		
هه رولاً میکی تر	О		
3 8 . 33			
 ناک <i>ری</i>			
و لا م ناداته وه	997		
·	999		
به <del>لی →</del> برِؤ بؤ ثرسیاری 8,4	1	هيض زةوى وة زاريك هةي لة	8.3
نه خير ٢ برؤ بؤ		طوندةكةت ناتوانن بةكارى بهينن لةبةر	
ثرسیاری 8,5 ک	3	بونى تةقةمةنى لةناو زةويةكة؟ ولأمى	
دلنیا نیمه// ناز انم	007	راست بخقرة ناو بازنة .	
ناکریَ	997		
ناتوانم زه وی به کاربینم/له ده ست دانی	1	بونی مین وة تةقةمةنی لة ناو	0.4
		ا بوتے، میں وہ تحصیے ت- تو ا	8.4
داهاتی به رویوم	_		8.4
داهاتی به روبوم بهٔ چه نه فاتنه شده بستیهٔ کانی که مقل		زةويةكةت بةشيَوةيةكى سقرةكى ض	8.4
بةجى نةهاتنى ثيداويستيةكانى كومةل		زةويةكةت بةشيوةيةكى سقرةكى ض كارتيكردنى هةية لةسةرتان؟ ولأمى	8.4
بةجى نةهاتنى ثيداويستيةكانى كومةل (قوتابخانة ريطاوبان بيرى ئاو	2	زةويةكةت بةشيَوةيةكى سقرةكى ض	8.4
بةجى نه هاتنى ثيداويستية كانى كومة (قوتابخانة ريطاوبان بيرى ئاو . هه ست به ئارامى ناكه ن/ئه ترسن		زةويةكةت بةشيوةيةكى سقرةكى ض كارتيكردنى هةية لةسةرتان؟ ولأمى	8.4
بةجى نةهاتنى ثيداويستيةكانى كومةل (قوتابخانة ريطاوبان بيرى ئاو	2	زةويةكةت بةشيوةيةكى سقرةكى ض كارتيكردنى هةية لةسةرتان؟ ولأمى	8.4
بةجى نه هاتنى ثيداويستية كانى كومة (قوتابخانة ريطاوبان بيرى ئاو . هه ست به ئارامى ناكه ن/ئه ترسن		زةويةكةت بةشيوةيةكى سقرةكى ض كارتيكردنى هةية لةسةرتان؟ ولأمى	8.4

5	
997	

8,5 هيض رِاوبؤضونيکي تر هةية ؟

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سوثاسي بةشدار بووةكة بكة و كوَتايي بة ضاوثيَكةوتنةكة بهيَنة.

# Appendix 8: Tables used to Evaluate the Livelihood Asset Scale in Phases 1 and 2

Table 8.1: Inter-Item Correlation Matrix, Livelihood Asset Scale, Demonstrating the Strength of the Correlation Between Items, Phase 1

Item <sup>a</sup>	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	6.10	6.11	6.12	6.13	6.14	6.15
6.1 Children in enrolled in school	1.000	.571	007	057	.000	.162	001	.053	.074	.089	024	.139	.116	.021	.064
6.2 Children miss school due to poor heath	.571	1.000	.025	005	.048	.177	.033	.068	.068	.068	049	.093	.100	.089	.048
6.3 Food variety	007	.025	1.000	.122	.185	007	.182	.057	.066	.191	.026	.144	.103	014	.128
6.4 Time	057	005	.122	1.000	.168	.152	.171	.178	.053	.192	041	.158	.151	.014	019
6.5 Pride	.000	.048	.185	.168	1.000	002	.150	.096	.124	.143	.073	017	024	.060	.143
6.6 Worry children	.162	.177	007	.152	002	1.000	022	.142	039	.088	.016	.142	.067	040	032
6.7 Participate, part of the community	001	.033	.182	.171	.150	022	1.000	.456	.234	.230	.010	.259	.138	.019	018
6.8 Visit friends	.053	.068	.057	.178	.096	.142	.456	1.000	.217	.262	.022	.196	.101	.040	025
6.9 Access district hospital	.074	.068	.066	.053	.124	039	.234	.217	1.000	.240	041	.092	.093	.039	153
6.10 Access market	.089	.068	.191	.192	.143	.088	.230	.262	.240	1.000	.072	.164	.107	.100	.019
6.11 Access phone, electricity	024	049	.026	041	.073	.016	.010	.022	041	.072	1.000	076	.024	.295	.362
6.12 Ability to save money or invest	.139	.093	.144	.158	017	.142	.259	.196	.092	.164	076	1.000	.439	074	088
6.13 Ability to keep belongings	.116	.100	.103	.151	024	.067	.138	.101	.093	.107	.024	.439	1.000	.026	009
6.14 Water farming/vegetable/ fruit gardens	.021	.089	014	.014	.060	040	.019	.040	.039	.100	.295	074	.026	1.000	.425
6.15 Safe grazing land for animals	.064	.048	.128	019	.143	032	018	025	153	.019	.362	088	009	.425	1.000

<sup>&</sup>lt;sup>a</sup>For full text see Appendix 7

Table 8.2: Individual Item Fit Statistics for the Livelihood Asset Scale Indicating Misfit of Item 6.11, Phase 1

Item	a	Loc	SE	Fit Resid	DF	Chi Sq DF	Prob
6.1	Children in enrolled in school	-0.61	0.09	1.02	446	7.80 7	0.34
6.2	Children miss school due to poor health	-3.29	0.10	0.56	446	10.53 7	0.16
6.3	Food variety	0.56	0.08	0.54	446	5.33 7	0.61
6.4	Time	0.70	0.08	0.00	444	4.89 7	0.67
6.5	Pride	-0.53	0.09	-0.23	443	12.20 7	0.09
6.6	Worry children	0.24	0.08	-0.25	445	15.19 7	0.03
6.7	Participate, part of the community	0.44	0.08	-1.77	446	19.32 7	0.00
6.8	Visit friends	0.67	0.08	-1.77	445	13.51 7	0.06
6.9	Access district hospital	0.74	0.07	0.18	446	8.53 7	0.28
6.10	Access market	0.50	0.08	-1.91	445	12.47 7	0.08
6.11	Access phone, electricity	-2.80	0.09	4.18 <sup>b</sup>	445	21.31 7	0.00
6.12	Ability to save money or invest	0.81	0.08	-0.98	445	10.59 7	0.15
6.13	Ability to keep belongings	1.24	0.08	-0.87	443	5.55 7	0.59
6.14	Water farming/vegetable/fruit gardens	0.56	0.10	-0.14	445	4.30 7	0.74
6.15	Safe grazing land for animals	0.74	0.09	0.64	445	8.09 7	0.32

 $<sup>\</sup>overline{{}^a}$ For full text see Appendix 7  ${}^b$ Fit residual = >2.5 indicating misfit to the Rasch model

Table 8.3: Correlation Matrix of Fit-Residuals of Scale Data Showing Local Dependency for Items 6.1 and 6.2 and Items 6.14 and 6.15, Phase 1

Item <sup>a</sup>	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	6.1	6.11	6.12	6.13	6.14	6.15
6.1 Children in enrolled in school	1														
6.2 Children miss school due to poor health	h 0.575 <sup>t</sup>	' 1													
6.3 Food variety	-0.120	-0.110	1												
6.4 Time	-0.239	-0.193	-0.058	1											
6.5 Pride	-0.138	-0.094	0.024	0.011	1										
6.6 Worry children	0.057	0.064	-0.153	0.011	-0.109	1									
6.7 Participate, part of the community	-0.218	-0.180	-0.007	-0.040	-0.033	-0.206	1								
6.8 Visit friends	-0.154	-0.133	-0.168	-0.042	-0.091	-0.020	0.277	1							
6.9 Access district hospital	-0.063	-0.070	-0.095	-0.110	-0.011	-0.160	0.015	0.014	1						
6.10 Access market	-0.114	-0.150	-0.019	-0.029	-0.042	-0.106	-0.012	0.007	0.038	1					
6.11 Access phone, electricity	-0.130	-0.163	-0.093	-0.154	-0.005	-0.044	-0.149	-0.141	-0.145	-0.090	1				
6.12 Ability to save money or invest	-0.058	-0.113	-0.020	-0.008	-0.221	-0.029	0.063	-0.044	-0.099	-0.079	-0.243	1			
6.13 Ability to keep belongings	-0.055	-0.071	-0.078	-0.029	-0.198	-0.062	-0.097	-0.146	-0.081	-0.144	-0.121	0.298	1		
6.14 Water farming/vegetable/fruit gardens	-0.083	-0.021	-0.180	-0.127	-0.046	-0.125	-0.169	-0.141	-0.106	-0.083	0.233	-0.264	-0.134	1	
6.15 Safe grazing land for animals	-0.021	-0.043	-0.013	-0.151	0.056	-0.102	-0.208	-0.199	-0.289	-0.173	0.300	-0.276	-0.160	0.375 <sup>b</sup>	1

<sup>&</sup>lt;sup>a</sup>For full text see Appendix 7 <sup>b</sup>Correlation at the > 2.5 level indicating local dependency

Table 8.4: Individual Item Fit Statistics for the Livelihood Asset Scale, After Removing Item 6.1 From the 15 Dimension Scale Showing Item 6.11 Misfits the Rasch Model, Phase 1

Item	a	Loc	SE	Fit Resid	DF	Chi Sq DF	Prob
6.2	Children miss school due to poor health	-3.29	0.10	2.78	444	11.36 7	0.12
6.3	Food variety	0.51	0.08	0.57	444	7.58 7	0.37
6.4	Time	0.65	0.08	-0.36	441	4.69 7	0.69
6.5	Pride	-0.58	0.09	-0.38	440	19.57 7	0.00
6.6	Worry children	0.21	0.08	-0.05	442	12.43 7	0.08
6.7	Participate, part of the community	0.39	0.08	-2.05	444	19.31 7	0.00
6.8	Visit friends	0.62	0.08	-1.93	443	13.28 7	0.06
6.9	Access district hospital	0.69	0.07	0.25	444	4.02 7	0.77
6.10	Access market	0.45	0.08	-1.93	443	13.38 7	0.06
6.11	Access phone, electricity	-2.85	0.09	3.97	b 443	12.35 7	0.08
6.12	Ability to save money or invest	0.77	0.08	-0.94	442	8.62 7	0.28
6.13	Ability to keep belongings	1.20	0.08	-0.83	440	4.79 7	0.68
6.14	Water farming/vegetable/fruit gardens	0.51	0.10	-0.15	443	5.66 7	0.57
6.15	Safe grazing land for animals	0.68	0.09	0.77	443	9.24 7	0.23

<sup>&</sup>lt;sup>a</sup>For full text see Appendix 7 <sup>b</sup> Fit residual = >2.5 indicating misfit to the Rasch model

Table 8.5: Correlation Matrix of Fit-Residuals of Scale Data Showing Local Dependency for Items 6.14 and 6.15 after Removing Item 6.1 from the 15 Dimension Scale, Phase 1

Item	а	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	6.10	6.11	6.12	6.13	6.14	6.15
6.2	Children miss school due to poor health	1													
6.3	Food variety	-0.067	1												
6.4	Time	-0.162	-0.077	1											
6.5	Pride	-0.071	0.007	-0.008	1										
6.6	Worry children	0.098	-0.163	0.007	-0.112	1									
6.7	Participate, part of the community	-0.151	-0.028	-0.067	-0.052	-0.217	1								
6.8	Visit friends	-0.101	-0.186	-0.064	-0.106	-0.023	0.263	1							
6.9	Access district hospital	-0.030	-0.107	-0.129	-0.021	-0.151	-0.001	-0.002	1						
6.10	Access market	-0.117	-0.033	-0.049	-0.052	-0.097	-0.031	-0.006	0.028	1					
6.11	Access phone, electricity	-0.134	-0.107	-0.173	-0.015	-0.047	-0.167	-0.155	-0.149	-0.100	1				
6.12	Ability to save money or invest	-0.076	-0.027	-0.023	-0.228	-0.024	0.050	-0.053	-0.099	-0.086	-0.251	1			
6.13	Ability to keep belongings	-0.039	-0.084	-0.044	-0.206	-0.056	-0.112	-0.155	-0.081	-0.149	-0.126	0.297	1		
6.14	Water farming/vegetable/fruit gardens	0.004	-0.191	-0.145	-0.056	-0.125	-0.188	-0.153	-0.111	-0.092	0.228	-0.271	-0.138	1	
6.15	Safe grazing land for animals	-0.011	-0.019	-0.166	0.050	-0.092	-0.220	-0.207	-0.290	-0.178	0.296	-0.277	-0.160	$0.374^{1}$	<sup>5</sup> 1

<sup>&</sup>lt;sup>a</sup> For full text see Appendix 7 <sup>b</sup> Correlation at the > 2.5 level indicating local dependency

Table 8.6: Inter-Item Correlation Matrix of the Livelihood Asset Scale Showing Highly Correlated Items (> .7) Phase 2

Item <sup>a</sup>	6.1	6.2	6.3	6.4	6.5	6.7	6.8	6.9	6.10	6.12	6.13	6.14	6.15
6.1 Children in enrolled in school	1.000	.901 <sup>b</sup>	.147	057	.155	.225	.176	.134	.146	.103	.107	.142	.267
6.2 Children miss school due to poor health	.901 <sup>b</sup>	1.000	.129	071	.120	.203	.163	.096	.107	.089	.094	.147	.308
6.3 Food variety	.147	.129	1.000	.468	.124	.107	.144	.069	.076	.088	.149	.272	.406
6.4 Time	057	071	.468	1.000	.408	.203	.260	.206	.176	.145	.136	.159	.178
6.5 Pride	.155	.120	.124	.408	1.000	.629	.570	.642	.624	.271	.256	.045	093
6.7 Participate, part of the community	.225	.203	.107	.203	.629	1.000	.875 <sup>b</sup>	.542	.505	.388	.345	.036	100
6.8 Visit friends	.176	.163	.144	.260	.570	.875 <sup>b</sup>	1.000	.491	.455	.390	.347	.030	060
6.9 Access district hospital	.134	.096	.069	.206	.642	.542	.491	1.000	.873 <sup>b</sup>	.219	.283	017	119
6.10 Access market	.146	.107	.076	.176	.624	.505	.455	.873 <sup>b</sup>	1.000	.234	.301	016	125
6.12 Ability to save money or invest	.103	.089	.088	.145	.271	.388	.390	.219	.234	1.000	.633	.106	.071
6.13 Ability to keep belongings	.107	.094	.149	.136	.256	.345	.347	.283	.301	.633	1.000	.131	.097
6.14 Water farming/vegetable/ fruit gardens	.142	.147	.272	.159	.045	.036	.030	017	016	.106	.131	1.000	.533
6.15 Safe grazing land for animals	.267	.308	.406	.178	093	100	060	119	125	.071	.097	.533	1.000

<sup>&</sup>lt;sup>a</sup>For full text see Appendix 7 <sup>b</sup>Correlation at the > .7 level indicating redundancy

Table 8.7: Individual Item Fit Statistics for the Livelihood Asset Scale Indicating Misfit of Item 6.4, Phase 2

Item	a	Loc	SE	Fit Resid	DF	Chi Sq	DF
6.1	Children in enrolled in school	0.45	0.10	-0.51	398	37.58	6
6.2	Children miss school due to poor health	0.42	0.11	-0.21	398	43.70	6
6.3	Food variety	-0.78	0.11	1.22	398	13.43	6
6.4	Time	-0.87	0.11	2.73 <sup>1</sup>	398	26.85	6
6.5	Pride	-1.16	0.11	1 -3.90	398	42.11	6
6.7	Participate, part of the community	-0.88	0.12	-4.84	398	41.88	6
6.8	Visit friends	-0.88	0.12	-4.42	398	35.97	6
6.9	Access district hospital	0.85	0.11	-3.61	398	31.04	6
6.10	Access market	-1.01	0.11	-3.10	398	29.04	6
6.12	Ability to save money or invest	-0.39	0.23	-1.83	398	9.76	6
6.13	Ability to keep belongings	-0.36	0.27	-1.53	398	6.96	6
6.14	Water farming/vegetable/fruit gardens	2.50	0.09	2.16	398	43.57	6
6.15	Safe grazing land for animals	2.12	0.08	2.31	398	80.75	6

<sup>&</sup>lt;sup>a</sup>For full text see Appendix 7 <sup>b</sup>Fit residual = >2.5 indicating misfit to the Rasch model

Table 8.8: Correlation Matrix of Fit-Residuals of Scale Data Showing Local Dependency for Items 6.3 and 6.4, 6.5 and 6.7, 6.7 and 6.8, 6.9 and 6.10 and 6.4 and 6.15 from the 13 Dimension Scale, Phase 2

Item	6.1	6.2	6.3	6.4	6.5	6.7	6.8	6.9	6.10	6.11	6.12	6.13	6.14
6.1 Children in enrolled in school	1												
6.2 Children miss school due to poor health	$0.876^{b}$	1											
6.3 Food variety	-0.150	-0.155	1										
6.4 Time	-0.363	-0.360	$0.315^{b}$	1									
6.5 Pride	-0.265	-0.296	-0.292	0.091	1								
6.7 Participate, part of the community	-0.183	-0.197	-0.327	-0.170	$0.346^{b}$	1							
6.8 Visit friends	-0.240	-0.239	-0.263	-0.082	0.256	0.757*	• 1						
6.9 Access district hospital	-0.248	-0.285	-0.312	-0.130	0.397	0.245	0.178	1					
6.10 Access market	-0.223	-0.264	-0.291	-0.153	0.366	0.195	0.131	$0.767^{b}$	1				
6.12 Ability to save money or invest	-0.129	-0.139	-0.21	-0.095	-0.003	0.179	0.175	-0.033	0.003	1			
6.13 Ability to keep belongings	-0.139	-0.148	-0.127	-0.127	-0.008	0.143	0.140	0.040	0.084	0.193	1		
6.14 Water farming/vegetable/ fruit gardens	-0.116	-0.096	0.083	-0.040	-0.343	-0.368	-0.358	-0.378	-0.355	-0.144	-0.170	1	
6.15 Safe grazing land for animals	0.027	0.076	0.214	-0.038	-0.487	-0.553	-0.463	-0.493	-0.497	-0.129	-0.153	$0.454^{b}$	1

<sup>&</sup>lt;sup>a</sup>For full text see Appendix 7 <sup>b</sup>Items showing local dependency (> .2.5)

# Appendix 9: Questionnaire and Scale, Research Sites 3 (NRA, National Lao Program)

## **English Version**

Post UXO clearance impact assessment

#### Household Questionnaire Instructions for Interviewer:

Directions for the interviewer are included throughout each form and are in a box. They are preceded by the words "Instructions to interviewer:" The directions are in *italics* and the script is to be read is in normal text.

Form 1 Introduction and Record of Household Visits

Form 2 Verbal Consent Form

Form 3 Household and Demographic Questionnaire

Form 4 UXO clearance: individual task

Form 5 UXO clearance: community task

Form 6 UXO clearance: individual task and community task

Form 7 Livelihood impact measurement scale and current land use

**Interviewer ID:** Each interviewer will be pre-identified with 2 letter initials – to be allocated by contractor focal point

**Survey number:** A unique four digit number each for each survey form – to be allocated by contractor focal point

Province code: A unique two-digit number each for Province:

Xieng Khounag: 09 Savanakhet: 13 Champassack: 16

District code: A unique two-digit number each for Province:

Pek (XK): 01 Nong (SVK): 06 Paksong (CHP): 04

#### Instructions to interviewer

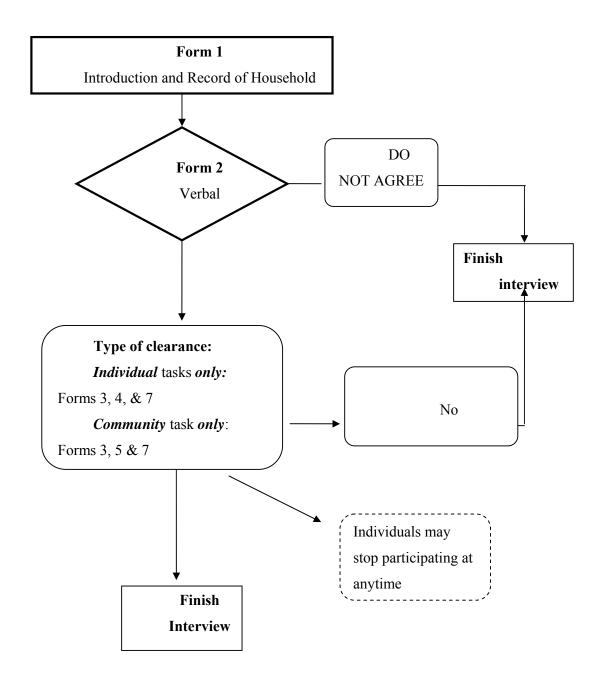
For the purpose of this questionnaire, the following definitions are used:

For the purpose of this quest	tionnaire, the following definitions are used:
Household	A household is a group of people living and eating together under the same roof
Household member	Anyone who has slept and eaten in the household for at least 6 months
	out of the past 12 months, including new babies even if they are
	younger than 6 months old.
Individual task: a	Paddy, upland farming, swidden (mixed – rice and vegetables or only
clearance task that has been undertaken for an individual household, or for use or for a limited number of households (<10)	rice), small irrigation systems including weir, small dam, canals, cash crops, plantation, industrial cropping/plantation, weir, fish pond, grass land, gardens including small gardens for fruit/vegetables and larger plantations/ industrial cropping such as mulberry, coffee, rubber. May also include construction, for example, a house. The land is owned by an individual household or households and is used by the household or
	rented to other households. The land or the building(s) on the land may be used for generating income for the household or household(s) the land belongs to but is not usually used for other commercial uses, e.g. it is <b>not</b> a factory, or large industrial cropping/plantation. While the household may employ some non-household members on the land/building, these are not normally more than 20 non-household members.
Individual and community task  People with disability/chronic illness	A community task is usually for the benefit of the whole community or a section of the community (usually for 10 households or more) and provides a public facility. This public facility may be used to <i>provide a service</i> to the community (e.g. government office), may be <i>local infrastructure</i> (e.g. road) or may be public land (e.g., Grazing) It has no individual title and is <i>not</i> used for commercial purposes. Examples, include, road (new or upgraded, access or main), buildings (new or existing), for community use, school clinic, temple, water, latrines, market, tourist area, public park, power line, phone (mobile or land), area for resettlement. May also include community land such as grazing land where the land is <b>not owned</b> by an individual household or households but belongs to community and is considered as public land with all the community having free access (i.e. they do not pay to use the land)  This is a combination of an 'Individual task' and a 'Community task' described above. Land has been cleared for <i>individual</i> household use. In addition, the beneficiary household lives in a village where a community task has been undertaken. Thus the household benefits from both their own land being cleared and from a task undertaken for the community.  People with impairments, activity limitations, and participation restrictions due to ill health including for example blindness and low
disability/chronic illness	restrictions due to ill health including for example, blindness and low vision, people with mental impairments, chronic diseases such as HIV, diabetes. Disability somewhat limits, or results in an inability to work or carry out daily activities.
Year	Refers to the <i>Lao calendar</i> year not the international year.
UXO	Refers to any kind of explosive remnant of war (e.g. aircraft bombs, bombies, mines, hand propelled grenades).
Human assets	Quality of human labour available (e.g. health, food security and diversity, ability to access education/send children to school regularly, time available to spend on income generating activities aside from subsistence farming, feeling positive).
Social Assets	Ability to increase social networks, fulfil social and cultural obligations and gather information.
Financial Assets	Ability to purchase basic goods and services for household members

	and save small amounts.	
Physical Assets	Access to basic infrastructure (schools, clinic, access road, market, potable water).	
Environmental Assets	Safe access to forest, farm land and water sources.	

# Instructions to interview

For each village you will be given a list of people to interview and whether you should interview the head or spouse of the head of the household. If the person you are to interview is not there try and arrange an alternative time to interview her/him. If this is not possible, if you are scheduled to interview the head of the household, interview the spouse of the head of the household if available, or if you are to interview the spouse of the head of the household try and interview the head of the household or make a time to come back to interview them.



# Form 1

# Instructions to interviewer:

*Please complete Form 1 before the Interview* (<u>Question 1.7-1.9 to be answered by the village head</u> during introductions of the data collection team by the team supervisor)

Survey	number:   _  _	
1.1	Interviewer code <i>Write</i>	
1.2	Interview date	/   /_2_ _0_ _1_ _0
	Write	
1.3	Province code <i>Write</i>	_ _
1.4	District code <i>Write</i>	_ _
1.5	Village code <i>Write</i>	_ _
1.6	Distance from district town to village in time by vehicle?  Write	_mins 999 district town
1.7	Is there all weather road access to this village? <b>Circle one</b>	0 No 1 Yes
1.8	Main ethnicity of the village? Write	
1.9	What is the village status?  Circle one	<ul><li>1 Relocated</li><li>2 Combined/consolidated</li><li>3 New location</li><li>4 Old</li></ul>
	Signature of interviewer	
	Interviewer code	I_I_I
	Signature of supervisor	
	Supervisor code:	_ _

# Form 2

May I return at that time?'

Instructions to interviewer:	
Read: I'd like to ask the	_ (head of the household or spouse of the head of the
,	ling schedule) some questions about UXO clearance. Are ousehold/ spouse of the head of the household)?
YesComplete the appropriate box below.  No If the person selected for the inter-	view is not at home ask: 'When will he/she be at home?

- If no one is home, if the head of the household is not home, or if you are asked to come back later, schedule follow-up visit date and time.
- If home and agreed to interview, please check the appropriate box.
- If home and did not complete the interview, please check the appropriate box.

<b>2.1 Attempt 1</b> : Date	/ / Interviewer ID:
-----------------------------	---------------------

	Zi Attempt 1: Date meer viewer ib		
	STATUS (circle one)	SCHEDULED FOLLOW-UP VISIT DATE AND TIME	
1	Not home <b>OR</b> asked interviewer to come back later	Follow-up date// Time:	
2	Home / Not selected person	Follow-up date// Time:	
3	Home / Agreed to interview (go to Form 2)	Start time:: Finish time:::	
4	Home / Refused or incomplete (end interview)	Refused Incomplete	
5	Not home	Replaced Replaced	
		Spouse next on list	

2.2	Attempt 2: Date	/	/ Interviewer ID:

	STATUS (circle one)	SCHEDULED FOLLOW-UP VISIT DATE AND TIME
1	Not home <b>OR</b> asked interviewer to come back later	Follow-up date// Time:
2	Home / selected person	Follow-up date// Time:
3	Home / Agreed to interview (go to Form 2)	Start time:: Finish time::
4	Home / Refused or incomplete (end interview)	Refused Incomplete
999	Not applicable (i.e. consented on attempt 1)	

#### Instructions to Interviewer:

**Read:** "My name is. ..... We are collecting information in (name of village) to help us understand the effect of UXO clearance on your community. I would like to ask you to participate in a one-to-one interview. It will take about 45 minutes of your time. Please answer all the questions as **truthfully and accurately** as you can. There are **no wrong answers** to the questions.

Your answers will be kept confidential.

Your name will not be written down. It will not be possible to identify you. There is no direct benefit to you in participating to this study.

However, we hope that the research will benefit people living in UXO/mine contaminated areas. Your participation is voluntary. You may refuse to answer any question and you may choose to stop the discussion at any time. Refusing to participate will not affect you, your family or the UXO/mine services provided in this area. If you have any concerns about this research please contact your local government office. Do you have any questions? You may ask questions about this study at any time. May I begin the interview now?"

Yes	
Signature/thumb print	
No	

Signature/thumb print

#### 2.3 Instructions to interviewer:

Read: I am going to ask you some questions about your household. A household is a group of people living and eating together under the same roof. First, I'd like to ask you if in the last five years land that is used by your household for **your individual use** (e.g. paddy, upland farming, irrigation, cash crops, plantation, weir, fish pond, grass land, house, garden) was cleared of UXO **by an outside agency** (i.e. not by your household or local people)?

#### Circle one

1	Yes
2	No

#### 2.4 Then ask:

I'd also like to ask you if land in your village was cleared of UXO by an outside agency (i.e. not by your household or local people) for community use (e.g. government building, school, irrigation for the village, weir/dam for the village, religious site, water, latrines. May also include community land such as grazing land where the land is not owned by an individual household or households but belongs to community and is considered as public land with all the community having free access (i.e. they do not pay to use the land)

#### Circle one

1	Yes
2	No

#### Instructions to interviewer:

If no to 2.3 and 2.4 thank the respondent and close the interview and circle 999 in 2.3 below.

If **yes to either 2.3 or 2.4 or both**, circle the respondent code in 2.5 below (circle one) and proceed to the appropriate sections

#### 2.5

1	Individual task (yes to 2.1 only)	Forms 3, 4 and 7
2	Community task only (yes to 2.2	Forms 3, 5 and 7
	only)	
3	Individual and community task (yes	Forms 3, 6 and 7
	to 2.1 <i>and</i> 2.2)	
999	Not applicable, i.e. no clearance task	Close the interview

#### Instructions to interviewer:

# A respondent can only fit into ONE of the above categories

Form 3: Demographic information

# Instructions to interviewer:

# Read to respondent:

'I would like to ask you a few questions about your household. A household is a group of people living and eating together under the same roof. Please answer as truthfully as you can. There are no right or wrong answers. '

# Instruction to interviewer:

Read all questions. <u>Do not read answers</u> unless indicated, circle answers unless indicated.

3.1	What is the sex of the respondent?	1	Female
	Observe and record. <u>Do not ask question!</u>	2	Male
3.2	What is the age of the household head in years?  Write the number		years
3.3	What is the age of the respondent in years?  Write the number		years
3.4	What has been your household's main source of income in the last 12 months?  Circle one	1 2 3 4 5 6 7 8 9 10 11	Farmer – rice (water/lowland rice field) Farmer –(dry rice) Upland rice Cash crop Livestock rearing and/or selling Fishing/river resources Wage labour – on farm Wage labour – off farm Handicrafts /Artisan Collection and/or sale of Forest Products (NTFPs) & Hunting (including birds) Remittances (i.e. money from people living outside of the household in the last 6 months) Other
3.5	What is the gender (sex) of the household head?  Circle one	1 2	Female Male
3.6	What is the level of education of the <i>adult</i> (15 over) with the highest level of education in this household has had?  Circle one	1 2 3 4	No school Some primary school but not completed Primary school completed Above primary school
3.7	How many people <b>14-64 years</b> in your household (family) can <b>fully work</b> (i.e. are able to work a full day, 5 days a week)? <b>Write number</b>		people

3.8	What is the <i>main</i> material of the <i>roof</i> of your	1	Grass/thatch
	house?	2	Bamboo
	Observe and record. Do not ask question!	3	Zinc/wood/tile
	Circle one		
3.9	What is the <i>main</i> material of the <i>walls</i> of	1	Mainly bamboo
	your house?	2	Mainly wood
	Observe and record. Do not ask question!	3	Mainly bricks
	Circle one		
3.10	Where do the people in your household	1	None/bush/forest
	usually go to the toilet?	2	Communal latrine
	Circle one.	3	Pit latrine or flush/Wet
			(water) latrine
3.11	What is your <i>main</i> fuel for cooking?	1	Sawdust
	Circle one.	2	Wood
		3	Charcoal
		4	Other
3.12	Normally, how many months in one year		
	does your household have enough rice (self-		_  months
	produced) for?		
	Circle one	999	Do not produce own rice
3.13	Where do you <i>usually</i> get your <i>drinking</i>	1	River, stream or dam
	water from?	2	Well/borehole unprotected
	Circle one	3	Mountain source (incl.
			GFS)/Well/borehole
			protected/pump
		4	Other
3.14	How many people in your household have		
3.1	been killed or injured by UXO?		
	Write the number		111 people
3.15	How many people with a <i>disability or chronic</i>		
3.13	illness that prevents them from being fully		     people
	functional currently live in your household?		beoble
	Write the number		
	vviite tile number		

# **FORM 4: UXO CLEARANCE FOR INDIVIDUAL LAND USE**

999 |\_\_|Not applicable to this respondent (please mark ×) (i.e. respondent is **community land (Form 5) or individual task and community land (Form 6) only**)

# Form 4: UXO clearance for individual land use

# Instruction to interviewer:

Read to respondent:

'I would like to ask you about your household's land that has been cleared of UXO **by an outside agency** (i.e. not by your household or local people)? Please answer as truthfully as you can. There are no right or wrong answers. '

#### Instruction to interviewer:

Read all questions unless indicated. <u>Do not read answers unless indicated.</u> Circle answers.

4.1	You told me before that some household's land has been cle that land (i.e. the land that was of UXO) being used now?  Circle one	ared, is	1 2 3	Yes, all of it – comp Yes, some of it – co No – go to form 5	-
4.2	Do you know the <i>main reason</i> w	hy your ed for	1 2 3 4 5 6 7 999	been accidents on Village/district auth	ntaminated/there have my land norities requested it d a plan to use the land of a food for NGO/IO project quested it resettled
4.3	How confident are you that that has been cleared is safe? Read the answers Circle one	he land	1 2 3 4 999	I feel very confident I feel confident I feel confident b careful I don't feel confide Not sure/other/no	out I still have to be
Read 'Can Instru Comp	Instruction to interviewer: I to respondent: you help me complete this table?' uction to interviewer: plete the table for each piece of lan and use type 2. Land use type after clearance clearance (use code)  code)	3. Area cleare	(m²)		
		_  r	m <sup>2</sup>	m <sup>2</sup>     m <sup>2</sup>     m <sup>2</sup>	
	ļ ļ				212

Codes for question 4.4.1 and 4.4.2	
1 Swidden	8 Plantation/ industrial cropping
2 Lowland farming (wet season only)	9 Grass land
3 Lowland farming ( <i>dry</i> season only)	10 Irrigation
4 Lowland farming (wet and dry season)	8 Plantation/industrial cropping
5 Vegetables/fruit	11 Fish pond
	12 House
	13 Other (write)
6 Cash crops	999 Not sure/no answer

**Instruction to interviewer**: complete the questions below according to the codes for the answer to 4.4.2

Covert measurements given by the respondent into tonnes, m<sup>2</sup>, kilos as appropriate.

4.5 (If codes 1-Average yield	per har	vest from	this <i>a</i>	rea of	land	that	has	been	cleare	d <b>before</b>	clearance
Average yield	-	ar from	this ar	ea of	land	that	has	been	cleare	ed <i>after</i>	clearance
							ll		999	not	applicable
4.6 (If code 10 How many m² Average yield   _ _ _	is irrigated per harv	est from	this a	rea of	land	that	has I	been i	irrigate	d <i>before</i>	
Average yield		vest from	n this a	rea of	land				irrigat olicable		clearance
4.7 (If code 11 Average 	) yield _  kilos	per	year	har	vest	of		fish	be	fore	clearance
Average   _ _ _	yield _  kilos	per	year	haı	rvest	C	of	fish	Ċ	ıfter	clearance
4.8 (if code 12	<b>)</b> )						lI		999	not	applicable
Instruction to		r. use cod	les helov	,							
Where	were		you		livi	ng		be	fore		clearance?
How	many	peo	ple	liv	/e		in		your	ŀ	nousehold?
							lI	99	9	not	applicable
Codes for 4.8											
1 Another villa	-										
<ul><li>2 My parents'</li><li>3 Other</li></ul>	nouse										

4.9	If land is has not been used in the past	1	Lack of labour
4.9	-	2	
	year what it the main reason? Circle one		Lack of equipment Weather
	Circle one	3	
		5	Lack of money
		6	Clearance too late
		7	Land not suitable
		8	Land sold
		9	Difficult to look after/not convenient
		999	not applicable/land in use
		Write	Other
4.10	What has been the most significant	1	Feel safer/worry less
	change for your household as a result of	2	Can dig deeper/faster
	having this land cleared?	3	Rice is stronger/more beautiful
	Circle one	5	Have enough/more rice to eat/no need
			to eat tubers/no need to buy rice
		6	Have enough rice/fruit/veg to sell some/
			share with family/friends/monks/at
			parties/at ceremonies
		7	Feel satisfied/do not worry about food
			security
		8	Children will inherit land which is more
			valuable
		9	If we need to we can sell the land for
			more money
		10	No change
		999	Not sure/no answer
		Write	Other
		l	

#### **FORM 5: UXO CLEARANCE: COMMUNITY LAND USE**

999 |\_\_|Not applicable to this respondent (please mark ×) (i.e. respondent is *individual task only* (form 4) or individual and community task (Form 6)

# Form 5: UXO clearance: community land use

#### Instruction to interviewer:

Read to respondent:

'I would like to ask you a few questions about land in village that has been cleared of UXO by an outside agency (i.e. not by your household or local people) for a community project (e.g. road, school, clinic, temple, water, latrines). Please answer as truthfully as you can. There are no right or wrong answers. '

#### Instruction to interviewer:

Read all questions unless indicated. <u>Do not read answers.</u> Circle answers unless indicated.

5.1	Has some of the land in this village been cleared of UXO for a community project? Circle one	1 2	Yes – go to next question No – do not complete the rest of Form 5
5.2	Do you know the <i>main reason</i> why your village was selected for clearance?  Circle one	1 2 3 4 999	Our village is poor The village requested it/part of village plan The district requested it/part of district plan Another organisation (e.g. WFP, NGO) requested it Not sure/no answer/other

# 5.3 Instruction to interviewer:

Read to respondent:

'Can you help me complete this table?'

# Instruction to interviewer:

Complete the table for each piece of land that has been cleared by an outside agency (i.e. not by your household or local people) for the respondent.

5.3.1 Land use type <i>before</i> clearance (use code)	5.3.2 Land use type <i>after</i> clearance (use code)	5.3.3 Year cleared
R1		
R2		_
R3		

Codes for question 5.3.1	Codes for question 5.3.2
Land use type before clearance	Land use type after clearance
1 Road – dirt track, dry season only	1 Road – dirt track, dry season only
2 Road, dry season only	2 Improved road, dry season only
3 Road, all season	3 Improved road, all season
4 School	4 Improved school/new school
5 Water	5 Safe water source
6 Latrines	6 Latrines
7 Fish ponds	7 Fish ponds
8 Community hall/religious site	8 Community hall/religious site

9 Irrigation (weir, dam, canal) 9 Irrigation (weir, dam, canal) 10 Grass land/grazing 10 Grass land/ grazing

11 Swidden 11 Swidden

12 Lowland farming (**wet** season only)
13 Lowland farming (**dry** season only)
14 Lowland farming (**wet** and **dry** season)
15 Lowland farming (**dry** season)
16 Lowland farming (**wet** and **dry** season)
17 Lowland farming (**wet** and **dry** season)

15 Vegetables/fruit 15 Vegetables/fruit 16 Cash crops 16 Cash crops

17 Plantation/ industrial cropping 17 Plantation/ industrial cropping

18 Grass land 18 Grass land

19 Government building 19 Government building

20 House 20 House

21Souksala/hospital21Souksala/hospital22 Not used22 Not used23 Other (write)23 Other (write)

999 Not sure/no answer 999 Not sure/no answer

# Instruction to interviewer:

Read all questions. <u>Do not read answers</u>. Circle answers.

Complete questions 5.4-5.8 for *each* resource mentioned in 5.3.2. Use a *different answer sheet* for each resource.

#### Resource 1

For re	esource 1: code for resource (from 5.3.2)	<u>   </u>	
5.4	Is this still being used?	1	Yes - Go to 5.6 and complete rest of Form
	(enumerator insert name of new	2	5 No - Go to 5.5, then Form 7
	community resource i.e. the resource/	999	Not sure/other/no answer
	resources mentioned in 5.3.2)	other	
	Circle one		
5.5	What is the main reason for the	1	Not convenient/suitable
		2	Difficult to look after
	not being used? (enumerator insert	3	Not needed
	name of new community resource i.e.	4	Has broken
	the resource/ resources mentioned in	5	Lack of money
	5.4)	6	Weather (rain/drought)
	Circle one	7	Lack of labour
		8	Lack of equipment
		9	Poor quality
		999	Not sure/other/no answer
			Go to form 7
5.6	Who maintains <i>the</i> ?	1	Villagers
	(enumerator insert name of new	2	Village authorities
	community resource i.e. the resource/	3	District authorities
	resources mentioned in 5.4)	4	No one
	Circle one	999	Not sure/other/no answer
5.7	Who benefits most from this	1	Female children only
	? (enumerator insert name	2	Male children only
	of new community resource i.e. the	3	Adults (men and women) only
	resource/ resources mentioned in 5.4)	4	Children only
	Circle one	5	Women and children
		6	Men and children
		7	Men only
		8	Women only
		9	Everybody

		10	Nobody
		999	Not sure/other/no answer
5.8	What has been the <i>most significant</i>	1	Rice is stronger/more beautiful/can plant
	change for your household as a result		earlier
	of having this?	2	Can work as labourer on farm
	(enumerator insert name of new	3	Can work as labourer off farm
	community resource i.e. the resource/	4	Feel more satisfied with food security
	resources mentioned in 5.4)	5	Children like to go to school/go more often
		6	Feel healthier
	Circle one	7	Have clean water/save time collecting
		8	water
		9	Can sell produce/more trade
			Can go outside the village/have more
		10	information
			Easier to visit friends/family/go to
		11	parties/ceremonies
			Feel proud/more satisfied/more confident
		12	about life
		13	More trade/can sell things
		999	No change
		Write	Not sure/no answer
			Other

# Resource 2

For re	esource 2: (from 5.3.2)		
5.4	Is this still being used?	1	Yes - Go to 5.6 and complete rest of Form
	(enumerator insert name of new	2	5 No - Go to 5.5, then Form 7
	community resource i.e. the resource/	999	Not sure/other/no answer
	resources mentioned in 5.3)	other	
	Circle one		
5.5	What is the main reason for the	1	Not convenient/suitable
		2	Difficult to look after
	not being used? (enumerator insert	3	Not needed
	name of new community resource i.e.	4	Has broken
	the resource/ resources mentioned in	5	Lack of money
	5.4)	6	Weather (rain/drought)
	Circle one	7	Lack of labour
		8	Lack of equipment
		9	Poor quality
		999	Not sure/other/no answer
			Go to form 7
5.6	Who maintains <i>the</i> ?	1	Villagers
	(enumerator insert name of new	2	Village authorities
	community resource i.e. the resource/	3	District authorities
	resources mentioned in 5.4)	4	No one
	Circle one	999	Not sure/other/no answer
5.7	Who benefits most from this	1	Female children only
	? (enumerator insert name	2	Male children only
	of new community resource i.e. the	3	Adults (men and women) only
	resource/ resources mentioned in 5.4)	4	Children only
	Circle one	5	Women and children
		6	Men and children
		7	Men only
		8	Women only

	10 999 1	Everybody Nobody Not sure/other/no answer Rice is stronger/more beautiful/can plant
nost significant 1		
nold as a result	1	Rice is stronger/more beautiful/can plant
? 2		earlier
	2	Can work as labourer on farm
ame of new 3	3	Can work as labourer off farm
. the resource/ 4	4	Feel more satisfied with food security
5.4) 5	5	Children like to go to school/go more often
6	6	Feel healthier
7	7	Have clean water/save time collecting
8	8	water
9	9	Can sell produce/more trade
		Can go outside the village/have more
10	10	information
		Easier to visit friends/family/go to
1:	11	parties/ceremonies
		Feel proud/more satisfied/more confident
12	12	about life
13	13	More trade/can sell things
99	999	No change
И	Write	Not sure/no answer
		Other
	name of new e. the resource/ 5.4)	ame of new 3 e. the resource/ 4 5.4) 5 6 7 8

Reso	urce 3		
For r	esource 3: (from 5.3.2)    _		
5.4	Is this still being used?	1	Yes – Go to 5.6 and complete rest of Form
	(enumerator insert name of new	2	5 No - Go to 5.5, then Form 7
	community resource i.e. the resource/	999	Not sure/other/no answer
	resources mentioned in 5.3)	other	
	Circle one		
5.5	What is the main reason for the	1	Not convenient/suitable
		2	Difficult to look after
	not being used? (enumerator insert	3	Not needed
	name of new community resource i.e.	4	Has broken
	the resource/ resources mentioned in	5	Lack of money
	5.4)	6	Weather (rain/drought)
	Circle one	7	Lack of labour
		8	Lack of equipment
		9	Poor quality
		999	Not sure/other/no answer
			Go to form 7
5.6	Who maintains the?	1	Villagers
	(enumerator insert name of new	2	Village authorities
	community resource i.e. the resource/	3	District authorities
	resources mentioned in 5.4)	4	No one
	Circle one	999	Not sure/other/no answer
5.7	Who benefits most from this	1	Female children only
	? (enumerator insert name	2	Male children only
	of new community resource i.e. the	3	Adults (men and women) only
	resource/ resources mentioned in 5.4)	4	Children only
	Circle one	5	Women and children
		6	Men and children

	T		
		7	Men only
		8	Women only
		9	Everybody
		10	Nobody
		999	Not sure/other/no answer
5.8	What has been the <i>most significant</i>	1	Rice is stronger/more beautiful/can plant
	change for your household as a result		earlier
	of having this?	2	Can work as labourer on farm
	(enumerator insert name of new	3	Can work as labourer off farm
	community resource i.e. the resource/	4	Feel more satisfied with food security
	resources mentioned in 5.4)	5	Children like to go to school/go more often
		6	Feel healthier
	Circle one	7	Have clean water/save time collecting
		8	water
		9	Can sell produce/more trade
			Can go outside the village/have more
		10	information
			Easier to visit friends/family/go to
		11	parties/ceremonies
			Feel proud/more satisfied/more confident
		12	about life
		13	More trade/can sell things
		999	No change
		Write	Not sure/no answer
			Other
	ı		

# FORM 6: UXO CLEARANCE FOR INDIVIDUAL LAND USE AND COMMUNITY USE

999 |\_\_|Not applicable to this respondent (please mark ×) (i.e. respondent is *community land (Form 5) or individual task (Form 4) only*)

# Form 6: UXO clearance for individual land use and community use

# Instruction to interviewer:

Read to respondent:

'I would like to ask you about **your household's land** that has been cleared of UXO **by an outside agency** (i.e. not by your household or local people). Please answer as truthfully as you can. There are no right or wrong answers. '

#### Instruction to interviewer:

Read all questions unless indicated. <u>Do not read answers unless indicated.</u> Circle answers.

6.1	You told me before that some of the land	1	Yes, all of it
	that belongs to your household's has	2	Yes, some of it
	been cleared, is that land (i.e. the land	3	No
	that was cleared of UXO) being used		
	now?		
	Circle one		
6.2	Do you know the <i>main reason</i> why your	1	My household is poor/food insecure
	land was selected for clearance?	2	Our land is very contaminated/there have
	Circle one	3	been accidents on my land
		4	Village/district authorities requested it
		5	I/my household had a plan to use the
		6	land
			It was part of a food for
		7	work/government/NGO/IO project
		8	I/my household requested it
		999	My household was resettled
			Not sure/other/no answer
6.3	How <i>confident</i> are you that the land that	1	I feel very confident
	has been cleared is <i>safe</i> ?	2	I feel confident
	Read the answers	3	I feel confident but I still have to be
	Circle one	4	careful
		999	I don't feel confident
			Not sure/other/no answer

# 6.4 Instruction to interviewer:

Read to respondent:

'Can you help me complete this table?'

# Instruction to interviewer:

Complete the table for each piece of land that has been cleared **by an outside agency** (i.e. not by your household or local people) for the respondent.

6.4.1 Land use type before clearance (use code)	6.4.2 Land use type after clearance (use code)	6.4.3 Area (m²) cleared	6.4.4 Area (m²) being used <i>now</i>	6.4.5Year cleared
R1		m²	_ _  m²	_ _  _
R2		_   m²	_   m²	_ _
R3		_ m²	_ m²	

Codes for question 6.4.1 and 6.4.2					
1 Swidden 2 Lowland farming ( <i>wet</i> season only) 3 Lowland farming ( <i>dry</i> season only) 4 Lowland farming ( <i>wet and dry</i> season) 5 Vegetables/fruit	8 Plantatio 9 Grass lan 10 Irrigatio 8 Plantatio 11 Fish por 12 House	d n n/ industr nd			
6 Cash crops	13 Other (v 999 Not su		wer		
(If codes 1-8 for <b>6.4.1</b> and <b>6.4.2</b> ):  Instruction to interviewer: complete the quience 6.4.2  Covert measurements given by the respondent					the answer to
Average yield per harvest from this are	ea of land	that has	been cle	eared <i>bef</i> o	<b>ore</b> clearance
Average yield per year from this area     tonnes	a of land				<i>ter</i> clearance
6.6 (If code 10 <b>6.4.1 and 6.4.2</b> )  How many m <sup>2</sup> is irrigated for        Average yield per harvest from this are       tonnes  Average yield per harvest from this are       tonnes	ea of land t	usehold hat has that has		s irrigati gated <b>bef</b> o	<i>ore</i> clearance
6.7 (If code 11 <b>6.4.1 and 6.4.2</b> ) Average yield per year	harvest	of	fish	before	clearance
Average yield per year	harvest	of	fish	after	clearance
6.8 (if code 12 <b>6.4.1</b> and <b>6.4.2</b> )		999	not applica	able	I_I
Instruction to interviewer: use codes below Where were you	livir	ng	befor	e	clearance?
 How many people 	live	in	yo	ur	household?
Codes for 6.8		ll	999	not	applicable
1 Another village					
2 My parents' house					
3 Other					

6.9	If cleared land is <b>not being used now</b>	1	Lack of labour
	what it the main reason?	2	Lack of equipment
	Circle one	3	Weather (rain/drought)
		5	Lack of money
		6	Clearance too late
		7	Land not suitable
		8	Land sold
		9	Difficult to look after/not convenient/not
			suitable
		10	Not needed
		999	Don't know/not sure
		Write	Other
6.10	What has been the <i>most significant</i>	1	Feel safer/worry less
	change for your household as a result	2	Can dig deeper/faster
	of having this land cleared?	3	Rice is stronger/more beautiful
	Circle one	5	Have enough/more rice to eat/no need to
			eat tubers/no need to buy rice
		6	Have enough rice/fruit/veg to sell some/
			share with family/friends/monks/at
			parties/at ceremonies
		7	Feel satisfied/do not worry about food security
		8	Children will inherit land which is more valuable
		9	If we need to sell the land we will get more
			money
		10	No change
		999	Not sure/no answer/not applicable
		Write	Other

# Instruction to interviewer:

Read to respondent:

'Now I would like to ask you a few questions about land in village that has been cleared of UXO **by an outside agency** (i.e. not by your household or local people) for a community project (e.g. road, school, clinic, temple, water, latrines, grazing, and community agriculture). Please answer as truthfully as you can. There are no right or wrong answers. '

# Instruction to interviewer:

Read all questions unless indicated. <u>Do not read answers</u>. Circle answers unless indicated.

6.11	Has some of the land in this village been cleared of UXO by an outside agency (i.e. not by your household or local people) for a community project? Circle one		Yes – go to next question No – go to Form 7
6.12	What year was the clearance?  Write the year		_ _
6.13	Do you know the <i>main reason</i> why your village was selected for clearance?	1 2	Our village is poor The village requested it/part of village

Circle one	3	plan
	4	The district requested it/part of district
		plan
	999	Another organisation (e.g. WFP, NGO)
		requested it
		Not sure/no answer/other

# 6.14 Instruction to interviewer:

Read to respondent:

'Can you help me complete this table?'

# Instruction to interviewer:

Complete the table for each piece of land that has been cleared **by an outside agency** (i.e. not by your household or local people) for the village.

6.14.1 Land use type <i>before</i>	6.14.2 Land use type <i>after</i>	6.14.3 Year cleared
clearance (use code)	clearance (use code)	
		_
		_
		1 1 11 1 1

Codes for question 6.14.1

Codes for question 6.14.1

Land use type before clearance	Land use type after clearance
1 Road – dirt track, dry season only	1 Road – dirt track, dry season only
2 Road, dry season only	2 Improved road, dry season only
3 Road, all season	3 Improved road, all season
4 School	4 Improved school/new school
5 Water	5 Safe water source
6 Latrines	6 Latrines
7 Fish ponds	7 Fish ponds
8 Community hall/religious site	8 Community hall/religious site
9 Irrigation (weir, dam, canal)	9 Irrigation (weir, dam, canal)
10 Grass land/grazing	10 Grass land/ grazing
11 Swidden	11 Swidden
12 Lowland farming (wet season only)	12 Lowland farming (wet season only)
13 Lowland farming ( <i>dry</i> season only)	13 Lowland farming ( <i>dry</i> season only)
14 Lowland farming (wet and dry season)	14 Lowland farming (wet and dry season)
15 Vegetables/fruit	15 Vegetables/fruit
16 Cash crops	16 Cash crops
17 Plantation/industrial cropping	17 Plantation/ industrial cropping
18 Grass land	18 Grass land
19 Government building	19 Government building
20 House	20 House
21Souksala/ hospital	21Souksala/hospital
22 Not used	22 Not used
23 Other (write)	23 Other (write)
999 Not sure/no answer	999 Not sure/no answer

# Instruction to interviewer:

Read all questions. <u>Do not read answers</u>. Circle answers.

Complete questions 6.15-6.19 for *each* resource mentioned in 5.3.2. Use a *different answer sheet* for each resource.

Resource 1
For resource 1: code for resource (from 6.14.2) |\_\_||\_\_|

6.15	Is this still being used?	1	Vos. Co to 6.17 and somplete rost of
0.15	Is this still being used?	1	Yes - Go to 6.17 and complete rest of
	(enumerator insert name of new	_	section 4
	community resource i.e. the resource/	2 999	No - <i>Go to 6.16</i>
	resources mentioned in 6.14)  Circle one	other	Not sure/other/no answer
C 1C			Not convenient/suitable
6.16	What is the main reason for the	1 2	Not convenient/suitable Difficult to look after
	not being used? (onumerator insert	3	Not needed
	not being used? (enumerator insert	_	
	name of new community resource i.e.	4	Has broken
	the resource/ resources mentioned in	5	Lack of money
	6.14)	6	Weather (rain/drought)
	Circle one	7	Lack of labour
		8	Lack of equipment
		9	Poor quality
		999	Not sure/other/no answer
6.17	Who maintains <b>the</b> ?	1	Villagers
	(enumerator insert name of new	2	Village authorities
	community resource i.e. the resource/	3	District authorities
	resources mentioned in 6.14)	4	No one
	Circle one	999	Not sure/other/no answer
6.18	Who benefits most from this	1	Female children only
	?(enumerator insert	2	Male children only
	name of new community resource i.e.	3	Adults (men and women) only
	the resource/ resources mentioned in	4	Children only
	6.14)	5	Women and children
	Circle one	6	Men and children
		7	Men only
		8	Women only
		9	Everybody
		10	No one
		999	Not sure/other/no answer
6.19	What has been the <i>most significant</i>	1	Rice is stronger/more beautiful/can plant
	change for your household as a result		earlier
	of having this?	2	Can work as labourer on farm
	(enumerator insert name of new	3	Can work as labourer off farm
	community resource i.e. the resource/	4	Feel more satisfied with food security
	resources mentioned in 6.14)	5	Children like to go to school/go more often
		6	Feel healthier
	Circle one	7	Have clean water/save time collecting
		8	water
		9	Can sell produce/more trade
			Can go outside the village/have more
		10	information
			Easier to visit friends/family/go to
		11	parties/ceremonies
			Feel proud/more satisfied/more confident
		12	about life
		13	More trade/can sell things
		999	No change
		Write	Not sure/no answer

	Other

# Resource 2 For resource 1: code for resource (from 6.14.2) |\_\_||\_\_|

6.15	Is this still being used?	1	Vos. Go to 6.17 and complete rost of
0.15	Is this still being used? (enumerator insert name of new	1	Yes – Go to 6.17 and complete rest of section 4
	community resource i.e. the resource/	2	No - <b>Go to 6.16</b>
	resources mentioned in 6.14)	999	Not sure/other/no answer
	Circle one	Other	Not sure/other/file answer
6.16	What is the main reason for the	1	Not convenient/suitable
0.10	What is the main reason for the	2	Difficult to look after
	not being used? (enumerator insert	3	Not needed
	name of new community resource i.e.	4	Has broken
	the resource/ resources mentioned in	5	Lack of money
	6.14)	6	Weather (rain/drought)
	Circle one	7	Lack of labour
		8	Lack of equipment
		9	Poor quality
		999	Not sure/other/no answer
6.17	Who maintains <i>the</i> ?	1	Villagers
	(enumerator insert name of new	2	Village authorities
	community resource i.e. the resource/	3	District authorities
	resources mentioned in 6.14)	4	No one
	Circle one	999	Not sure/other/no answer
6.18	Who benefits most from this	1	Female children only
	?(enumerator insert	2	Male children only
	name of new community resource i.e.	3	Adults (men and women) only
	the resource/ resources mentioned in	4	Children only
	6.14)	5	Women and children
	Circle one	6	Men and children
		7	Men only
		8	Women only
		9	Everybody
		10	No one
		999	Not sure/other/no answer
6.19	What has been the <i>most significant</i>	1	Rice is stronger/more beautiful/can plant
	change for your household as a result		earlier
	of having this?	2	Can work as labourer on farm
	(enumerator insert name of new	3	Can work as labourer off farm
	community resource i.e. the resource/	4	Feel more satisfied with food security
	resources mentioned in 6.14)	5	Children like to go to school/go more often
	Circle and	6	Feel healthier
	Circle one	7	Have clean water/save time collecting
		8 9	water Can sell produce/more trade
		9	Can go outside the village/have more
		10	information
		10	Easier to visit friends/family/go to
		11	parties/ceremonies
			Feel proud/more satisfied/more confident
		12	about life
		13	More trade/can sell things
		999	No change
		555	110 change

	Write	Not sure/no answer
		Other

# Resource 3 For resource 1: code for resource (from 6.14.2) |\_\_||\_\_|

C 1 F	Objective and the same of the	4	Vac. Co. to C.17 and consulate most of
6.15	Is this still being used?	1	Yes - Go to 6.17 and complete rest of
	(enumerator insert name of new	_	section 4
	community resource i.e. the resource/	2	No - <i>Go to 6.16</i>
	resources mentioned in 6.14)	999	Not sure/other/no answer
6.46	Circle one	Other	
6.16	What is the main reason for the	1	Not convenient/suitable
		2	Difficult to look after
	not being used? (enumerator insert	3	Not needed
	name of new community resource i.e.	4	Has broken
	the resource/ resources mentioned in	5	Lack of money
	6.14)	6	Weather (rain/drought)
	Circle one	7	Lack of labour
		8	Lack of equipment
		9	Poor quality
		999	Not sure/other/no answer
6.17	Who maintains <i>the</i> ?	1	Villagers
	(enumerator insert name of new	2	Village authorities
	community resource i.e. the resource/	3	District authorities
	resources mentioned in 6.14)	4	No one
	Circle one	999	Not sure/other/no answer
6.18	Who benefits most from this	1	Female children only
	?(enumerator insert	2	Male children only
	name of new community resource i.e.	3	Adults (men and women) only
	the resource/ resources mentioned in	4	Children only
	6.14)	5	Women and children
	Circle one	6	Men and children
		7	Men only
		8	Women only
		9	Everybody
		10	No one
		999	Not sure/other/no answer
6.19	What has been the <i>most significant</i>	1	Rice is stronger/more beautiful/can plant
	change for your household as a result		earlier
	of having this?	2	Can work as labourer on farm
	(enumerator insert name of new	3	Can work as labourer off farm
	community resource i.e. the resource/	4	Feel more satisfied with food security
	resources mentioned in 6.14)	5	Children like to go to school/go more often
		6	Feel healthier
	Circle one	7	Have clean water/save time collecting
		8	water
		9	Can sell produce/more trade
			Can go outside the village/have more
		10	information
			Easier to visit friends/family/go to
		11	parties/ceremonies
			Feel proud/more satisfied/more confident
		12	about life
		13	More trade/can sell things
		999	No change

	Write	Not sure/no answer
		Other

### FORM 7: IMPACT OF UXO CLEARANCE ON LIVELIHOODS

#### Instruction to interviewer:

Form 7 is for all respondents who have received UXO clearance (individual or community)

#### Instruction to interviewer:

Read to respondent: I am going to ask you some questions about whether things have changed for better or worse in your household since the clearance activities we have been talking about were completed.

#### Form 7: Impact of UXO clearance on livelihoods

#### *Instruction to interviewer:*

Read to respondent:

'Now I would like to ask you some questions about how things have changed for household since the clearance tasks undertaken *by an outside agency* (i.e. not by your household or local people) were completed. Please answer as truthfully as you can. There are no right or wrong answers. I will read the responses. Please tell me which response best describes the situation for your household. If you would like me to read the question or any of the responses again please ask me.'

#### Instruction to interviewer:

Read all questions. Circle one answer for each question.

#### Social

#### Instruction to interviewer:

Read to respondent:

'Now I would like to ask you about your household's social activities and how things have changed for your household since the clearance tasks were completed. If you would like me to read the question or any of the responses again please ask me. I will now ask you for each question how things have changed for household compared to before the clearance activities we talked about earlier'

Read all questions unless indicated. **Do not read the answers unless the respondent needs some** prompting. Text in brackets () are prompts only, do not read unless checking the respondents answer.

Circle one answer for each question.

Read: Compared to before (year/pc land use – name resource) and now,

S1	Compared to before (year/pc land use -	1	A lot less
	name resource) and now, when there is a	2	Less
	social event (e.g. wedding, a ceremony, a	3	More
	religious event or a funeral) in your	4	A lot more Does not apply to my
	village), how easy is it for you to		household (i.e. no change/we have
	participate?		never gone to social events/ same)
		999	
S2	Compared to before (year/pc land use -	1	A <i>lot less</i> (i.e. we can go outside of our
	name resource) and now, on average in		village a lot less times than before/it is
	one month how often in is your household		harder)
	able to visit friends and relatives outside of	2	Less
	your village?	3	More
		4	A <i>lot more</i> (i.e. we can go outside of
			our village a lot more times than

			hafara/it is assign)
		000	before/it is easier)
		999	Does not apply to my household (i.e. no
			change/we have never gone outside of
			the village/ same)
S3	Compared to before (year/pc land use –	1	A <i>lot less</i> (i.e. we have a lot less extra
	name resource) and now, how much food		food for other people)
	(e.g. fruit, vegetables, rice, chilli) does your	2	Less
	household have to <b>share</b> with other	3	More
	villagers/friends when they need it?	4	A <i>lot more</i> (i.e. we have a lot extra
			food for other people if they need it)
		999	Does not apply to my household (i.e.
			no change/we do not give food to
			others/ same)
S4	Compared to before (year/pc land use -	1	A lot less (i.e. we have a lot less
	name resource) and now, how much		information from outsiders than
	information is available to your household	2	before)
	from traders, people in the market,	3	Less
	people coming to your village on market	4	More
	prices, new ideas, new farming methods		A <i>lot more</i> (i.e. we have a lot more
	etc.?	999	information from outsiders than
			before)
			Does not apply to my household (i.e.
			no change/ same)
<b>S</b> 5	Compared to before (year/pc land use –	1	A lot less (i.e. before we used to go to
	name resource) and now, on average in		the market quite often but now we go
	one month how often do members of		to the market a lot less)
	your household go to the markets or	2	Less
	other local events outside of your village?	3	More
		4	A lot more (i.e. before we rarely went
			to the but now we go to the market a
		999	lot more)
			Does not apply to my household (i.e.
			no change/ same)
S6	Compared to before (year/pc land use -	1	A lot less (i.e. before we used to go to
	name resource) and now, on average in		the district quite often but now we go
	one month how often do members of		to the market a lot less)
	your household go to the district centre	2	Less
	and to meet new people outside of your	3	More
	village?	4	A lot more (i.e. before we rarely went
			to the but now we go to the market a
		999	lot more)
			Does not apply to my household (i.e.
			no change/ same)
S7	Compared to before (year/pc land use -	1	Not <b>at all</b> involved with or part of
	name resource) and now, how much do		village's life and its activities
	you feel your household is <i>involved and</i>	2	Not involved with or part of village's
	part of village life?		life and its activities
	, , , , , , , , , , , , , , , , , , , ,	3	M <i>ore</i> involved with and part of <i>village's</i>
		_	life and its activities
		4	M <b>uch more</b> involved and part of
			village's life and its activities
		999	Does not apply to my household (i.e.
			no change/ same)
S8	Compared to before (year/pc land use –	1	A lot less
33	name resource) and now, how confident	2	Less
	are you that there <i>are people in your</i>	3	More
	are you mat mere are people in your	ر	HIVE

community who would	help	your	4	A lot more	
household if needed?			999	Does not apply to my household (i.e.	
				no change/ same)	

# Physical

# Instruction to interviewer:

Read to respondent:

'Now I would like to ask you about your household's access to physical assets and how things have changed for your household since the clearance tasks were completed. If you would like me to read the question or any of the responses again please ask me. I will now ask you for each question how things have changed for household compared to before the clearance activities we talked about earlier'

Read all questions unless indicated. Do not read the answers unless the respondent needs some prompting. Text in brackets () are prompts only, do not read unless checking the respondents answer.

Circle *one* answer for each question.

**Read Compared to b**efore (year/pc land use – name resource) and now.

neau (	Compared to before (year/pc land use – name	resour	ce) and now
P1	Before (year/pc land use – name resource)	1	A <i>lot harder</i> (i.e. it is harder for us to
	and now, how has access for your		get to the nearest health centre – e.g.
	household to get to the nearest health		road is worse than before, bad,
	centre (souksala, e.g., at cluster level)		transport is worse than before)
	changes?	2	Harder
		3	Easier
		4	Much easier (i.e. it is much easier for
			us to get to the nearest health centre –
			e.g. have better road/transport)
		5	Does not apply to my household (i.e.
			no change/ same)
P2	Does your household have school age	1	A <i>lot worse</i> (i.e. the quality of the
	children? If no, go to 7.16. If yes, read:		school building and facilities is much
	Before (year/pc land use – name resource)		worse than before)
	and now how has <i>access to school</i> for your	2	Worse
	household's children changed?	3	Better
	_	4	A <i>lot better</i> (i.e. the quality of the
			school building and facilities is a lot
			better/improved than before)
		999	Does not apply to my household i.e.
			do not have children at school or there
			is no change/ same)
Р3	Compared to before (year/pc land use -	1	A <i>lot worse</i> (i.e. we have a lot less
	name resource) and now, how has your		clean water than before)
	household's access to <i>clean drinking</i>	2	Worse
	water changed (e.g. have a well, borehole,	3	Better
	GFS, do not use the river water anymore)	4	A <i>lot better</i> (i.e. we have a lot more
			clean water than before)
		999	Does not apply to my household (i.e.
			no change/ same)
P4	Compared to before (year/pc land use –	1	A <i>lot harder</i> (i.e. it is harder for us to
	name resource) and now, how has access		get to the nearest health centre – e.g.
	for your household to go the district or		road is bad, no transport)
	provincial centre changed?	2	Harder
		3	Easy
		4	Easier (i.e. it is easier for us to get to
			the nearest health centre – e.g. have
			road/transport)
		999	Does not apply to my household (i.e.

			no change/ same)
P5	Compared to before (year/pc land use -	1	A lot worse (i.e. we have a lot less
	name resource) and now, how have your		things, e.g. we had to sell some, give
	household's physical assets changed (e.g.,		them back/give them to someone else)
	tractor, motorbike, plough, milling	2	Worse
	machine)?	3	Better
	7	4	A <i>lot better</i> (i.e. we have a lot more
			things than before – we can borrow,
		999	buy, rent) Does not apply to my
			household (i.e. no change/ same)
P6	Compared to before (year/pc land use -	1	Not at all (i.e. no improvements to
	name resource) and now, how much has		your house)
	the <i>quality</i> of your household's house	2	A little (i.e. done some repairs, have
	changed (e.g. new roof, some timber or		got some material to improve your
	stone or metal sheeting)?		house but not done yet)
		3	Quite a lot (i.e. have improved or re-
			done the roof, have some more wood
			for the walls, improved the floor)
		4	A <i>lot</i> (i.e. you have made
			improvements to the walls and the
			roof/may have made the house larger
		999	and/or more rooms)
			Does not apply to my household (i.e.
			no change or do not have own house/
			same)
P7	Compared to before (year/pc land use –	1	A lot less
	name resource) and now, how much basic	2	Less
	household equipment do you have (e.g.	3	More
	cooking pots, mattress, blankets, table)	4	A lot more
		999	Does not apply to my household (i.e.
			no change/ same)
P8	Compared to before (year/pc land use –	1	A lot less (i.e. we have a lot less water
	name resource) and now, how much		from irrigation than before/irrigation
	irrigation for your farmland does your		was OK before but now does not work)
	household have?	2	Less
		3	More
		4	A lot more (i.e. we have a lot more
			water from irrigation/irrigation works
		999	well)
			Does not apply to my household (i.e.
			no change/ same)

### Financial

# Instruction to interviewer:

#### Read to respondent:

'Now I would like to ask you about your household's access to financial assets and how things have changed for your household since the clearance tasks were completed. If you would like me to read the question or any of the responses again please ask me. I will now ask you for each question how things have changed for household compared to before the clearance activities we talked about earlier'

Read all questions unless indicated. Do not read the answers unless the respondent needs some prompting. Text in brackets () are prompts only, do not read unless checking the respondents answer.

Circle *one* answer for each question.

Read Compared to before (year/pc land use - name resource) and now,

F1   Co	npared to	<b>b</b> efore	(year/pc la	and use –	1	A lot	less	(i.e. It	f I needed	l to sel	l it I
---------	-----------	----------------	-------------	-----------	---	-------	------	----------	------------	----------	--------

F2	name resource) and now, how has the (financial) value of the land that has been cleared (of UXO) for your household changed (increased or decreased)?  Compared to before (year/pc land use – name resource) and now, on average in one month how much produce (e.g. vegetables/fruit/ eggs/bamboo/frogs) or goods (e.g. handicrafts/baskets) can you sell for extra income (e.g. not because of an emergency)?	2 3 4 999 1 2 3 4	could sell it for a lot less than before)  Less  More  A lot more (i.e. If I needed to sell it I could sell it for a lot more than before)  Does not apply to my household (e.g. my own land has not been cleared, only community land/same)  A lot less (i.e. before we could sell some quite often but now we rarely sell any)  Less  More  A lot more (i.e. we sell a lot more e.g. to traders, visitors than before  Does not apply to my household (i.e. no change/same)
F3	Compared to before (year/pc land use – name resource) and now, in on average one month how much money can your household save or invest (e.g. in a buffalo) to use in the future?	1 2 3 4 999	A <i>lot less</i> (i.e. before we could save a little but now we cannot save at all)  Less  More  A <i>lot more</i> (i.e. we can save at least double the amount we could save before)  Does not apply to my household (i.e. no change/ same)
F4	Compared to before (year/pc land use – name resource) and now, how much does your household have to meet its basic needs (things you <i>must</i> have, e.g. Rice, chilli, MSG))?	1 2 3 4	A <i>lot less</i> (i.e. before we had a little but now we have no money)  Less  More  A <i>lot more</i> (i.e. we have at least double the amount of money we had before for basic items)  Does not apply to my household (i.e. no change/ same)
F5	How much do you worry about your household having enough to meet its basic needs (things you must have) in the future?	1 2 3 4 999	A <i>lot more</i> (i.e. before I did not worry, we had enough)  More  Less  A <i>lot less</i> (i.e. I am more confident now that we will have enough and I do not worry so much)  Does not apply to my household (i.e. no change/do not worry about the future/ same)
F6	Compared to before (year/pc land use – name resource) and now, On average in one month how much money does your household have to buy <i>non-food items</i> (e.g. ability to buy household items or work tools)?	1 2 3 4 999	A <i>lot less</i> (i.e. before we had a little but now we have no money for non-basic items)  Less  More  A <i>lot more</i> (i.e. we have at least double the amount of money we had before for non-basic items)  Does not apply to my household (i.e. no change/ same)

F7	Compared to before (year/pc land use – name resource) and now, in on average in	1	A lot less Less
	one year how <i>much more rice</i> (or other	2	More
	crop/most important crop) have you had	3	A lot more
	(for own consumption or sell)?	4	Does not apply to my household (i.e.
	(	-	no change/ same)
		999	
F8	Does your household have livestock? If	1	A lot less
	yes, read: Compared to before (year/pc	2	Less
	land use – name resource) and now, how	3	More
	has your access to <i>healthy livestock</i>	4	A lot more
	changed? (for own consumption or sell)?	999	Does not apply to my household (i.e.
			no change/ same)
F9	Compared to before (year/pc land use –	1	A lot more (i.e. before we did not have
	name resource) and now, on average one		to sell possessions very much to pay for
	<i>year</i> how often has your household have		an emergency)
	had to sell your possessions to pay for an	2	More
	emergency (e.g. illness, accident, floods,	3	Less
	drought, pests, fire)?	4	A <i>lot less</i> i.e. before we had to sell
			possessions a lot to pay for an
		999	emergency)
			Does not apply to my household (i.e.
F 10	Commenced to before /very/re land ver	1	no change/ same)
F.10	Compared to before (year/pc land use –	1	A lot less
	name resource) and now, how has the	2	Less
	number of traders coming to your village to buy your household's produce	3	More A lot more
	changed?	999	Does not apply to my household (i.e.
	changeu:	333	no change/ same)
			no change/ same/
F11	Have you or other household members	1	A lot more
	ever <b>borrowed money</b> for basic needs (i.e.	2	More
	things you must have) If no, go to 7.31, if	3	Less
	yes, read: Compared to <b>b</b> efore (year/pc	4	A lot less
	land use – name resource) and now, how	999	Does not apply to my household (i.e.
	<b>often have you had to borrow money</b> to		no change/ same)
	buy food?		

# Human

# Instruction to interviewer:

# Read to respondent:

'Now I would like to ask you some questions about your household's situation and how things have changed for your household since the clearance tasks were completed. If you would like me to read the question or any of the responses again please ask me. I will now ask you for each question how things have changed for household compared to before the clearance activities we talked about earlier'

Read all questions unless indicated. Do not read the answers unless the respondent needs some prompting. Text in brackets () are prompts only, do not read unless checking the respondents answer.

Circle *one* answer for each question.

<b>Read: Compared to b</b> efore (year/pc land use – name reso
--

H1	Does your household have school age	1	A <i>lot more</i> (i.e. before they missed <i>a</i>
	children? If no, go to 7.2. If yes, read:		<i>few days</i> in a semester but now there

	Compared to before (year/pc land use –		are many days they <i>do not</i> go to school)
	name resource) and now, how often in	2	More
	one semester do children in your	3	Less
	household <i>miss</i> school for <i>one week or</i>	4	A <i>lot less</i> (i.e. before they missed many
	more due to poor health, tiredness or		days but now they go to school a lot
	hunger?		more days in a semester)
		999	Does not apply to my household (i.e. do
			not have children at school or there is
			no change/same)
H2	Compared to before (year/pc land use -	1	A <i>lot less</i> (i.e. before I was confident
	name resource) and now, overall how		about the future but now I am less
	confident do you feel about your		confident/worry more about the future)
	household's ability to meet its food	2	Less More
	needs?	3	Much more (i.e. before I was not
		4	confident but now I feel more
			confident/better/do not worry very
			much about my household's future)
			Does not apply to my household (i.e. do
		999	not think about the future/ same)
Н3	Compared to before (year/pc land use –	1	A <b>lot more</b> (i.e. before worked every
	name resource) and now, how often in		day /only missed a few days in a month
	one month have adults in your household		due to illness but now there are <i>many</i>
	not been able to work (farm or sell		days they do not work)
	labour) for two days or more because of	2	More
	illness (not including pregnancy)?	3	Less
	54 ( 54 54 6 F 56 5 7)	4	A <i>lot less</i> (i.e. they can work a lot more
			than before, are not often ill)
		999	Does not apply to my household (i.e. no
			one in my household works or no
			change/ same)
H4	Compared to before (year/pc land use -	1	A <i>lot less</i> (i.e. I am less proud)
	name resource) and now, <i>overall h</i> ow	2	Less
	much <i>pride</i> do you feel for your	3	More
	household's achievements (e.g. at work,	4	A <i>lot more</i> (i.e. I am more proud)
	at school, learning new skills)?	999	Does not apply to my household (i.e. no
	, ,		change/ same)
H.5	Has your household ever hired people to	1	A lot less (i.e. before employed other
	work for you? If yes, read: Compared to		
	, ,		people but now not at all)
	<b>b</b> efore (year/pc land use – name resource)	2	people but now not at all) L <i>ess</i>
		2	
1	<b>b</b> efore (year/pc land use – name resource)		Less
	<b>b</b> efore (year/pc land use – name resource) and now, <i>how often are you able to hire</i>	3	Less More
	<b>b</b> efore (year/pc land use – name resource) and now, <b>how often are you able to hire</b> <b>other people</b> (e.g. pay by rice or money or	3	Less More A lot more (i.e. have more income or
	before (year/pc land use – name resource) and now, how often are you able to hire other people (e.g. pay by rice or money or some other way) to work for you because	3 4	Less More A lot more (i.e. have more income or land and employ people a lot more)
	before (year/pc land use – name resource) and now, how often are you able to hire other people (e.g. pay by rice or money or some other way) to work for you because	3 4	Less More A lot more (i.e. have more income or land and employ people a lot more) Does not apply to my household (i.e.
Н6	before (year/pc land use – name resource) and now, how often are you able to hire other people (e.g. pay by rice or money or some other way) to work for you because	3 4	Less More A lot more (i.e. have more income or land and employ people a lot more) Does not apply to my household (i.e. no change/ we have never employed
Н6	before (year/pc land use – name resource) and now, how often are you able to hire other people (e.g. pay by rice or money or some other way) to work for you because you have more income/more land?	3 4 999	Less More A lot more (i.e. have more income or land and employ people a lot more) Does not apply to my household (i.e. no change/ we have never employed people/ same)
Н6	before (year/pc land use – name resource) and now, how often are you able to hire other people (e.g. pay by rice or money or some other way) to work for you because you have more income/more land?  Compared to before (year/pc land use –	3 4 999	Less More A lot more (i.e. have more income or land and employ people a lot more) Does not apply to my household (i.e. no change/ we have never employed people/ same) A lot less (i.e. I am less satisfied)
Н6	before (year/pc land use – name resource) and now, how often are you able to hire other people (e.g. pay by rice or money or some other way) to work for you because you have more income/more land?  Compared to before (year/pc land use – name resource) and now, overall how	3 4 999	Less More A lot more (i.e. have more income or land and employ people a lot more) Does not apply to my household (i.e. no change/ we have never employed people/ same) A lot less (i.e. I am less satisfied) Less
Н6	before (year/pc land use – name resource) and now, how often are you able to hire other people (e.g. pay by rice or money or some other way) to work for you because you have more income/more land?  Compared to before (year/pc land use – name resource) and now, overall how satisfied do you feel with your	3 4 999 1 2 3	Less More A lot more (i.e. have more income or land and employ people a lot more) Does not apply to my household (i.e. no change/ we have never employed people/ same) A lot less (i.e. I am less satisfied) Less More
Н6	before (year/pc land use – name resource) and now, how often are you able to hire other people (e.g. pay by rice or money or some other way) to work for you because you have more income/more land?  Compared to before (year/pc land use – name resource) and now, overall how satisfied do you feel with your	3 4 999 1 2 3 4	Less More A lot more (i.e. have more income or land and employ people a lot more) Does not apply to my household (i.e. no change/ we have never employed people/ same) A lot less (i.e. I am less satisfied) Less More A lot more (i.e. I am more satisfied)
H6	before (year/pc land use – name resource) and now, how often are you able to hire other people (e.g. pay by rice or money or some other way) to work for you because you have more income/more land?  Compared to before (year/pc land use – name resource) and now, overall how satisfied do you feel with your	3 4 999 1 2 3 4	Less More A lot more (i.e. have more income or land and employ people a lot more) Does not apply to my household (i.e. no change/ we have never employed people/ same) A lot less (i.e. I am less satisfied) Less More A lot more (i.e. I am more satisfied) Does not apply to my household (i.e. no
	before (year/pc land use – name resource) and now, how often are you able to hire other people (e.g. pay by rice or money or some other way) to work for you because you have more income/more land?  Compared to before (year/pc land use – name resource) and now, overall how satisfied do you feel with your household's current health?	3 4 999 1 2 3 4 999	Less More A lot more (i.e. have more income or land and employ people a lot more) Does not apply to my household (i.e. no change/ we have never employed people/ same) A lot less (i.e. I am less satisfied) Less More A lot more (i.e. I am more satisfied) Does not apply to my household (i.e. no change/ same)
	before (year/pc land use – name resource) and now, how often are you able to hire other people (e.g. pay by rice or money or some other way) to work for you because you have more income/more land?  Compared to before (year/pc land use – name resource) and now, overall how satisfied do you feel with your household's current health?  Compared to before (year/pc land use –	3 4 999 1 2 3 4 999	Less More A lot more (i.e. have more income or land and employ people a lot more) Does not apply to my household (i.e. no change/ we have never employed people/ same) A lot less (i.e. I am less satisfied) Less More A lot more (i.e. I am more satisfied) Does not apply to my household (i.e. no change/ same) A lot less
	before (year/pc land use – name resource) and now, how often are you able to hire other people (e.g. pay by rice or money or some other way) to work for you because you have more income/more land?  Compared to before (year/pc land use – name resource) and now, overall how satisfied do you feel with your household's current health?  Compared to before (year/pc land use – name resource) and now, how much rice	3 4 999 1 2 3 4 999	Less More  A lot more (i.e. have more income or land and employ people a lot more)  Does not apply to my household (i.e. no change/ we have never employed people/ same)  A lot less (i.e. I am less satisfied)  Less More  A lot more (i.e. I am more satisfied)  Does not apply to my household (i.e. no change/ same)  A lot less  Less

			change/ same)
Н8	Compared to before (year/pc land use -	1	A lot less
	name resource) and now, how concerned	2	Less
	are you about people in your household	3	More
	having UXO injury?	4	A lot more
		999	Does not apply to my household (i.e. no
			change/ same)
Н9	Compared to before (year/pc land use -	1	A lot less
	name resource) and now, how satisfied	2	Less
	are you with your sense of safety for your	3	More
	household?	4	A lot more
		999	Does not apply to my household (i.e. no
			change/ same)
H10	Compared to before (year/pc land use –	1	A lot less
	name resource) and now, how concerned	2	Less
	are you about children in your household	3	More
	having UXO injury?	4	A lot more
		999	Does not apply to my household (i.e. no
			change/ same)
H11	Compared to before (year/pc land use –	1	A lot less
	name resource) and now, how often do	2	Less
	you find ERW in the areas where you go	3	More
	on a regular basis?	4	A lot more
		999	<b>Does not apply to my household</b> (i.e. no
			change/ same)
H12	Compared to before (year/pc land use –	1	A lot less
	name resource) and now, how often do	2	Less
	the children in your household report	3	More
	seeing UXO?	4	A lot more
		999	Does not apply to my household (i.e. no
			change/ same)

# Environment

#### Instruction to interviewer:

Read to respondent:

'Now I would like to ask you about your household's access to environment assets and how things have changed for your household since the clearance tasks were completed. If you would like me to read the question or any of the responses again please ask me. I will now ask you for each question how things have changed for household compared to before the clearance activities we talked about earlier'

Read all questions unless indicated. Do not read the answers unless the respondent needs some prompting. Text in brackets () are prompts only, do not read unless checking the respondents answer.

Circle **one** answer for each question.

Read: Compared to before (year/pc land use – name resource) and now,

E1	(Only ask if land has been cleared for any	1	A lot less (i.e. now we have more land
	kind of agriculture, i.e. paddy, hai, cash		with UXO)
	crops, vegetables, corn, if not go to 7.32)	2	Less
	Compared to before (year/pc land use -	3	More
	name resource) and now, how much land	4	A <i>lot more</i> (i.e. a lot of the land that you
	without UXO for growing (e.g. rice, corn,		use for planting has been cleared of
	cash crops) does your household have?	999	UXO)
			Does not apply to my household (i.e. no
			land for planting/none of the farming
			land we use has been cleared of UXO/
			same)

E2	Compared to before (year/pc land use – name resource) and now, how much community land is there in your village without UXO?	1 2 3 4 5	A <i>lot less</i> (i.e. now we have more community land with UXO)  Less  More  A <i>lot more</i> (i.e. a lot of community land has been cleared of UXO)  Does not apply to my household (i.e. no community land has been cleared of UXO/ same)
E3	Compared to before (year/pc land use – name resource) and now, how much	1 2	A lot less Less
	access to water for farming/gardening	3	More
	does your household have?	4	A lot more
		999	Does not apply to my household

What are the negative effects of UXO clearance?

# **Household income**

# Instruction to interviewer:

Read to respondent:

'Now I would like to ask you about your household's income. *Please answer as truthfully as you can.* There are no right or wrong answers. '

Read all questions unless indicated. <u>Do not read answers</u>, circle answers unless indicated.

7.2	How has your income changed <i>per month</i> since clearance and the new resource from the cleared land? (e.g. road, community land or AG)  Circle one	1 2 3 999	It's increased a little It's increased by about 50%/double It has increased a lot Not sure/other/no answer/the same/does not apply to my household - go to 7.42
7.3	What is the <i>main</i> thing you use the money for?  Circle one	1 2 3 4 5 999 write	Basic items Non-basic items (e.g. household items, clothes), things for school (fees, uniforms, notebooks etc.) Livestock Farming/work equipment/tools/motorbike /vehicle/fuel/bicycle Not sure/don't know Other

# **Current UXO situation**

Instruction to interviewer:

# Read to respondent:

'Now I would like to ask you a few questions about the current situation. There is no right or wrong answer. Please answer as truthfully as you can'

# Instruction to interviewer:

Read all questions unless indicated. Do not read answers, circle answers.

7.4	Do you have land in this village which you would	0	No – go to 7.45
	like cleared	1	Yes – <b>go to 7.44</b>
	Circle one		
7.5	What is the <i>main effect</i> of UXO/mines on this	1	Cannot farm land/loss of food production
	household?	2	Cannot build community facilities (e.g.
	Circle one		schools, road, borehole, irrigation)
		3	Feel unsafe/worry
		4	No effect
		999	Not sure/don't know/other

7.6 Do you have any other comments?	

Thank the respondent and close the interview

# Questionnaire and Scale, Research Sites 3 (NRA, National Lao Program) Lao Version

ແບບສອບຖາມສຳລັບຄົວເຮືອ

ກາ ປະເມີ ຜີ ກະທົບຫຼັງກາ ເກັບກູ້ ລບຕ

ແບບສອບຖາມສາລັບຄອບຄົວ ຄຳແ ະ ຳສາລັບັກສາພາດ:

# <u>ໝາຍເຫດ:</u> "ຄອບຄົວ" ໃ ທີ່ນີ້ໝາຍເຖິງ ເຮືອນຫຼັງໜຶ່ງ ຫຼື "Household ແລະ Family" ໃ ສະບັບພາສາອັງກິດ.

ຂໍ້ແ ະ ຳສຳລັບັກສຳພາດແມ່ ໄດ້ລະບຸຢູ່ໃ ແຕ່ລະພາກຂອງແຕ່ລະແບບຟອມ ແລະ ໄດ້ລະບຸໄວ້ຢູ່ໃ ບ່ອກ ຊຶ່ງຄຳແ ະ ຳດັ່ງກ່າວແມ່ ໄດ້ຂຶ້ນຕື່ນດ້ວຍຄຳວ່າ 'ຄຳແ ະ ຳສຳລັບັກສຳພາດ" ຂໍ້ແນະນຳດັ່ງກ່າວແມ່ ເປັ ຕີວອັກສອ ຕີວ*ໍໜຶ່ງ* ແລະ ຊຸງ ເປັ ຂໍ້ຄວາມອ່າ ຫຳມະດາ.

ແບບສອບຖາມພາກທີ 1 ຂໍ້ແ ຮ ຳ ແລະ ກາ ບ້ ທຶກຂໍ້ມູ ກ່ງວກັບຄອບຄົວທີ່ທຳ ຈະສຳພາດ
ແບບສອບຖາມພາກທີ 2 ກາ ຂ້ອະ ບາດກ່ອ ກາ ເລີ່ມສຳພາດ
ແບບສອບຖາມພາກທີ 3 ຄຳຖາມກ່ຽວກັບຄອບຄົວ ແລະ ສະມາຊິກພາບໃ ຄອບຄົວ
ແບບສອບຖາມພາກທີ 4 ກາ ເກັບກູ້ລບຕ: ໜ້າວຽກກາ ເກັບກູ້ສຳລັບບຸກຄົ
ແບບສອບຖາມພາກທີ 5 ກາ ເກັບກູ້ລບຕ: ໜ້າວຽກກາ ເກັບກູ້ສຳລັບຂຸມຊີ
ແບບສອບຖາມພາກທີ 6 ກາ ເກັບກູ້ລບຕ: ໜ້າວຽກກາ ເກັບກູ້ສຳລັບບຸກຄີ ແລະ ຊຸມຊີ
ແບບສອບຖາມພາກທີ 7 ກາ ປະເມີ (ວັດແທກ) ລະດັບຂອງຜີ ກະທິບຕໍ່ຊີວິດກາ ເປ້ ຢູ່ ແລະ ສະພາບກາ ຳໃຊ້ທີ່

ລະຫັດຂອງ ັກສາພາດ: ັກສາພາດແຕ່ລະຄື ຈະມີລະຫັດຂອງຕີ ເອງໂດຍກາີດເປັ 02 ຕີວອັກສອນ-ຊຶ່ງຜູ້ສັ ຍາເກັບ ກຳຂໍ້ມູ ຈະເປັ ຜູ້ກຳີດໃຫ້.

ຕົວເລກລຳດັບຂອງກາ ສຳຫຼວດ: ใช้ทຳ ີດເປັ 04 ຕິວເລກໂດຍລຸງຕາມລຳດັບແຕ່ ອຍຫາໃຫຍ່ໃສ່ແຕ່ລະແບບສອບ ຖາມນັ້ນ-ຊຶ່ງຜູ້ສັ ຍາເກັບກຳຂໍ້ມູ ຈະເປັ ຜູ້ກຳ ີດ.

# ລະຫັດແຂວງ: ໃ ແຕ່ລະແຂວງໃຫ້ໃສ່ລະຫັດ 02 ຕີວເລກຕາມລະຫັດທີ່ກາ ົດໃຫ້ດັ່ງນີ້:

ແຂວງ ຊຸງງຂວາງ: 09 ແຂວງ ສະຫວັ ະເຂດ: 13 ແຂວງ ຈຳປາສັກ: 16

ລະຫັດເມືອງ: ใ แต่ละเมือງใຫ້ให่ละຫັດ 02 ຕົວເລກຕາມລະຫັດທີ່ກາ ີດໃຫ້ດັ່ງນີ້:

ເມືອງ ແປກ (ຊຂ): 01 ເມືອງ ອງ (ສຫວຂ): 06 ເມືອງ ປາກຊ່ອງ (ຈປສ): 04

**ຄາແ ະ ຳສາລັບ ັກສາພາດ** ເພື່ອໃຫ້ບໍ ລຸໄດ້ຕາມເບົ້າໝາຍຂອງແບບສອບຖາມນີ້ ແມ່ ໄດ້ ຳໃຊ້ບັ ດາຄາ ີ ຍາມລຸ່ມນີ້:

ຄົວເຮືອ	ຄົວເຮືອນໜຶ່ງ ໝາຍເຖິງກຸ່ມຄົນໜຶ່ງທີ່ຢູ່ ແລະ ກິ ອາຫາ ຮ່ວມກັ ຢູ່ໃ ຫຼັງຄາເຮືອ
	ດງວກັ
ສະມາຊິກຂອງຄົວເຮືອ	ໝາຍເຖິງຜູ້ທີ່ ອ ແລະ ກິ ຢູ່ໃ ຄອບຄິວດງວກັ <i>ເປັ ຢ່າງໝ້ອຍ 6</i> ເດືອ ໃ ຈຳ ວ
	12 ເດືອ ໃນ 1 ປີ, ຊຶ່ງໃ ນີ້ລວມທັງເດັກ ້ອຍເກີດໃໝ່ທີ່ມີອາຍຸຕ່ຳກວ່າ 6 ເດືອ
ກາ ເກັບກູ້ ລບຕ ສາລັບບຸຄີ : ໝາຍເຖິງໜ້າວຸງກທີ່ເກັບ ກູ້ສຳລັບຄອບຄີວໜຶ່ງ, ຫຼື ສຳລັບຄອບຄີວຈຳນວນໜຶ່ງ (<10)	ຊຶ່ງລວມມີ ດີ ຳ, ດີ ກະສຶກຳເຂດເີ ສູງ, ໂຮ່ (ກາ ປູກພຶດປະສົມປະສານ-ເຊັ່ນ: ກາ ປູກເຮົ້າປະສົມກັບພຶດຕັກ ຫຼື ປູກສະເພາະເຂົ້າເທົ່ານັ້ນ), ລະບີບຊີນລະປະຫານຂະໜາດ ນ້ອຍ ຊຶ່ງລວມທັງຝາຍກັ້ນນ້ຳ, ເຂື່ອນຂະໜາດນ້ອຍ, ຄອງຊີ ລະປະຫາ , ກາ ປູກພຶດ ເສດຖະກິດ, ກາ ປູກໄມ້, ກາ ປູກພຶດ/ໄມ້ອຸດສາຫະກຳ, ຝາຍກັ້ນນ້ຳ, ໜອງປາ, ທົ່ງຫຍ້າ ລຸ້ງສັດ, ສວນ ຊຶ່ງລວມທັງພື້ນທີ່ສຳລັບປູກໄມ້ໃຫ້ໝາກ/ພຶດຕັກຂະໜາດໜ້ອຍ ແລະ ກາ ປຸກໄມ້/ພຶດອຸດສາຫະກຳຂະໜາດໃຫຍ່ ເຊັ່ນ: ປຸກມອ , ກາເຟ ແລະ ຢາງພາລາ. ໃ ນີ້ອາດຈະລວມທັງພື້ນທີ່ກໍ່ສ້າງ, ຕີວຢ່າງ ກໍ່ສ້າງເຮືອ . ເປັ ພື້ນທີ່ດີ ທີ່ເປັ ກາມະສິດ ຂອງຄອບຄີວດັ່ງກ່າວໄດຍກົງ ຫຼື ໃຫ້ ຄອບຄີວອື່ນໆເຊົ້າ. ທີ່ດີນ ຫຼື ຕຶກອາຄານດັ່ງກ່າວ ອາດຈະ ຳໃຊ້ເພື່ອສ້າງລາຍຮັບສຳລັບ ຄອບຄີວທຶ່ງ ຫຼື ຫຼາຍຄອບຄີວທີ່ເປັ ກຳມະສິດທີ່ດີ ດັ່ງກ່າວ ແຕ່ໃ ນີ້ບໍ່ໝາຍເຖິງກາ ຳ ໃຊ້ເຂົ້າໃ ເປົ້າໝາຍທາງກາ ຄ້າອື່ນໆ ເຊັ່ນ: ບໍ່ແມ່ ຳໃຊ້ເປີ ໂຮງງາ , ຫຼື ກາ ປູກພືດ/ ໄມ້ອຸດສາຫະກຳຂະໜາດໃຫຍ່. ພ້ອມກັນນັ້ນຄອບຄີວດັ່ງກ່າວອາດວ່າຈ້າງສະມາຊິກຂອງ ຄອບຄີວອື່ນມາ ຳໃຊ້ດີ /ຕິກອາຄາ ດັ່ງກ່າວ ແຕ່ໃດຍປົກກະຕິແລ້ວກາ ວ່າຈ້າງດັ່ງກ່າວ ນັ້ນບໍ່ໃຫ້ເກົ ຈຳ ວ 20 ຄື .
ໜ້າວງກກາ ເກັບກູ້ສຳລັບຊຸມ	ໜ້າວງກກາ ເກັບກູ້ສຳລັບຊຸມຊີນໜຶ່ງ ປົກກະຕິແລ້ວແມ່ ກາ ເກັບກູ້ສຳລັບຜີ ປະໂຫຍດ
ຊີ : (ປົກກະຕິແລ້ວແມ່ ກາ	ຂອງຮຸມຊີ້ ທັງໝິດ ຫຼື ສ່ວນໜຶ່ງຂອງຮຸມຊີ້ນນັ້ນ (ໂດຍຫລີໄປແມ່ ສຳລັບ 10 ຄອບຄົວ ຫຼື
ເກັບກູ້ສຳລັບ ຫຼື ຫຼາຍກວ່າ 10	ຫຼາຍກວ່ານັ້ນ) ແລະ ໄດ້ຕອບສະໜອງສິ່ງອຳ ວຍຄວາມສະດວກຫາງດ້າ ສາທາລະ
ຄອບຄິວຂຶ້ນໄປ)	ນະຕ່າງໆ. ຊຶ່ງສິ່ງອາ ວຍຄວາມສະດວກທາງດ້າ ສາທາລະ ະນີ້ອາດຈະເຄີຍ າໃຊ້ສຳ
11 950	ລັບ <i>ກາ ຕອບສະໜອງກາ ບໍລິກາ</i> ໃຫ້ແກ່ຊຸມຊີ (ເຊັ່ນ: ສຳັກງາ ຂອງລັດຖະບາ ),
	້ພື້ນຖານໂຄງລ່າງຂອງທ້ອງຖິ່ນ (ເຊັ່ນ: ເສັ້ນຫາງ) ຫຼື ເປັ ທີ່ດີ ຂອງສາທາລະນາ (ທີ່ງຫຍັກ
	ລັງງສັດ) ຊຶ່ງບໍ່ແມ່ ທີ່ດີ ທີ່ມີໃບຕາດີ ເປັ ຂອງບຸກຄີ ແລະ ຂໍ່ເຄີຍ ຳໃຊ້ເຂົ້າໃ ເປົ້າ
	ໝາຍທາງກາ ຄ້າ. ຕົວຢ່າງ ລວມທັງເສັ້ນທາງ (ທີ່ສ້າງ ຫຼື ປັບປຸງໃໝ່, ເສັ້ນທາງເຂົ້າບ້າ
	ຫຼື ເສັ້ນຫາງໃຫຍ່), ຕຶກອາຄາ ຕ່າງໆ (ສ້າງຂຶ້ນໃໝ່ ຫຼື ຕຶກທີ່ສ້າງມາກ່ອ ແລ້ວ), ສິ່ງທີ່ ຳ
	ໃຊ້ສຳລັບຊຸມຊີ , ໂຮງຮຸງ , ສຸກສາລາ, ວັດ, ແຫຼ່ງ ຳ້ສະອາດ, ວິດຖ່າຍ, ຕະຫຼາດ, ສະ
	ຖາ ນີ້ທ່ອງທ່ຽວ, ສວ ສາທາລະ ະ, ແລວສາຍໄປຟ້າ, ຫຼັກສັ ຍາ ໂທລະສັບ (ໂທລະ
	ສັບມືຖື ຫຼື ແບບມີສາຍ) ແລະ ພື້ນທີ່ຕັ້ງບ້ານໃໝ່. ໃ ນັ້ນອາດຈະລວມທັງທີ່ດີ ລວມຂອງ
	ບ້າ ເຊັ່ນ: ທີ່ງຫຍ້າລັງງສັດ ທີ່ບໍ່ແມ່ ເປັ ກຳມະສິດຂອງຄອບຄົວໃດໜຶ່ງ ຫຼື ຄອບຄົວ
	ຈຳ ວ ໜຶ່ງ ແຕ່ເປັ ກຳມະສິດຂອງຂຸມຊີ ແລະ ຖືໄດ້ວ່າເປັ ດີ ສ່ວ ລວມ ຊຶ່ງ <b>ຂຸມຊີ</b>
	<b>ຫັງໝົດສາມາດ ຳໃຊ້ໄດ້ຢ່າງອຶດສະຫຼະ</b> (ເຊັ່ນວ່າ: ເຂົາເຈົ້າບໍ່ຈຳເປັ ຕ້ອງເສຍພາສີທີ່ດິ
	ແຕ່ຢ່າງໃດ)
ໜ້າວງກກາ ເກັບກູ້ສຳລັບ	ກາ ເກັບກູ້ຮູບແບບນີ້ແມ່ ກາ ລວມເອົາ "ໜ້າວງກການເກັບກູ້ສຳລັບບຸກຄົນ" ແລະ "ໜ້າ
ບຸກຄື ແລະ ຊຸມຊີ	ວງກກາ ເກັບກູ້ສຳລັບຂຸມຊີ " ດັ່ງທີ່ໄດ້ອະທິບາຍຢູ່ຂ້າງເທິງນັ້ນ. ໝາຍຄວາມວ່າຢູ່ໃ

#### ແບບສອບຖາມສຳລັບຄົວເຮືອ

	ບ້າ ດັ່ງກ່າວໄດ້ມີກາ ກວດກູ້ທີ່ດີ ສຳລັບກາ ຳໃຊ້ສຳລັບ <i>ບຸກຄື</i> ແລະ ກາ ກວດກູ້ ສຳລັບ <i>ຊຸມຊີ</i> . ສະນັ້ນຄອບຄິວດັ່ງກ່າວ ອກຈາກຈະໄດ້ຮັບຜີ ປະໄຫຍດຈາກກາ ເກັບກູ້ ທີ່ດີ ຂອງຕີ ເອງແລ້ວຍັງໄດ້ຮັບຜີ ປະໄຫຍດຈາກໜ້າວໆກທີ່ເກັບກູ້ສຳລັບຂຸມຊີ ຢູ່ໃ ບ້ານນັ້ນຕື່ມອີກ.
ຜູ້ພິກາ /ເຈັບປ່ວຍແບບຊ <b>ົ</b> ້າ ເຮື້ອ (ຖາວອນ)	ໝາຍເຖິງຜູ້ທີ່ມີກາ ຢ່າງຮ້າຍແຮງ, ມີຂໍ້ຈຳກັດໃ ກາ ດຳລົງຊີວິດ ແລະ ຖືກຈຳກັດກາ ມີ ສ່ວ ຮ່ວມຢູ່ໃ ສັງຄືມ ເນື່ອງຈາກກາ ເຈັບປ່ວຍທາງສຸຂະພາບ ຊຶ່ງລວມທັງ ຕາບອດ, ຄວາມຮູ້ສຶກຕໍ່າ, ຜູ້ທີ່ມີກາ ເນື່ອງຈາກສະເກັດລະເບີດ, ມີພະຍາດປະຈຳຕິວ ເຊັ່ນ: ພະ ຍາດຕິດຕໍ່ທາງເພດສຳພັ (HIV) ແລະ ພະຍາດເບົາຫວາ . ຜູ້ທີ່ມີກາ ບາງຄັ້ງໝາຍ ເຖິງຜູ້ທີ່ມີຂໍ້ຈຳກັດ ຫຼື ບໍ່ມີຄວາມສາມາດອອກແຮງງາ ໄດ້ ຫຼື ບໍ່ສາມາດທີ່ຈະເຮັດວຸງກ ກິດຈະ ກຳປະຈຳວັ ດ້ວຍຕີ ເອງໄດ້.
ເດືອ	ໃຫ້ປຸ່ງ ເປັ ເດືອ ໃ ປະຕິທິ ສາກິ
ລບຕ	ໝາຍເຖິງ ອາວຸດທຸກຊະິດທີ່ເສດເຫຼືອຈາກສິງຄາມ (ເຊັ່ນ: ລູກບີ່ມທີ່ຖິ້ມໄດຍເຮືອບິ , ລູກບີ່ມບີ່, ມິນ, ລູກລະເບີດມື)
ຊັບສິ ຫາງດ້າ ຊັບພະຍາ ກອ ມະຸດ	ໝາຍເຖິງ ຄຸ ະພາບຂອງກາ ຕອບສະໜອງທາງດ້າ ແຮງງາ ຂອງຄົ (ເຊັ່ນ: ສຸຂະ ພາບ, ກາ ຄ້າປະກັ ທາງດ້າ ສະບຸງອາຫາ ແລະ ຄວາມຫຼາກຫຼາຍ, ຄວາມສາມາດ ໃ ກາ ເຂົ້າເຖິງກາ ສຶກສາທີ່ງລຸກໄປຮູງ ຢ່າງເປັ ປົກກະຕິ, ກາ ໃຊ້ເວລາໃ ກາ ສ້າງ ລາຍຮັບ ຊຶ່ງ ອກຈາກທີ່ກາ ທຳກາ ຜະລິດເພື່ອກາ ບໍລິໂພກໃ ຄອບຄົວແລ້ວ ແລະ ຄວາມຮູ້ສຶກໃ ແງ່ບວກອີກດ້ວຍ)
ຊັບສິ ທາງດ້າ ສັງຄົມ	ໝາຍເຖິງ ຄວາມສາມາດໃ ກາ ເພີ້ມທະວີສາຍພິວພັ ຢູ່ໃ ສັງຄົມ, ກາ ປະຕິບັດ ພັ ທະທາງສັງຄົມ ແລະ ຮີດຄອງວັດທະ ະທຳ ແລະ ກາ ເຂົ້າເຖິງຂໍ້ມູ ຂ່າວສາ ຕ່າງໆ
ຊັບສິ ຫາງດ້າ ກາ ເງິ	ໝາຍເຖິງ ຄວາມສາມາດໃກາ ຊື້ສິ່ງຈຳເປັ ແລະ ກາ ບໍລິກາ ອັນພື້ນຖານ ໃຫ້ແກ່ ສະມາຊິກໃ ຄອບຄົວ ແລະ ກາ ສະສົມຫິ ຈຳ ວ ້ອຍໃດໜຶ່ງ
ຊັບສິ ຫາງດ້າ ກາຍຍະໜາບ	ໝາຍເຖິງ ກາ ເຂົ້າເຖິງພື້ນຖານໂຄງລ່າງອັ ພື້ນຖານຕ່າງໆ (ເຊັ້ນ: ໂຮງຮູງ , ສຸກສາລາ, ເສັ້ນຫາງ, ຕະຫຼາດ, ນຳ້ດີ່ມຈາກໂຮງງາ )
ຊັບສິ ຫາງດ້າ ສະໝາບແວດ ລ້ອມ	ໝາຍເຖິງ ກາ ເຂົ້າເຖິງກາ ຳໃຊ້ປ່າໄມ້, ທີ່ດີ ທຳກາ ຜະລິດ ແລະ ແຫຼ່ງ ຳໃຊ້

# ຂະບວ ກາ ສຸ່ມຕິວຢ່າງສຶກສາ

ຂະໜາດຕົວຢ່າງສຶກສາ:

ປະຊາກອ ຜູ້ທີ່ໄດ້ຮັບກາ ກວດກູ້ ລບຕແມ່ ໄດ້ຄຳ ວ ໂດຍອີງໃສ່ຈຳ ວ ຄອບຄົວທີ່ໄດ້ຮັບຜີ ປະໄຫຍດຈາກກາ ເກັບ ກູ້ດັ່ງກ່າວ, ສຳລັບພື້ນທີ່ໆບໍ່ມີຂໍ້ມູ ຈຳ ວ ຄອບຄົວດັ່ງກ່າວນັ້ນ ພວກເຮົາໄດ້ໃຊ້ຄ່າສະເລ່ຍຂະໜາດຂອງຄອບຄົວຢູ່ໃ ເມືອງ ນັ້ນເພື່ອກະຕວງເອົາຈຳ ວ ຄອບຄົວດັ່ງກ່າວ.

Najalio=1,266

Nales ann= 673

N<sub>เมือง ปากต่อง</sub>= 357

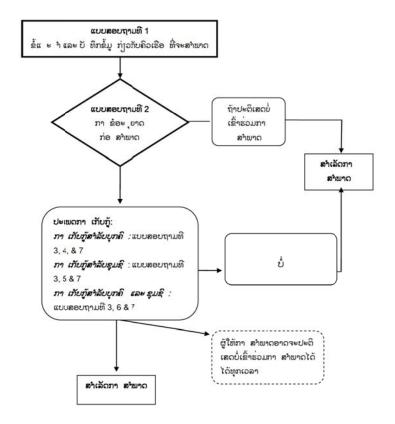
N<sub>ເມືອງ ອງ</sub>= 236

# ຄຳແ ຮ ຳສຳລັບ ັກສຳພາດ

ໃ ແຕ່ລະບ້າ ກຳ ຈະຕ້ອງກຳ ໂດລາຍຊື່ບຸກຄື ທີ່ທຳ ຈະເຮັດກາ ສຳພາດ ແລະ ຈາກນັ້ນທ່ານຈະຕ້ອງສຳພາດຫົວໜ້າ ຄອບຄົວ ຫຼື ຜົວ/ເມຍ ຂອງຫົວໜ້າຄອບຄົວນັ້ນ. ຖ້າຫາກວ່າບຸກຄື ທີ່ທຳ ຈະສຳພາດນັ້ນບໍ່ຢູ່ບ້າ ແມ່ ໃຫ້ພະຍາຍາມ ແລະ

# ແບບສອບຖາມສຳລັບຄົວເຮືອ

ຊອກຫາເວລາອື່ນເພື່ອເຮັດກາ ສຳພາດກັບບຸກຄື ດັ່ງກ່າວ. ຖ້າຫາກວ່າວິຫີກາ ນີ້ບໍ່ສາມາດເປັ ໄປໄດ້ ແລະ ທຳ ຫາກໄດ້ ກຳົດເວລາເພື່ອສຳພາດຫີວໜ້າຄອບຄົວດັ່ງກ່າວນັ້ນແລ້ວ ແມ່ ໃຫ້ສຳພາດຜີວ ຫຼື ເມຍຂອງຫີວໜ້າຄອບຄົວນັ້ນແທ ຫາກ ເຫັ ວ່າມີຄວາມເໝາະສົມ, ຫຼື ຖ້າຫາກທຳ ກຳົດເວລາທີ່ຈະສຳພາດຜີວ/ເມຍຂອງຫີວໜ້າຄອບຄົວນັ້ນແລ້ວ ແມ່ ໃຫ້ພະ ຍາຍາມສຳພາດຫິວໜ້າຄອບຄົວນັ້ນແທ ກໍ່ໄດ້ ຫຼື ຈະັດເວລາໃໝ່ແລ້ວຈຶ່ງກັບມາສຳພາດເຂົາເຈົ້າກໍ່ໄດ້.



	ບຖາມທີ 1	
	ຳສຳລັບ ັກສຳພາດ:	
		<b>ອ<sup>າ</sup>ພາດ</b> (ຄາຖາມທີ 1.6-1.10ແມ່ າຍບັາ ຈະເປັ ຜູ້ໃຫ້ອໍ້
มูใลง	ະຫວ່າງທີ່ຜູ້ຊີ້ນຳຂອງທຶມງາ ສະເໜີກ່ຽວກັບທຶມງາ	ເກັບກຳຂໍມູ ນັນ)
ຕີວເລກລ	ຈຳດັບຂອງກາ ສຳຫຼວດ:   _	
1.1	ລະຫັດຂອງັກສຳພາດ	
	ใช้เรา ใต่	
1.2	ວັ ທີ່ສຳພາດ	_ / _ /_2_ _0_ _1_ _0
	ให้ญ ใต่	
1.3	ລະຫັດຂອງແຂວງ	
	ใຫ້ຊາ ใต่	
1.4	ລະຫັດຂອງເມືອງ	
	ใช้เลา ใต่	
1.5	ລະຫັດຂອງບ້າ	
	ហ៊ែន្យ ដល់	
1.6	ໄລຍະຫ່າງຈາກເທດສະບາ ເມືອງຫາບັາ ໃ ກາ ເດີ ທາງໂດຍລົດ?	าชี
		999 ກໍລະີເປັ ບ້າ ຢູ່ໃ ເທດສະບາ ເມືອງ
1.7	ເສັ້ນຫາງເຂົ້າບ້າ ສາມາດ ຳໃຊ້ໄດ້ (ເຂົ້າເຖິງ)	0 ប់ំពៃ
	ທັງສອງລະດຸບໍ?	1 ໄດ້
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	
1.8	ຊີ ເຜົ່າຕົ້ ຕໍຢູ່ພາຍໃ ບ້າ ແມ່ ຊີ ເຜົ່າຫຍັງ?	
	ໃຫ້ຂຸງ ຄຳຕອບ	
1.9	ສະຖາ ະພາບຂອງບ້າ ແມ່ ຫຍັງ?	1 ບ້າ ໂຍກຍ້າຍມາຕັ້ງໃໝ່
		2 ໂຮມບ້າ ້ອຍເປັ ບ້າ ໃຫຍ່
		3 ບ້າ ດັ່ງເດີມ
		18 18
1.10	ຄອບຄົວຂອງທ່າ ຈັດຢູ່ໃ ຄອບຄົວປະເພດໃດ?	1 ທຸກຍາກທີ່ສຸດ
		2 ทุทยาท
		3 ບໍ່ທຸກ/ຮັ່ງມີ/ກຸ້ມຢູ່ກຸ້ມກິນ
	ລາຍເຊັ ຂອງັກສຳພາດ	
	ລະຫັດຂອງ ັກສຳພາດ	

ឧបបនា	ອບຖາມສຳລັບຄົວເຮືອ		
	ລາຍເຊັ ຂອງຜູ້ຊື້ນຳ		
	ລະຫັດຂອງຜູ້ຊີ້ນຳ:		
ແບບຄ	ສອບຖາມທີ 2		
กาน	ะ ำสำลับ ักสาพาด:		
ภษล	າອຳ :ຂ້າພະເຈົ້າຈະຖາມ(ຫີ	ວໜ້າຄອບຄົວ ຫຼື ຜິວ/ເມຍ ຂອງເ	ท็อขขาดอบดิว-ຂຶ้ນทับ
	ນເໝາະສີມໂດຍອີງຕາມຕາຕະລາງເວລາຂອງກາ ສຸ່ມຕົ		
	ปั(ทิงพาดอบดิว ที่ ผิว/เ		
•	ทุ๊าซาทบ์มิใชยุ่เธือ , ทุ๊าซาทซิอซบ้าลอบลิอป์ยู ກາ ิกลั เอลา ักขมายดั่วท่าอ. ทุ๊าซากเลิาเจ้ายู่เธือ และ อะ ุยากใช้สาพาก ลิม. ทุ๊าซากเลิาเจ๊ายู่เธือ และ กา สาพากมั้มซาก เขมาะลิม.	ໄດ້ ແມ່ ໃຫ້ຕື່ມຂໍ້ມູ ໃສ່ບອກບໍ່ເ ບໍ່ສາເລັດ ແມ່ ໃຫ້ຕື່ມຂໍ້ມູ ໃສ່ບ	ອ ເປົ່າຫວ່າງຕາມເໝາະ
2.1 6	ລວາມພະຍາຍາມທີ 1: ວັ ທີ, ເດືອ , ປີ// ສະຖາ ະພາບ (ຊີດອ້ອມເອົາ 1 ຄຳຕອນ)	ຈະຫັດຂອງ ັກສາພາດ:	
	and (1 carlo (schools of 1 strictor)	ສຳພາດໄດ້	) APM-ITI-IFICEN I-I
1	นุ่าพามภุ่คุ๋เซือ ญี้ ัดหมายจะมาสาพาดตามพา		_// ເວລາ::
2	ຢູ່ເຮືອ /ແຕ່ບໍ່ແມ່ ຜູ້ທີ່ຖືກຄັດເລືອກ		_// ເວລາ::
3	ຢູ່ເຮືອ /ອະ ຸຍາດໃຫ້ສຳພາດ (ໃຫ້ສືບຕໍ່ຖາມຄຳຖາມ ເລັດ)	ຫ້ສຳ †ເລີ່ມຕື່ ເວລາ: :	: ສຳເລັດເວລາ:
4	ຢູ່ເຮືອ /ປະຕິເສດ ຫຼື ກາ ສຳພາດບໍ່ສຳເລັດ (ຢຸດເຊົາ: ສຳພາດ)	† ඒ පෆි (කර	†ບໍ່ສຳເລັດ
5	ນໍ່ຢູ່ເຮືອ	ສຳພາດຜິວ/ເມຍຂ ຫິວໜ້າຄອບຄິວແ	
ໝາຍ	ະຫດ:	•	33.563
រាំ នូន	<i>ເຫດ:</i> ຖ້າຫາກບໍ່ຢູ່ເຮືອ <b>ຫຼື</b> ັດໝາຍຈະມາສາພາດຕາມ ຂໍ້ 2.2 ລຸ່ມນີ້		ກາ ສຳພາດແມ່ ໃຫ້ຕື່ມຂໍ້
2.2 6	กอามพะยายามที่ 2: อั ที, เถือ , ปิ//	ລະຫັດຂອງ ັກສຳພາດ:	_

ສະຖາ ະພາບ (ຂີດອ້ອມເອົາ 1 ຄຳຕອບ)

7

ວັ ເວລາຕິດຕາມທີ່ຈະສາມາດເຮັດກາ

		ສາພາດໄດ້
1	ຖ້າຫາກນໍ່ຢູ່ເຮືອ ຫຼື ັດໝາຍຈະມາສຳພາດຕາມພາຍຫຼັງ	†ວັ ທີິດໝາຍ// ເວລາ::
2	ຢູ່ເຮືອ /ແຕ່ບໍ່ແມ່ ຜູ້ທີ່ຖືກຄັດເລືອກ	
3	ຢູ່ເຮືອ /ອະຸຍາດໃຫ້ສຳພາດ (ໃຫ້ສືບຕໍ່ຖາມຄຳຖາມໃຫ້ສຳ ເລັດ)	†ເລີ່ມຕີ້ ເວລາ:: ສຳເລັດເວລາ::
4	ຢູ່ເຮືອ /ປະຕິເສດ ຫຼື ກາ ສຳພາດບໍ່ສຳເລັດ (ຢຸດເຊົາກາ ສຳພາດ)	†ປະຕິເສດ ບໍ່ສຳເລັດ
999	ຖ້າບໍ່ກ່ຽວຂ້ອງ (ເຊັ່ນ: ເຫັ ດີກັບຄວາມພະຍາຍາມທີ 1)	

### กำแ ะ ำสำลับ ักสำเขาก:

ກະລຸ າອ່າ : ຂ້າພະເຈົ້າຊື້. ..... ຊຶ່ງພວກເຮົາກາລັງດຳເ ີ ກາ ເກັບກາຂໍ້ມູນຢູ່ (ຊື້ຂອງບ້ານ) ເພື່ອສຶກສາເຖິງຜີ ກະຫົບ ຫຼັງກາ ເກັບກູ້ ລບຕ ຢູ່ໃ ລະດັບຂຸມຊີ ໃ ບ້າ ຂອງທ່ານ. ສະນັ້ນ, ຂ້າພະເຈົ້າ ຂໍອະ ບາດເພື່ອສຳພາດທ່ານ. ຊຶ່ງກາ ສຳ ພາດນີ້ຄາດວ່າຈະໃຊ້ເວລາທັງໝົດປະມານ 45 ນາທີ. ດັ່ງນັ້ນກະລຸ າຕອບຄຳຖາມຕາມ*ຄວາມຈິງ* ແລະ *ໃຫ້ຈະແຈ້*ງ ເທົ່າທີ່ ຈະເປັ ໄປໄດ້. ໂດຍບໍ່ໃຫ້ກັງວີ ວ່າຄຳຕອບດັ່ງກ່າວນັ້ນ ຈະຜົດ ເນື່ອງຈາກວ່າຄຳຕອບຂອງທ່າ ແມ່ ຈະໄດ້ຮັກສາເປັ ຄວາມລັບ ແລະ ຊື້ຂອງທ່າ ແມ່ ຈະບໍ່ໄດ້ບັ ຫິກລິງໃ ນີ້. ສຳລັບກາ ສຶກສານີ້ແມ່ ຈະບໍ່ມີຜີ ປະໄຫຍດໂດຍກິງແກ່ທ່າ .

ເຖິງແ ວໃດກໍ່ຕາມ ພວກເຮົາຫວັງວ່າກາ ສຶກສາຄັ້ງນີ້ແມ່ ຈະເປັ ປະໂຫຍດແກ່ປະຊາຊົ ທີ່ດຳລົງຊີວິດຢູ່ໃ ເຂດທີ່ມີລະ ເບີດບໍ່ຫັ ແຕກ. ໂ ກາ ເຂົ້າຮ່ວມ ຫຼື ກາ ສຳພາດນີ້ແມ່ ບໍ່ໄດ້ເປັ ກາ ບັງຄັບ ຊຶ່ງຂຶ້ນກັບຄວາມສະໝັກໃຈ, ທຳ ສາມາດບໍ່ ຕອບຕໍ່ຄຳຖາມດັ່ງກ່າວ ຫຼື ບຸດເຊົາກາ ສົ ທະ າເວລາໃດກໍ່ໄດ້. ຖ້າຫາກທຳ ຈະປະຕິເສດບໍ່ໃຫ້ກາ ສຳພາດນັ້ນແມ່ ບໍ່ ຕ້ອງກັງວີ ວ່ານັ ຈະມີຕີ ກະທົບຕໍ່ທຳ , ຕໍ່ຄອບຄົວຂອງທຳ ແລະ ອົງກາ ທີ່ດຳເ ີ ກາ ເກັບກູ້ ລບຕ ຢູ່ໃ ພື້ນທີ່ນີ້ ແຕ່ ຢ່າງໃດ. ຖ້າຫາກທຳ ຫາກຍັງມີຄວາມກັງວີ ຫຼື ບັ ຫາໃດບໍ່ຈະແຈ້ງແມ່ ສາມາດຕິດຕໍ່ອຳ າດກາ ປົກຄອງຢູ່ໃ ຂັ້ນຫ້ອງ ຖິ່ນ (ເມືອງ ແລະ ແຂວງ) ເພີ່ມເຕີມກໍ່ໄດ້. ທຳ ມີຄຳຖາມຫຍັງບໍ? ແ ວໃດກໍ່ຕາມທຳ ສາມາດຖາມໄດ້ຕະຫຼອດເວລາໃ ລະຫວ່າງທີ່ສຳພາດ. ສະນັ້ນ, ຂ້າພະເຈົ້າຂໍເລີ່ມສຳ ພາດໄດ້ບໍ່?

ຖ້າຕອບ "ໄດ້"		
ลายเรี /จำโ	ð	
ຖ້າຕອບ "ບໍ່ໄດ້		
ລາຍເຊັ /ຈຳ້ໂ:	ปั	

### 2.3 ຄຳແ ະ ຳສຳລັບ ັກສຳພາດ:

**ກະລຸ າອ່າ** : ຂ້າພະເຈົ້າຈະຖາມຄຳຖະມຈຳນວນໜຶ່ງກ່ຽວກັບຄອບຄິວຂອງທ່າ . ຄິວເຮືອນໜຶ່ງໝາຍເຖິງກຸ່ມຄື ທີ່ຢູ່ ແລະ ກິ ຮ່ວມກັ ຢູ່ໃ ເຮືອນຫຼັງດຽວກັນ. ຊຶ່ງກ່ອນອື່ນໝົດ ຂ້າພະເຈົ້າຈະຖາມທ່າ ວ່າໃ ໄລຍະ 05 ປີຜ່າ ມານີ້ ທີ່ດີ ຂອງ ຄອບຄິວທ່າ ທີ່ ຳໃຊ້ສະເພາະ **ຄອບຄິວຂອງທ່າ** (ເຊັ່ນ: ດິນ າ, ໄຮ, ຊົນລະປະທານ, ພື້ນທີ່ປູກພຶດເສດຖະກິດ, ພື້ນທີ່ປູກ

ໄມ້, ປາຍກັ້ນນກ໌, ໜອງປາ, ທົ່ງຫຍ້າລຶງສັດ, ທີ່ດີ ບຸກສ້າງເຮືອ ແລະ ສວ ) ໄດ້ກວດກູ້ ລບຕ ໂ**ດຍອົງກາ ຈັດຕັ້ງຈາກ** ທາງ ອກ (ເຊັ່ນ:ທີ່ບໍ່ແມ່ ຄອບຄົວສອງທ່າ ຫຼື ຄື ໃ ທ້ອງຖິ່ນເປ້ ຜູ້ເກັບກູ້ເອງ) **ໃດໜຶ່ງບໍ**??

### ໃຫ້ຂີດອ້ອມເອົາ 1 ຄຳຕອບ

1	ມີ
2	ບໍ່ມີ

# 2.4 ตัวจากบั๊บใต้ถาม:

ຂ້າພະເຈົ້າຈະຖານທ່າ ວ່າ ທີ່ດີ ສຳລັບກາ ຳ ໃຊ້ຂອງຊຸມຊີ (ເຊັ່ນ: ສຳນັກງານຂອງລັດຖະບາ , ໂຮງຮູງ , ຊີ ລະປະ ທາ ສຳລັບຊາວບ້າ , ຝາຍກັ້ນນຳໃເຂື່ອນ ສຳລັບຊາວບ້າ , ສະຖາ ທີ່ຫາງສາດສະໜາ, ນຳສະອາດ, ວິດຖ່າຍ. ຊຶ່ງອາດຈະ ລວມຫັງທີ່ດີ ສ່ວ ລວມເຊັ່ນ ທີ່ງຫຍ້າລົງລັດ **ທີ່ປໍແມ່ ກຳມະສິດ**ຂອງຄອບຄົວໃດໜຶ່ງ ຫຼື ຄອບຄົວຈຳນວນໜຶ່ງ ແຕ່ວ່າເປັ ກຳມະສິດຂອງຊຸມຊີ ແລະ ຖືວ່າເປັ ທີ່ດີ ຂອງສາຫາລະນະ ຊຶ່ງຊຸມຊີ ສາມາດ ຳໃຊ້ຢ່າງອິດສະຫຼະ ໝາຍຄວາມວ່າເຂົາ ເຈົ້າບໍ່ຈຳເປັ ຕ້ອງເສຍພາສີທີ່ດີ ) ຢູ່ໃ ບ້າ ຂອງທ່າ ໄດ້ກວດກູ້ ລບຕ ໂດຍອົງກາ ຈັດຕັ້ງຈາກຫາງ ອກ (ທີ່ບໍ່ແມ່ ຄອບຄົວຂອງທ່າ ຫຼື ຄີ ໃ ຫ້ອງຖິ່ນເປ້ ຜູ້ເກັບກູ້ເອງ) ບໍ?

### ໃຫ້ຂີດອ້ອມເອົາ 1 ຄຳຕອບ

1	ມີ	
2	ບໍ່ມີ	

### ถาน ะ าสาลัย ักสาพาก:

ຖ້າຫາກວ່າ*ຢູ່ໃ ຂໍ້2.1 ແລະ* 2.2 ນັ້ນບໍ່ຖືກຕ້ອງກັບບຸກຄື ທີ່ຈະສຳພາດນັ້ນ ແມ່ ໃຫ້ກ່າວສະແດງຄວາມຂອບໃຈ ແລະ ຢຸດ ກາ ສຳພາດ ແລ້ວຂີດວິງມີ ອ້ອມເອົາ 999 ຢູ່ໃ ຂໍ້ 2.3 ລຸ່ມນີ້.

ຖ້າຫາກວ່າຖືກ*ຢູ່ໃ ກໍລະ ຂອງຂໍ້ທີ 2.3 ຫຼື 2.4 ຫຼື ອ ຢູ່ໃ ສອງກໍລະ ຕັ່ງກ່າວ*, ແມ່ ໃຫ້ຂີດອ້ອມເອົາລະຫັດຂອງຜູ້ທີ່ຈະ ເຂົ້າຮວມກາ ສຳພາດນັ້ນຢູ່ໃ ຂໍ້ທີ 2.5 ລຸ່ມນີ້ <u>(ໂດຍໃຫ້ຂີດອ້ອມເອົາ 1 ຄຳຕອບ)</u> ແລະ ສືບຕໍ່ຖາມບັ ດາຄຳຖາມຕ່າງໆທີ່ ເໝາະສົມ.

### 2.5

1	ເກັບກູ້ສຳລັບບຸກຄີ ( <i>ຖືກກັບກໍລະ ີ ຂອງຂໍ້</i> 2.1 ເທົ່ານັ້ນ)	ແບບສອບຖາມທີ 3, 4 ແລະ 7	
2	ກາ ເກັບກູ້ສຳລັບຂຸມຊີ (ຖື <b>ກກັບກໍລະ ຂອງ</b> ຂໍ້ທີ 2.2 ເທົ່ານັ້ນ)	ແບບສອບຖາມທີ 3, 5 ແລະ 7	
3	ກາ ເກັບກູ້ສຳລັບບຸກຄີ ແລະ ຂຸມຊີ ( <i>ຖືກ</i> <i>ທັງກຸ່ລະ ີ ຂອງຂໍ້ຫີ</i> 2.1 ແລະ 2.2)	ແບບສອບຖາມທີ 3, 6 ແລະ 7	
999	ບໍ່ຖືກກັບກໍລະີໃດເລີຍ, ເຂັ່ນ: ບໍ່ມີກາ ເກັບ ກູ້ເລີຍ	ໃຫ້ຢຸດເຊົາກາ ສາພາດ	

### ຄຳແ ະ ຳສຳລັບ ກສຳພາດ:

ຜູ້ທີ່ທ່າ ຈະສາພາດແມ່ ເປັ ຜູ້ທີ່ ອ ຢູ່ໃ ກໍລະ**ີ ໃດໜຶ່ງ** ທີ່ກາົດໄວ້ໃ ຂ້າງເທິງນັ້ນເທົ່ານັ້ນ ແບບສອບຖາມທີ 3: ຂໍ້ມູ ທາງດ້າ ປະຊາກອ

# ຄຳແ ະ ຳສຳລັບ ັກສຳພາດ:

# ทะลุ าอ่า ล้ัดจามลุ่มนี้ใต้แท่ผู้ใต้สาพาก:

ี่ล้าพะเจ้าจะทามถาทามจามอมพึ่ງท่าอทับถอบถือลอๆท่า . ถือเรือ พื่าพบายเท็าทุ่มถิมพึ่ງที่ยู่ และ ที่ ฮ่อม

2	ທັສັງເກດ ແລະ ບັ ທຶກເອົາ. <u>ແຕ່ບໍ່ໃຫ້ຖາມຄຳຖາມ!</u>	2	b füt
ź	ໂດອ້ອມເອົາ 1 ຄຳຕອບ	3	ສັງກະສີ/ໄມ້ແປ້ /ກະເບື້ອງ
3.9	ຝາ <b>ເຮືອ ສ່ວ ໃຫຍ່</b> ແມ່ ແຍ້ມດ້ວຍວັດຖຸຊະີດ ໃດ? ໃຫ້ <b>ສັງເກດ ແລະ ບັ ຫິກ. <u>ແຕ່ບໍ່ໃຫ້ຖາມຄຳຖາມ!</u></b>	1 2 3	ສ່ວ ໃຫຍ່ແມ່ ໄມ້ແປ່ ສ່ວ ໃຫຍ່ແມ່ ໄມ້ແປ່ ສ່ວ ໃຫຍ່ແມ່ ດີ ຈີ່
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ		
3.10	ປົກກະຕິແລ້ວສະມາຊິກໃ ຄອບຄົວໄປຖ່າຍ (ຊື້ ແລະ ຍຸ່ງວ) ຢູ່ໃສ? <i>ຂີດອ້ອມເອົາ 1 ຄາຕອບ</i>	1 2 3	ບໍ່ມີຫ້ອງ ຈ້າຟຸມໄມ້/ປ່າ ຫ້ອງ ຈັລວມຂອງຂຸມຊີ ວິດແຫັງຫຼື ວິດຊີມ
3.11	ພະລັງາ ຄວາມຮ້ອ <i>ສ່ວ ໃຫຍ່</i> ທີ່ທ່າ ໃຊ້ແຕ່ງຢູ່	1	ຮູ້ເລື້ອຍ
	ຄົວກິ ແມ່ ຫຍັງ? <i>ຂີດອ໌ອມເອົາ 1 ຄ</i> ຳຕອບ	2 3 4	ชิ ซุ่า อิ่มๆ
3.12	ໂດຍປົກກະຕິແລ້ວໃນປີໜຶ່ງຄອບຄິວຂອງທ່າ ມີ ເຂົ້າກຸ້ມກີ ຈັກເດືອ (ເຂົ້າທີ່ພະລິດໄດ້ເອງ)?	ໃຫ້ຂຽ ຄ່	ຳຕອນ/ ເດືອ
3.13	<i>ປົກກະຕິແລ້ວ</i> ທ່າ <i>ດື່ມນ</i> ຈ້ຈ∘ກແຫຼ່ງໃດ? <i>ຂີດອ້ອມເອົາ 1 ຄາຕອບ</i>	1 2 3	ແມ່ ກ໌, ຫ້ວຍ ຫຼື ເສື່ອນ ກໍ່ສ້າງ/ເຈາະເປີ ຮູຫີ່ບໍ່ມີຝາປິດ ແຫຼ່ງ ກໍ້ຈາກພູ (ລວມທັງ ກໍລີ )/ ກໍ່ສ້າງ/ເຈາະເປັນຮູຫີ່ມີຝາ ປິດ/ ກໍ້ ບາດາ ຂຶ້ນໆ
3.14	ໃ ຄອບຄິວທ່າ ມີຜູ້ທີ່ເສຍຊີວິດ ຫຼື ໄດ້ຮັບບາດ ເຈັບ ເນື່ອງຈາກ ລບຕ ຈັກຄີ ?	ໃຫ້ຂໆ ໃ	ช่
3.15	ປະຈຸບັນນີ້ຢູ່ໃ ຄອບຄົວຂອງທ່າ ມີ <i>ຜູ້ທີ່ພິກາ ຫຼື</i> ຜູ້ທີ່ມີພະຍາດຊ <b>໌າເຮື້ອ</b> ທີ່ບໍ່ສາມາດເຮັດວຸງກໄດ້ ເຕັມສ່ວ ຕາມຄວາມສາມາດຂອງເຂົາເຈົ້າ ຈັກ ຄົ ?	ใຫ້ຊຽ ใ	n

### ແບບສອບຖາມທີ 4: ກາ ເກັບກູ້ ລບຕ ສຳລັບບຸກຄົ

999 | | | ແມ່ ຜູ້ໃຫ້ສຳພາດນັ້ນບໍ່ ອ ຢູ່ໃ ກໍລະີນີ້ (ກະລຸນາໃສ່ເຄື່ອງໝາຍ) (ຕົວຢ່າງ: ຜູ້ທີ່ເຂົ້າຮ່ວມກາ ສຳພາດນັ້ນ ແມ່ ອ ຢູ່ໃ ກໍລະີກາ ເກັບກູ້ສຳລັບຂຸມຊີ (ໃຫ້ຂ້າມໄປແບບສອບຖາມທີ 5) ຫຼື ອ ຢູ່ໃ ກໍລະີກາ ເກັບສຳລັບ ບຸກຄື ແລະ ຊຸມຊີ (ໃຫ້ຂ້າມໄປແບບສອບຖາມທີ 6)

# ແບບສອບຖາມທີ 4: ກາ ເກັບກູ້ ລບຕ ສຳລັບດິ ບຸກຄົ

### ถาน ะ าตาลับ ักตาพาก:

ກະລຸ າອ່າ ຂໍ້ຄວາມລຸ່ມນີ້ໃຫ້ແກ່ຜູ້ທີ່ຈະໃຫ້ສາພາດກ່ອ ເລີ່ມດີ້ ສາພາດ:

'ຂ້າພະເຈົ້າຈະຖາມທ່າ ກ່ຽວກັບທີ່ດີ ຂອງຄອບຄິວຂອງທ່ານ ຕື່ໄດ້ຮັບກາ ເກັບກູ້ ລບຕ **ໂດຍອົງກາ ຈັດຕັ້ງຈາກທາງ ອກ** (ທີ່ບໍ່ແມ່ ຄອບຄິວຂອງທ່າ ຫຼື ຄີ ໃ ຫ້ອງຖິ່ນເປັ ຜູ້ເກັບກູ້ເອງ) ແລ້ວນັ້ນ, ກະລຸນາຕອບໃຫ້ຖືກຕ້ອງທີ່ສຸດເທົ່າທີ່ເປັ ໄປໄດ້ ຊຶ່ງຄຳຕອບດັ່ງກ່າວຈະບໍ່ຖືວ່າ**ຖືກ ຫຼື ຜິດ** 

### ถาน ะ าลาลับ ักลาพาก:

ໃຫ້ຖາມທຸກໆຄຳຖາມລຸ່ມນີ້ ຍິກເວັ້ນຄຳອະທິບາຍ. <u>ໂດຍບໍ່ໃຫ້ອ່າ ຄຳຕອບ ຍິກເວັ້ນກໍລະີ ທີ່ຈຳເປັ .</u> ແລ້ວຂີດວິງມີ ອ້ອມ ເອົາຄຳຕອບນັ້ນ.

4.1	ຄີດັ່ງທີ່ທ່າ ໄດ້ບອກຂ້າພະເຈົ້າກ່ອນໜ້ານີ້ແລ້ວວ່າ ທີ່ ດີ ຈຳນວນໜຶ່ງຂອງຄອບຄົວທ່າ ໄດ້ເກັບກູ້ ລບຕ	1	ແມ່ ແລ້ວ, ໄດ້ ຳໃຊ້ໝົດ <i>ໃຫ້ສືບຕໍ່ຖາມຄຳຖາມ</i> ໃ ແບບຟອນທີ 4 ໃຫ້ສຳເລັດ
	ແລ້ວ ແລະ ປະຈຸບັນນີ້ທີ່ດີ ດັ່ງກ່າວນັ້ນໄດ້ ຳໃຊ້ບໍ່? ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	2	ແມ່ ແລ້ວ, ໄດ້ ຳໃຊ້ຈຳນວນໜຶ່ງ <i>ໃຫ້ສືບຕໍ່ຖາມ</i> ຄຳຖາມ <i>ໃ ແບບຟອມຫີ 4 ໃຫ້ສຳເລັດ</i>
	The state of the s	3	ບໍ່ໄດ້ ຳໃຊ້ເລີຍ
4.2	ທ່າ ຮູ້ບໍ່ວ່າ <i>ເຫດ<del>ຜີ</del> ດີ້ ດໍ</i> ທີ່ໆດິ ຂອງຄອບຄົວທ່າ	1	ຄອບຄິວຂອງຂ້ອຍທຸກ/ບໍ່ມີເຂົ້າກຸ້ມກິ
	ໄດ້ຖືກຄັດເລືອກໃຫ້ມີກາ ເກັບກູ້ ລບຕ ນັ້ນແມ່ ຍ້ອ ຫຍັງ?	2	ດິ ຂອງພວກເຮົາມີ ລບຕ ຕຶກຄ້າງຫຼາຍ/ມີອຸປະຕິ ເຫດເກີດຂຶ້ນຢູ່ດິ ຂອງຂ້ອຍ
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	3	ອຳ າດກາ ປົກຄອງບ້າ /ເມືອງ ຂໍຮ້ອງໃຫ້ມີກາ ເກັບກຸ້
		4	ຂ້ອຍ/ຄອບຄົວຂອງຂ້ອຍມີແຜ ກາ ຈະ ຳໃຊ້ດິ
		5	ມັ ເປັ ສ່ວນໜຶ່ງຂອງໂຄງກາ ອາຫາ ເພື່ອງາ / ລັດຖະບາ ⁄ອິງກາ ທີ່ບໍ່ຂຶ້ນກັບລັດ/ອິງກາ ຈັດຕັ້ງ ສາກົ
		6	ຂ້ອຍ/ຄອບຄົວຂອງຂ້ອຍສະເໜີໃຫ້ມີກາ ເກັບກູ້
		7	ຄອບຄົວຂອງຂ້ອຍໄດ້ໂຍກກຍ້າຍມາຕັ້ງໃໝ່
		999	ບໍ່ແໍ່ໃຈ/ອື່ນໆ/ບໍ່ມີຄຳຕອບ
4.3	ທ່າ <i>ມີຄວາມໝັ້ນໃຈແ ວໃດ</i> ພາຍຫຼັງທີ່ໄດ້ມີກາ	1	ຮູ້ສຶກມີຄວາມເຊື້ອໝັ້ນກວ່າເກົາຫຼາຍ
	ເກັບກູ້ ລບຕ ອອກຈາກທີ່ດີ ແລ້ວ <i>ມັ ປອດໄພບໍ</i> ?	2	ມີຄວາມເຊື້ອໝັ້ນກວ່າເກົ່າ
	ໃຫ້ອ່າ ບັ ດາຄາຕອບ	3	ມີຄວາມເຊື່ອໝັ້ນ ແຕ່ຂ້ອຍຈຳຕ້ອງລະມັດລະວັງຢູ່
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	4	ບໍ່ມີຄວາມເຊື່ອໝັ້ນເລີຍ
		999	ບໍ່ແໍ່ໃຈ/ອື່ນໆ/ບໍ່ມີຄາຕອບ

# 4.4 ถาน ะ าลาลับ ักสาพาก:

ถาน ะ าลาลับ ักลาพาก:

ໃຫ້ຕື່ມຂໍ້ມູ ໃສ່ຕາຕະລາງລຸ່ມນີ້ໃຫ້ຄົບຖົວ ຕາມແຕ່ລະຕອ ດິ ທີ່ໄດ້ຮັບກາ ເກັບກູ້ ສຳລັບຄອບຄົວດັ່ງກ່າວ

ໃຫ້ປ່ຽນຫົວໜ່ວຍທີ່ຜູ້ໃຫ້ສາພາດບອກມານັ້ນ ເປັນຕາແມັດ (ກໍລະ ີ ດີ ບໍ່ໄດ້ ຳໃຊ້ໃ 4.1ຕາຕະລາງຂໍ້ທີ 2 ແລະ 4 ໃຫ້ໃສ່ a)

ຮັບພະຍາກອ ທີ (R)	<ol> <li>ກາ ຳໃຊ້ທີ່ ດີ ກ່ອ ກາ ເກັບກູ້ (ໃຫ້ ຳ ໃຊ້ລະຫັດ)</li> </ol>	<ol> <li>ກາ ຳໃຊ້ທີ່ ດີ ຫຼັງກາ ເກັບກູ້ (ໃຫ້ ຳໃຊ້</li> <li>ລະຫັດ)</li> </ol>	3. ເນື້ອທີ່ເກັບກູ້ (ມ <sup>2</sup> )	<ol> <li>ເນື້ອທີ່ ຳໃຊ້</li> <li>ແລ້ວ (J²)</li> </ol>	5. ປີທີ່ເກັບກູ້ (ປີໂ ປະຕິທີ ສາກິ )
R 1			ມ²	n <sub>s</sub>	_ _  _
R 2			ມ <sup>2</sup>	n	
R3			ມ <sup>2</sup>	n²	
R 4			ມ <sup>2</sup>	n	
R 5			ມ <sup>2</sup>	n <sub>2</sub>	
R 6			ئادً	JJ <sup>2</sup>	

# ລະຫັດຂອງຄຳຕອບສຳລັບຄຳຖາມທີ 4.4.1 ແລະ 4.4.2 1 ໄຮ 2 ດີ ຳ (ສະເພາະ າບີ) 3 ດີ ຳ (ສະເພາະ າແຂງ) 4 ດີ ຳ ( ຳປີ ແລະ ຳແຂງ) 5 ປູກພຶດຕັກ/ໄມ້ໃຫ້ໝາກ 6 ປູກພຶດຕັກ/ໄມ້ໃຫ້ໝາກ 6 ປູກພຶດຕັກ/ໄມ້ໃຫ້ໝາກ 8 ທຶງຫຍ້າລຸ່ງສັດທຳມະຊາດ/ທົ່ງຫຍ້າປູກ 9 ຊີ ລະປະທາ 10 ໜອງປາ 11ເຮືອ ຢູ່ 12 ອື່ນໆ (ໃຫ້ຊຸງ ຄຳຕອບໃສ່) 999 ບໍ່ແ ່ໃຈ/ບໍ່ມີຄຳຕອບ

ຖາມທີ 4.4.2 ຂ້າງເທິງນັ້ນ ໃຫ້ປ່ຽນຫົວໜ່ວຍທີ່ຜູ້ທີ່ໃຫ້ສຳພາດບອກບານັ້ນ ເປ້ ຫົວໜ່ວຍ ໂຕ່ , ຕາແມັດ ແລະ ກິໂລກະລາມ ທີ່ເຫັ ວ່າເໝາະສົມ. 4.5 (ກໍລະີລະຫັດທີ 1-8): ກໍລະີ *ທຶ່ງຫຍ້າຫາມະຊາດໃຫ້ໝາບ 999 ເລີຍ* ສະມັດຕະພາບຂອງຜີ ຜະລິດ ໂດຍສະເລ່ຍຂອງພືດດັ່ງກ່າວໃ ແຕ່ລະໆດູ*ກ່ອ* ທີ່ດີ ໄດ້ຮັບກາ ເກັບກູ້ ລບຕ ແມ່ ໄດ້ຈັກ ໂຕ່ ? |\_\_|\_|| 777 ບໍ່ຫັ ໄດ້ເກັບຜົ ພະລິດ/ບໍ່ໄດ້ ຳໃຊ້ |\_\_| ສະມັດຕະໜາບຂອງຜີ ຜະລິດ ໂດຍສະເລ່ຍຂອງພືດດັ່ງກ່າວໃນແຕ່ລະໆດຸ*ພາຍຫຼັງ*ທີ່ດີ ໄດ້ຮັບກາ ເກັບກູ້ ລບຕ ແລ້ວແມ່ ໄດ້ຈັກ ໂຕ່ ? |\_|\_|\_| 777 ບໍ່ຫັ ໄດ້ເກັບຜີ ຜະລິດ |\_| 999 ຖ້າບໍ່ກ່ຽວຂ້ອງເລີຍ  $\Box$ 4.6 (ກໍລະີລະຫັດທີ 9) ມີເນື້ອທີ່ດີ ຈັກ ມ² ທີ່ລະບົບຊີ ລະປະທາ ດັ່ງກ່າວຕອບສະໜອງ ຳໄດ້? |\_\_|\_|\_| ສະມັດຕະພາບຂອງຜົນຜະລິດ ໂດຍສະເລ່ຍຕໍ່ເຮັກຕາໃນແຕ່ລະໆດູຈາກພື້ນທີ່ດິນທີ່ມີລະບົບຊົນລະປະທານດັ່ງກ່າວກ່ອ 777 ບໍ່ທັ ໄດ້ເກັບຜີ ຜະລິດ/ບໍ່ໄດ້ ຳໃຊ້ |\_| ກາ ເກັບກູ້ ລບຕໄດ້ຈັກໂຕ່ ? |\_\_|\_| ສະມັດຕະພາບຂອງຜົນຜະລິດ ໂດຍສະເລ່ຍຈາກພື້ນທີ່ດິນທີ່ມີລະບົບຊົນລະປະທານດັ່ງກ່າວ*ພາຍຫຼັງ*ກາ ເກັບກູ້ ລບຕ ແລ້ວໄດ້ຈັກໂຕ່ ? |\_|\_| 777 ບໍ່ຫັ ໄດ້ເກັບຜີ ຜະລິດ |\_\_| 999 ຖ້າບໍ່ກ່ຽວຂ້ອງເລີຍ 4.7 (ກໍລະີລະຫັດທີ 10) ສະມັດຕະພາບຜີ ຜະລິດ**ປາ**ໂດຍສະເລ່ຍໃ ແຕ່ລະໆລະດູກ່ອ ກາ ເກັບກູ້ ລບຕ ໄດ້ຫຼາຍປາ ໃດ? |\_\_|\_| ກີ 777 ບໍ່ຫັ ໄດ້ເກັບຜີ ຜະລິດ/ບໍ່ໄດ້ ຳໃຊ້ |\_| ສະມັດຕະພາບຜີ ຜະລິດ**ປາ**ໃ ແຕ່ລະໆດູ*ພາຍຫຼັງ*ກາ ເກັບກູ້ ລບຕ ແລ້ວ ໄດ້ຫຼາຍປາ ໃດ? |\_|\_| ກິ 777 ບໍ່ຫັ ໄດ້ເກັບຜີ ຜະລິດ 📋 999 ຖ້າບໍ່ກ່ຽວຂ້ອງເລີຍ 4.8 (ກໍລະີລະຫັດທີ 11) ลาส ะ าสาลัย ักสาพาก: ใช้ าใຊ້ละชักลอาลาตอบลุ่มนี้ ທຳ ຢູ່ໃສກ່ອ ກາ ເກັບກູ້ ລບຕ ນັ້ນ? ມີທັງໝົດຈັກຄົນທີ່ອາໄສຢູ່ນຳຄອບຄົວຂອງທ່າ ? 999 ຖ້າບໍ່ກ່ຽວຂ້ອງເລີຍ ລະຫັດຂອງຄຳຕອບຂໍ້ທີ່ 4.8 1 ຢູ່ບ້ານອື່ນ 2 ຢູ່ ຳພໍ່ແມ່

ຄຳແ ະ ຳສຳລັບ ັກສຳພາດ: ໃຫ້ຕື່ມຄຳຕອບຕາມຄຳຖາມລຸ່ມນີ້ໃຫ້ຄົບຖົວ ໂດຍກາ ຳໃຊ້ລະຫັດຂອງຄຳຕອບສຳລັບຄຳ

3 ອື່ນໆ

4.9	ກໍລະີໃ ປີຜ່າ ມາຫາກ <i>ບໍ່ໄດ້ ຳໃຊ້</i> ທີ່ດິນນັ້ນ	1	ບໍ່ມີແຮງງາ
	ເຫດຜີ ຕື້ ຕໍແມ່ ຍ້ອ ຫຍັງ?	2	ບໍ່ມີອຸປະກອ
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	3	ສະພາບດິ ຟ້າອາກາດບໍ່ອຳ ວຍ
		5	ບໍ່ມີທີ່ ຮອ
		6	ກາ ເກັບກູ້ລ້າຊ້າເກີ ໄປ
		7	ທີ່ດິນບໍ່ມີຄວາມເໝາະສົມ
		8	ທີ່ດິນໄດ້ຂາຍໄປແລ້ວ
		9	ຫຍຸ້ງຍາກໃນການເບິ່ງແຍງຮັກສາ/
			ບໍ່ມີຄວາມສະດວກ
		999	ບໍ່ກຸ່ງວຂ້ອງ/ ຳໃຊ້ແລ້ວ
		ใช้เลา กา	ອື່ນໆ
		กอบ	
		2000	1
1.10	ສິ່ງທີ່ມີການປ່ຽນແປງ <i>ທີ່<b>ສຳຄັນທີ່ສຸດ</b>ຕ</i> ໍ່ຄອບຄິວຂອງທ່າ ເື່ອງ	1	ຮູ້ສຶກປອດໄພ/ມີຄວາມກັງວີ
	ຈາກວ່າທີ່ດິນໄດ້ຮັບການກວດກູ້ແລ້ວແມ່ນຫຍັງ?	2	ໜ້ອຍລົງ
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	2	ສາມາດຂຸດດິ ໄດ້ເລິກ/ໄວກວ່າ
		_	ເກົ່າ
		3	ຕື້ ເຂົ້າແຂງແຮງ/ງາມກວ່າເກົ່າ
		4	ມີເຂົ້າກຸ້ມກິ່/ບໍ່ຈຳເປີ ຕ້ອງກິ
			ຫົວມັ ອີກ/ບໍ່ໄດ້ຊື້ເຂົ້າເພີ່ມ
		5	ມີເຂົ້າ/ໝາກໄມ້/ຜັກກຸ້ມກິ ແລະ
			ໄດ້ຂາຍຈານວນໜຶ່ງ/ສາມາດແບ່ງ
			ປັ ໃຫ້ແກ່ຄອບຄົວ/ໝູ່ເພື່ອນ/ໃຫ້
			ຄູບາ/ຈັດງາ ລັງງ/ພິທີກາ ຕ່າງໆ
		6	ຮູ້ສຶກເພິ່ງພໍໃຈ/ບໍ່ກັງວີ ວ່າຢ້າ
			ເຂົ້າຈະບໍ່ກຸ້ມກິ
		7	ລູກຈະໄດ້ຮັບມູນມໍລະດີກທີ່ດິນທີ່ມີ
			ມູ ຄ່າສູງກວ່າເກົ່າ
		8	ຖ້າພວກເຮົາຈຳເປີ ຕ້ອງກາ ຂາຍ
			ທີ່ດິນຈະໄດ້ເງິນຫຼາຍຂຶ້ນ
		9	ບໍ່ມີກາ ປ່າ ແປງ
		999	ບໍ່ແ ່ໃຈ/ບໍ່ມີຄຳຕອບ
		ใช้เลร กำ	ອື່ນໆ
		ตอบ	

# ແບບສອບຖາມທີ 5: ກາ ກວດກູ້ ລບຕ: ສຳລັບການນຳໃຊ້ທີ່ດິນຂອງຊຸມຊີນ

999 | | ແມ່ ຜູ້ໃຫ້ສຳພາດັ້ນບໍ່ ອ ຢູ່ໃ ກໍລະ ນີ້ (ກະລຸນາໃສ່ເຄື່ອງໝາຍ) (ຕົວຢ່າງ: ຜູ້ທີ່ເຂົ້າຮ່ວມກາ ສຳພາດນັ້ນ ແມ່ ອ ຢູ່ໃ ກໍລະ ກາ ເກັບກູ້ສຳລັບມຸກຄື (ໃຫ້ຖາມຄາຖາມສະເພາະແບບສອບຖາມທີ 4 ເທົ່ານັ້ນ) ຫຼື ອ ຢູ່ໃ ກໍລະ ກາ ເກັບສຳລັບບຸກຄື ແລະ ຊຸມຂົ້ (ໃຫ້ຂ້າມໄປແບບສອບຖາມທີ 6)

# ແບບສອບຖາມທີ 5: ກາ ກວດກູ້ ລບຕ ສຳລັບການນຳໃຊ້ທີ່ດິນຂອງຊຸມຊົນ

### ถาน ะ าตาลับ ักตาพาก:

ກະລຸ າອ່າ ຂໍ້ຄວາມລຸ່ມນີ້ໃຫ້ແກ່ຜູ້ທີ່ຈະໃຫ້ສຳພາດກ່ອ ເລີ່ມດີ້ ສຳພາດ:

ໍຂ້າພະເຈົ້າຈະຖາມຄຳຖາມຈຳນວນໜຶ່ງກ່ຽວກັບທີ່ດິນຢູ່ພາຍໃນບ້ານຂອງທ່ານທີ່ໄດ້ຮັບການເກັບກູ້ ລບຕ ໂດຍອົງກາ ຈັດ ຕັ້ງຈາກທາງນອກ (ທີ່ບໍ່ແມ່ ຄອບຄົວຂອງທ່າ ຫຼື ຄີ ໃ ຫ້ອງຖິ່ນເປ້ ຜູ້ເກັບກູ້ເອງ) ເພື່ອນາໃຊ້ໃນໂຄງການພັດທະນາຂອງ ຊຸມຊົນ (ເຊັ່ນ: ການສ້າງເສັ້ນທາງ, ໂຮງຮູເນ, ສຸກສາລາ, ວັດ, ແຫຼ່ງນາສະອາດ ແລະ ວິດຖ່າຍ). ສະນັ້ນ, ກະລຸນາຕອບໃຫ້ ຖືກຕ້ອງທີ່ສຸດເທົ່າທີ່ເປ້ ໄປໄດ້ ຊຶ່ງຄຳຕອບດັ່ງກ່າວຈະບໍ່ຖືວ່າຖືກ ຫຼື ຜິດ

### ถาน ะ าลาลับ ักลาพาก:

ໃຫ້ອ່ານທຸກໆຄຳຖາມລຸ່ມນີ້ ຍົກເວັ້ນຄຳຊື້ແຈງ. <u>ໂດຍບໍ່ໃຫ້ອ່າ ຄຳຕອບ.</u> ແລ້ວຂີດອ້ອມເອົາຄຳຕອບດັ່ງກ່າວ ຍົກເວັ້ນກໍລະນີ ທີ່ຈະຕ້ອງໄດ້ປັນທຶກເອົາ.

5.1	ຢູ່ພາຍໃນບ້ານຂອງທ່ານມີທີ່ດິນຕອນໃດໜຶ່ງທີ່ໄດ້ກວດກຸ້ ລບຕ ເພື່ອນຳໃຊ້ເຂົ້າໃນໂຄງການພັດທະນາຂອງ ຊຸມຊີ ບໍ? <i>ຂີດອ້ອມເອົາ 1 ຄຳຕອບ</i>	1 2	ມີ – <i>ໃຫ້ຖາມຄຳຖາມຕໍ່ໄປ</i> ບໍ່ມີ – <i>ປຸດເຊົາ</i>
5.2	ທ່າ ຮູ້ບໍ່ວ່າ <i>ເຫດ<del>ດີ</del> ດີ້</i> ຕໍ່ທີ່ບ້ານຮອງທ່ານໄດ້ຖືກຄັດເລືອກ ໃຫ້ມີການກວດກູ້ ລບຕ ນັ້ນແມ່ນບ້ອນຫຍັງ?	1 2	ບ້າ ຂອງພວກເຮົາທຸກຍາກ ທາງບ້າ ສະເໜີໃຫ້ມີກາ ເກັບກູ້/ເປັ ສ່ວ
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ		ໜຶ່ງໃນແຜນການຂອງບ້ານ
		3	ທາງເມືອງສະເໜີ/ເປັນສ່ວນໜຶ່ງໃນແຜນການ ຂອງເມືອງ
		4	ອີງການຈັດຕັ້ງອື່ນໆ (ເຊັ່ນ: ໂຄງການອາຫານ ໂລກ, ອີງການຈັດຕັ້ງທີ່ບໍ່ຂຶ້ນກັບລັດຖະບານ)
		999	ເປັ ຜູ້ສະເໜີ ບໍ່ແ ່ໃຈ/ບໍ່ມີຄຳຕອບ/ອື່ນໆ

# 5.3 ถาน ะ าสาลัย ักสาพาด:

ทะลุ าอ่า ຂໍ้ดวามลุ่มนี้ใช้แก่ผู้ชี้จะใช้เลาพากท่อ เลิ้มดี้ ลาพาก:

່ ທ່ານສາມາດຊ່ວຍຂ້າພະເຈົ້າຕື່ມຂໍ້ມູນ ໃສ່ ໃນຕາຕະລາງລຸ່ມນີ້ ໃຫ້ຄົບຖ້ວນ ໄດ້ບໍ?

# ຄຳແ ະ ຳສຳລັບ ັກສຳພາດ:

ໃຫ້ເປີ້ມຂໍ້ມູນໃສ່ຕາຕະລາງຕາມແຕ່ລະຕອນດິນທີ່ໄດ້ຮັບການເກັບກູ້ ໂ**ດຍອົງການຈັດຕັ້ງຈາກທາງນອກ** (ທີ່ບໍ່ແມ່ ຄອບຄິວຂອງທ່າ ຫຼື ຄື ໃ ທ້ອງຖິ່ນເປັ ຜູ້ເກັບກູ້ເອງ) ໃຫ້ຄົບຖົວ .

ຊັບພະຍາກອ ທີ	5.3.1	5.3.2 ການນຳໃຊ້ທີ່ດິນ <i>ຫຼັງ</i>	5.3.3 ປີທີ່ເກັບກູ້
(R)	ການນຳໃຊ້ທີ່ດິນ <i>ກ່ອ</i> ກາ	ກາ ເກັບກູ້	(ປີໃ ປະຕິທິ ສາກີ )

	ເກັບກູ້ (ໃຫ້ ຳໃຊ້ລະຫັດຄຳຕອບ)	(ໃຫ້ ຳໃຊ້ລະຫັດຄຳຕອບ)		
R1			_ _ _	
R2				
R3				

ລະຫັດຂອງຄຳຕອບສຳລັບຄຳຖາມທີ 5.3.1

ລະຫັດຂອງຄຳຕອບສຳລັບຄຳຖາມທີ 5.3.2

ລະຫມຂອງທາດອບລາລບທາດໆມຫົວ.ລ.າ ປະເພດການນຳໃຊ້ທີ່ດິນ <i>ກ່ອ</i> ກາ ເກັບກຸ້	ປະເພດການນຳໃຊ້ທີ່ດິນ <i>ຫຼັງ</i> ກາ ເກັບກູ້		
1 ເສັ້ນຫາງ-ຫາງແດງ ຳໃຊ້ໄດ້ສະເພາະລະດູແລ້ງ	1 ເສັ້ນທາງ-ທາງແດງ ຳໃຊ້ໄດ້ສະເພາະລະດູແລັງ		
2 ເສັ້ນທາງ-ນຳໃຊ້ໃ ລະດູແລ້ງ	2 ເສັ້ນທາງໄດ້ປັບປຸງ-ນຳໃຊ້ໃ ລະດູແລັງ		
3 ເສັ້ນທາງ-ນຳໃຊ້ຕະຫຼອດປີ	3 ເສັ້ນທາງໄດ້ປັບບຸງ-ນຳໃຊ້ຕະຫຼອດປີ		
4 ໂຮງຮຸ	4 ໂຮງຮຸງ ໄດ້ປັບປຸງ/ສ້າງໃໝ່		
5 ແຫຼງ ້ຳສະອາດ	5 ແຫຼ່ງ ້ຳສະອາດ		
6 ວິດຖ່າຍ	6 ວິດຖ່າຍ		
7 ໜອງປາ	7 ໜອງປາ		
8 ຫໍໄຫວ້ຂອງຊຸມຊີ /ສະຖາ ທີ່ຫາງສາດສະໜາ	8 ຫໍໄຫວ້ຂອງຊຸມຊີ /ສະຖາ ທີ່ທາງສາດສະໜາ		
9 ຊີນລະປະທານ (ຝາຍກັ້ນນໍ້າ, ເຂື່ອນ, ຄອງຊີນລະປະທານ)	9 ຊົນລະປະທານ (ຝາຍກັ້ນນຳ້, ເຂື້ອ		
10 ທີ່ງຫຍ້າ/ບ່ອນລັງງສັດ	ຄອງຊີ ລະປະຫາ		
	10 ທີ່ງຫຍ້າ/ບ່ອນລັງງສັດ		
11 ໄຮ່	11 នៃ		
12 ດິ າ (ສະເພາະ າ <i>ປີ</i> )	12 ດິ າ (ສະໝາະ າ <i>ປີ</i> )		
13 ດີ າ ( <i>ສະໝາະ າແຊງ</i> )	13 ດີ ຳ ( <i>ສະເພາະ ຳແຂງ</i> )		
14 ດິ ຳ (ຳປີ ແລະ ຳແຊງ)	14 ດິ າ ( າປີ ແລະ າແຊງ)		
15 ປູກພືດຜັກ/ໄມ້ໃຫ້ໝາກ	15 ປູກພືດຜັກ/ໄມ້ໃຫ້ໝາກ		
16 ປູກພືດເສດຖະກິດ	16 ປູກພືດເສດຖະກິດ		
17 ປູກໄມ້/ພືດອຸດສາຫະກຳ	17 ປູກໄມ້/ພຶດອຸດສາຫະກຳ		
18 ທີ່ງຫຍ້າ	18 ທີ່ງຫຍ້າ		
19 ສຳນັກງານຂອງອົງການຈັດຕັ້ງລັດ	19 ສຳນັກງານຂອງອົງການຈັດຕັ້ງລັດ		
20 ປຸກສ້າງເຮືອ ຢູ່	20 ປຸກສ້າງເຮືອ ຢູ່		
21 ສຸກສາລາ/ໂຮງໝໍ	21 ສຸກສາລາ/ໂຮງໝ່		
22 ບໍ່ໄດ້ ຳໃຊ້	22 ບໍ່ໄດ້ ຳໃຊ້		
23 ອື່ນໆ (ໃຫ້ຂຸງນຄຳຕອບ)	23 ອື່ນໆ (ໃຫ້ຊງນຄາຕອບ)		
999 ช่น "ใจ/ช้มิลาตอบ	999 ບໍ່ແ ່ ໃຈ/ບໍ່ມີຄຳຕອບ		

# ถาน ะ าสาลับ ัทสาพาก:

ໃຫ້ອ່ານທຸກໆຄຳຖາມລຸ້ມນີ້. <u>ໂດຍບໍ່ຕ້ອງອ່າ ຄຳຕອບ.</u> ແລ້ວໃຫ້ຂີດອ້ອມເອົາຄຳຕອບນັ້ນ ກະລຸ າຕື່ມຄຳຕອບໃສ່ຄຳຖາມທີ 5.4-5.8 ຕາມ*ແຕ່*ລະຊັບພະບາກອ ທີ່ລະບຸຢູ່ໃ ຂໍ້ທີ 5.3.2 ນັ້ນ. ໂດຍ*ໃຫ້ ຳໃຊ້ ຮ່າງແບບຟອມຄຳຕອບໜຶ່ງ ສະເພາະຊັບພະບາກອ ຊະນິດໜຶ່ງເທົ່ານັ້ນ.* 

# ຊັບພະຍາກອ ທີ 1

# ລະຫັດສຳລັບຊັບພະຍາກອ ທີ 1 (ໃຫ້ເອົາຢູ່ຂໍ້ທີ 5.3.2) R1

5.4	ຍັງ ຳໃຊ້ຢູ່ບໍ? (ໃຫ້ນັກສຳພາດລະບຸເຖິງຊື່ຂອງຊັບພະຍາກອນ ໃໝ່ຂອງຊຸມຊົນ ເຊັ່ນ: ຊັບພະຍາກອນທີ່ລະບຸຢູ່ ໃ ຂໍ້ທີ 5.3.2 ນັ້ນ) ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	1 2 999 ໃຫ້ຂຸງ ໃສ່	ຍັງ ຳໃຊ້ຢູ່ - ໃຫ້ຂ້າມໄປຂໍ້ທີ 5.6 ແລະ ໃຫ້ສືບ ຕໍ່ຖາມຄຳຖານອື່ນໆຢູ່ໃນແບບສອບຖາມທີ 5 ນີ້ ຖ້າບໍ່ໄດ້ ຳໃຊ້ ໃຫ້ຖາມຕໍ່ຄຳຖາມທີ 5.5, ຈາກນັ້ນໃຫ້ຂ້າມໄປແບບສອບຖາມທີ 7 ເລີຍ ບໍ່ແໍ່ໃຈໄບໍ່ມີຄຳຕອບ
5.5	ເຫດຜົນອັນຕິ້ນຕໍ່ທີ່ບໍ່ນາໃຊ້ ນັ້ນແມ່ນຍ້ອນຫຍັງ? (ໃຫ້ ກສາພາດ ລະບຸເຖິງ ຊື່ຂອງຮັບພະຍາກອນໃໝ່ຂອງຊຸມຊີນ ເຊັ່ນ: ຮັບພະຍາກອນທີ່ລະບຸຢູ່ໃນຂໍ້ທີ 5.4 ນັ້ນ) ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	1 2 3 4 5 6 7 8 9 999	ບໍ່ມີຄວາມສະດວກ/ບໍ່ເໝາະສົມ ຫຍຸ້ງຍາກໃກາ ເບິ່ງແຍງດູແລ ບໍ່ຕ້ອງກາ ຳໃຊ້ ເປ່ເພແລ້ວ ບໍ່ມີທີ ຮອ ສະພາບດີ ຟ່າອາກາດບໍ່ອຳ ວຍ(ຝີ ຕິກ/ແຫ້ງແລ້ງ) ບໍ່ມີແຮງງາ ບໍ່ມີອຸປະກອ ບໍ່ໄດ້ຄຸ ະພາບ ບໍ່ແນ່ໃຈ/ອື່ນ/ບໍ່ມີຄຳຕອບ ຂ້າມໄປແບບສອບຖາມທີ 7 ເລີຍ
5.6	ແມ່ ໃຜເປັ ຜູ້ດູແລຮັກສາ ນັ້ນ? (ໃຫ້ນັກສຳພາດ ລະບຸເຖິງຊື່ຂອງຮຸ້ບພະຍາກອນ ໃໝ່ຂອງຊຸມຊີນ ເຊັ່ນ: ຮຸ້ບພະຍາກອນທີ່ລະ ບຸຢູ່ໃນຂໍ້ທີ 5.4 ນັ້ນ) ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	1 2 3 4 999	ຊາວບ້າ ທັງໝົດ ອຳ າດກາ ປົກຄອງບ້າ ອຳ າດກາ ປົກຄອງເມືອງ ບໍ່ມີໃຜ ບໍ່ແນ່ໃຈ/ອື່ນບໍ່ມີຄຳຕອບ

5.7	ແມ່ ໃຜເປັ ຜູ້ໄດ້ຮັບຜີ ປະໂຫຍດສູງສຸດຈາກ	1	ສະເພາະເດັກນ້ອຍຍິງເທົ່ານັ້ນ
	ນັ້ນ? (ໃຫ້ນັກສາພາດ ລະບຸເຖິງຊື່ຂອງຊັບພະຍາ	2	ລະເພາະເດັກນ້ອຍຜູ້ຊາຍເທົ່ານັ້ນ
	ກອນໃໝ່ຂອງຊຸມຊົນ ເຊັ່ນ: ຊັບພະຍາກອນທີ່ລະບຸຢູ່ໃນຂໍ້ທີ 5.4 ນັ້ນ)	3	ສະເພາະຜູ້ໃຫຍ່ (ຜູ້ຊາຍ ແລະ ແມ່ຍິງ) ເທົ່ານັ້ນ
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	4	ສະເພາະເດັກນ້ອຍເທົ່ານັ້ນ
		5	ແມ່ຍິງ ແລະ ເດັກ້ອຍ
		6	ຜູ້ຊາຍ ແລະ ເດັກ້ອຍ
		7	ສະເພາະຜູ້ຊາຍ
		8	ສະເພາະແມ່ຍິງ
		9	ທຸກໆຄີ ໃ ບ້າ
		10	ບໍ່ມີໃຜ
		999	ບໍ່ແນ່ໃຈ/ອື່ນ/ບໍ່ມີຄຳຕອບ
5.8	ສິ່ງທີ່ມີການປ່ຽນແປງ <i>ທີ່ສຳຄັນທີ່ສຸດ</i> ສາລັບຄົວເຮືອ ຂອງທ່າ ເນື່ອງຈາກມີ <u>ນັ້</u> ນແມ່ນຫຍັງ? (ໃຫ້ ັກສຳພາດ	1	ຕື້ ເຂົ້າແຂງແຮງ/ງາມ/ປັກດຳໄດ້ໂວ ກວ່າເກົ່າ
	ລະບຸເຖິງຊື່ຂອງຊັບພະຍາກອນໃໝ່ຂອງຊຸມຊີນ ເຊັ່ນ: ຊັບພະ	2	ສາມາດໄປຮັບຈ້າງແຮງງາ ຢູ່ໃ

3	ວງກງາ ກະສິກຳ ສາມາດໄປຮັບຈ້າງແຮງງານທີ່ບໍ່
	สามาเกเบอบจากูแอกูกุ่มขอ
	ແມ່ ວງກງາ ກະສິກາ
4	ຮູ້ສຶກເພິ່ງພໍໃຈກັບການທີ່ມີ ເຂົ້າກຸ້ມ
	ກິ (ກາ ຄຳປະກັ ສະບຸງ
	ອາຫາ )
5	ເດັກ້ອຍຢາກໄປໂຮງຮຽ /ໄປໂຮງ
	ຮຸງນເລື້ອຍໆກ່ວາເກົ່າ
6	ຮູ້ສຶກມີສຸຂະພາບແຂງແຮງຂຶ້ນ
7	มิ า์สะอากใຊ้/ปะยักเวลาใ
	ກາ ໄປຕັກ ຈ້
8	ສາມາດຂາຍຜີ ຜະລິດ/ເຮັດກາ
	ຄ້າຂາຍເພີ່ມຂຶ້ນ
9	ສາມາດເດີ ທາງອອກຈາກ ອກ
	ບ້ານ/ມີຂໍ້ມູນຂ່າວສານຫຼາຍຂຶ້ນ
10	ການໄປຢັ່ງມຢາມໝູ່ເພື່ອນ/ຄອບຄິເ
	/ໄປງານລັງງ/ພິທີຕ່າງໆງ່າຍຂຶ້ນ
11	ຮູ້ສຶກພູມໃຈ/ເພິ່ງພໍໃຈ/ເຊື້ອໝັ້ນກັບ
	ຊີວິດຫຼາຍຂຶ້ນ
12	ກາ ຄ້າຂາຍ/ຂາຍສິ ຄ້າເພີ່ມຂຶ້ນ
13	ບໍ່ມີກາ ປ່ຽ ແປງ
999	ບໍ່ແ ່ໃຈ/ບໍ່ມີຄຳຕອບ
ខែរីឡ	ອື່ນ <b>ໆ</b>
ຄຳຕອບ	
	5 6 7 8 9 10 11 12 13 999 20 20

# ຊັບພະຍາກອ ທີ 2 ລະຫັດສຳລັບຊັບພະຍາກອ ທີ 2 (ໃຫ້ເອົາຢຂໍ້ທີ 5.3.2) R2

5.4	ຍັງ ຳໃຊ້ຢູ່ບໍ່? (ໃຫ້ັກສາພາດ ລະບຸເຖິງຊື່ຂອງຮັບພະຍາກອນ ໃໝ່ຂອງຊຸມຊີນ ເຊັ່ນ: ຮັບນະຍາກອນທີ່ລະບຸຢູ່ ໃນຂໍ້ທີ 5.3.2 ນັ້ນ) ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	1 2 999 ໃກ້ຂຸງ ໃສ່	ຍັງ ຳໃຊ້ຢູ່ - ໃຫ້ສ້າມໄປຂໍ້ທີ່ 5.6 ແລະ ໃຫ້ສືບ ຕໍ່ຖາມຄຳຖາມອື່ນໆຢູ່ໃນແບບສອບຖາມທີ 5.ນີ້ ຖ້າບໍ່ໄດ້ ຳໃຊ້ ໃຫ້ຖາມຕໍ່ຄຳຖາມທີ 5.5, ຈາກນັ້ນໃຫ້ຂ້າມໄປແບບສອບຖາມທີ 7 ເລີຍ ບໍ່ແ ີໃຈ/ບໍ່ມີຄຳຕອບ ອື່ນໆ
5.5	ເຫດຕົນອັນຕຶ້ນຕໍ່ທີ່ບັ່ນຳໃຊ້ ນັ້ນແມ່ນຍ້ອນຫຍັງ? (ໃຫ້ນັກສຳພາດ ລະບຸເຖິງ ຊື່ຂອງຮັບພະຍາກອນໃໝ່ຂອງຊຸມຂົນ ເຊັ່ນ: ຮັບພະຍາກອນທີ່ລະບຸຢູ່ໃນຂໍ້ທີ 5.4 ນັ້ນ) ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	1 2 3 4 5	ບໍ່ມີຄວາມສະດວກ/ບໍ່ເໝາະສີມ ຫຍຸ້ງຍາກໃນການເບິ່ງແຍງດູແລ ບໍ່ຕ້ອງກາ ຳໃຊ້ ເປເພແລ້ວ ບໍ່ມີທີ່ ຮອ

		6 7 8 9 999	ສະພາບດີ ຟ້າອາກາດບໍ່ອ້າ ວຍ(ຝີ ຕີກ/ແຫ້ງແລ້ງ) ບໍ່ມີແຮງງາ ບໍ່ມີອຸປະກອ ບໍ່ໄດ້ຄຸ ະພາບ ບໍ່ແນ້ໃຈ/ອື່ນເບໍ່ມີຄຳຕອບ ຂ້າມໄປແບບສອບຖາມທີ 7 ເລີຍ
5.6	ແມ່ນໃຕເປັນຕູ້ດູແລຮັກສາ ນັ້ນ?	1	ຊາວບ້າ ທັງໝົດ
	(ໃຫ້ນັກສຳພາດ ລະບຸເຖິງຊື້ຂອງຮຸ້ບພະຍາກອນ	2	ອຳ າດກາ ປົກຄອງບ້າ
	ໃໝ່ຂອງຂຸມຊົນ ເຊັ່ນ: ຮັບພະຍາກອນທີ່ລະບຸຢູ່ໃ	3	ອຳ າດກາ ປົກຄອງພືອງ
	ຂໍ້ທີ 5.4 ນັ້ນ)	4	ບໍ່ມີໃຕ
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	999	ບໍ່ແນ້ໃຈ/ອື່ນບໍ່ມີຄຳຕອບ

5.7	ແມ່ ໃຜເປ້ ຜູ້ໄດ້ຮັບຜີ ປະໂຫຍດສູງສຸດຈາກ	1	ສະເພາະເດັກນ້ອຍຍິງເທົ່ານັ້ນ
	ນັ້ນ? (ໃຫ້ນັກສາພາດ ລະບຸເຖິງຊື່ຂອງຊັບພະຍາ	2	ສະເພາະເດັກນ້ອຍຜູ້ຊາຍເທົ່ານັ້ນ
	ກອນໃໝ່ຂອງຊຸມຊີນ ເຊັ່ນ: ຊັບພະຍາກອນທີ່ລະບຸຢູ່ໃນຂໍ້ທີ 5.4		ສະເພາະຜູ້ໃຫຍ່ (ຜູ້ຊາຍ ແລະ ແມ່ຍິງ)
	ນັ້ນ)		ເທົ່ານັ້ນ
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	4	ສະເພາະເດັກນ້ອຍເທົ່ານັ້ນ
		5	ແມ່ຍິງ ແລະ ເດັກ້ອຍ
		6	ຜູ້ຊາຍ ແລະ ເດັກ້ອຍ
		7	ສະເພາະຜູ້ຊາຍ
		8	ສະເພາະແມ່ຍິງ
		9	ທຸກໆຄີ ໃ ບ້າ
		10	ບໍ່ມີໃຜ
		999	ບໍ່ແນ່ໃຈ/ອື່ນ/ບໍ່ມີຄຳຕອບ
5.8	ສິ່ງທີ່ມີການປ່ຽນແປງ <i>ທີ່<b>ເຄາຄັນທີ່ສຸດ</b>ສ</i> ຳລັບຄົວເຮືອ ຂອງທ່າ	1	ກິ ເຂົ້າແຂງແຮງ/ງາມ/ປັກດຳໄດ້ໂວ
	ເນື່ອງຈາກມີນັ້ນແມ່ນຫຍັງ? (ໃຫ້ນັກສາພາດ		ກວ່າເກົ່າ
	ລະບຸເຖິງຊື່ຂອງຊັບພະຍາກອນໃໝ່ຂອງຊຸມຊີນ ເຊັ່ນ: ຊັບພະ	2	ສາມາດໄປຮັບຈ້າງແຮງງາ ຢູ່ໃ
	ຍາກອນທີ່ລະບຸຢູ່ໃນຂໍ້ທີ 5.4 ນັ້ນ)		ວງກງາ ກະສິກຳ
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	3	ສາມາດໄປຮັບຈ້າງແຮງງານທີ່ບໍ່
			ແມ່ ວງກງາ ກະສິກຳ
		4	ຮູ້ສຶກເພິ່ງພໍໃຈກັບການທີ່ມີ ເຂົ້າກຸ້ມ
			ກິ (ກາ ຄ້າປະກັ ສະບຸງ ອາຫາ )
		5	ເດັກ້ອຍຢາກໄປໂຮງຮຽ້/ໄປໂຮງ
			ຮູງນເລື້ອຍໆກ່ວາເກົ່າ
		6	ຮູ້ສຶກມີສຸຂະພາບແຂງແຮງຂຶ້ນ
		7	มิ าัสะอาดใຊ้/ปะยัดเอลาใ
			ກາ ໄປຕັກ ຈ້
		8	ສາມາດຂາຍຜີ ຜະລິດ/ເຮັດກາ
			ຄ້າຂາຍເພີ່ມຂຶ້ນ
		9	ສາມາດເດີ ທາງອອກຈາກ ອກ

10 ບ້ານ/ມີຂໍ້ມູນຂ່າວສານຫຼາຍຂຶ້ນ	
11 ການໄປຢັ່ງມຢາມໝູ່ເພື່ອນ/ຄອນ	ມຄົວ/
ໄປງານລັງງ/ພິທີຕ່າງໆງ່າຍຂຶ້ນ	
12 ຮູ້ສຶກພູມ ໃຈ/ເພິ່ງພໍໃຈ/ເຊື້ອໝັ້ນ:	กับຊີ
ວິດຫຼາຍຂຶ້ນ	
13 ການຄ້າຂາຍ/ຂາຍສິນຄ້າເພີ້ມຂຶ້	n
999 ບໍ່ມີກາ ປຸ່ງ ແປງບໍ່ແ ່ໃຈ/ບໍ່ມີຄ	ຳຕອນ
<i>ໃຫ້ຂຸ</i> ງ ອື່ນໆ	
ຄຳຕອບ	

# **ຊັບພະຍາກອ ທີ3** ລະຫັດສຳລັບຊັບພະຍາກອ ທີ3 (ໃຫ້ເອົາຢູຂໍ້ທີ5.3.2) R3

5.4	ຍັງ ຳໃຊ້ຢູ່ບໍ?	1	ຍັງ ຳໃຊ້ຢູ່ - <i>ໃຫ້ຂ້າມໄປຂໍ້ທີ 5.6 ແລະ ໃຫ້ສືບ</i>		
	(ໃຫ້ນັກສຳພາດລະບຸເຖິງຊື່ຂອງຊັບພະຍາກອນ	1	ຕໍ່ຖາມຄຳຖາມອື່ນໆຢູ່ໃນແບບສອບຖາມທີ 5 ນີ້		
	ໃໝ່ຂອງຊຸມຊົນ ເຊັ່ນ: ຊັບພະຍາກອນທີ່ລະບຸຢູ່	2	ຖ້າບໍ່ໄດ້ ຳໃຊ້ ໃຫ້ຖາມຕໍ່ຄາຖາມທີ 5.5,		
	ໃນຂໍ້ທີ 5.3.2 ນັ້ນ)	100	จากบั๊บใต้ร้ามไปแบบตอบຖามที่ 7 เฉีย		
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	999	ข้น "ใจ/ข้มีกาตอบ		
		ໃຫ້ຂງ ໃສ່	ອື່ນໆ		
5.5	ເຫດຜົນອັນຕົ້ນຕໍ່ທີ່ບໍ່ນຳໃຊ້	1	ບໍ່ມີຄວາມສະດວກ/ບໍ່ເໝາະສີມ		
	ນັ້ນແມ່ນຍ້ອນຫຍັງ? (ໃຫ້ນັກສຳພາດ ລະບຸເຖິງ	2	ຫຍຸ້ງຍາກໃນການເບິ່ງແຍງດູແລ		
	ຊື່ຂອງຊັບພະຍາກອນໃໝ່ຂອງຊຸມຊົນ ເຊັ່ນ:	3	ບໍ່ຕ້ອງກາ ຳໃຊ້		
	ຊັບພະຍາກອນທີ່ລະບຸຢູ່ໃນຂໍ້ທີ 5.4 ນັ້ນ)	4	ເປ່ເພແລ້ວ		
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	5	ບໍ່ມີທີ ຮອ		
		6	ສະພາບດິ ຟ້າອາກາດບໍ່ອຳ ວຍ(ຝີ ຕີກ/ແຫ້ງແລ້ງ)		
		7	ບໍ່ມີແຮງງາ		
		8	ນໍ້ມີອຸປະກອ		
		9	ບໍ່ໄດ້ຄຸ ະໜາບ		
		999	ບໍ່ແນ່ໃຈ/ອື່ນ/ບໍ່ມີຄຳຕອບ		
		1	ຂ້າມໄປແບບສອບຖາມທີ <b>7 ເລີຍ</b>		
5.6	ແມ່ນໃຜເປັນຜູ້ດູແລຮັກສານັ້ນ?	1	ຊາວບ້າ ທັງໝົດ		
	(ໃຫ້ນັກສຳພາດ ລະບຸເຖິງຊື່ຂອງຊັບພະຍາກອນ	2	ອຳ າດກາ ປົກຄອງບ້າ		
	ໃໝ່ຂອງຂຸມຊົນ ເຊັ່ນ: ຊັບພະຍາກອນທີ່ລະ	3	ອຳ າດກາ ປົກຄອງເມືອງ		
	ບຸຢູ່ໃນຂໍ້ທີ 5.4 ນັ້ນ)	4	ບໍ່ມີໃຜ		
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	999	ບໍ່ແນ່ໃຈ/ອື່ນ/ບໍ່ມີຄຳຕອບ		

5.7	ແມ່ ໃຜເປັ ຜູ້ໄດ້ຮັບຜີ ປະໂຫຍດສູງສຸດຈາກ	1	ສະເພາະເດັກນ້ອຍຍິງເທົ່ານັ້ນ
	ນັ້ນ? (ໃຫ້ນັກສາພາດ ລະບຸເຖິງຊື່ຂອງຊັບພະຍາ	2	ສະເພາະເດັກນ້ອຍຜູ້ຊາຍເທົ່ານັ້ນ
	ກອນໃໝ່ຂອງຊຸມຊົນ ເຊັ່ນ: ຊັບພະຍາກອນທີ່ລະບຸຢູ່ໃນຂໍ້ທີ 5.4	3	ສະເພາະຜູ້ໃຫຍ່ (ຜູ້ຊາຍ ແລະ

	ນັ້ນ)		ແມ່ຍິງ) ເທົ່ານັ້ນ
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	4	ສະເພາະເດັກນ້ອຍເທົ່ານັ້ນ
	State And State State (State of State Stat	5	ແມ່ຍິງ ແລະ ເດັກ ້ອຍ
		6	ຜູ້ຊາຍ ແລະ ເດັກ ້ອຍ
		7	ສະເພາະຜູ້ຊາຍ
		8	ສະເພາະແມ່ຍິງ
		9	ທຸກໆຄີ ໃ ບ້າ
		10	ບໍ່ມີໃຜ
	70 47	999	ບໍ່ແນ່ໃຈ/ອື່ນ/ບໍ່ມີຄຳຕອບ
5.8	ສິ່ງທີ່ມີການປ່ຽນແປງ <i>ທີ່ສຳຄັນທີ່ສຸດ</i> ສຳລັບຄົວເຮືອ ຂອງທ່າ	1	ຕີ້ ເຂົ້າແຂງແຮງ/ງາມ/ປັກດຳໄດ້ໄວ
	ເນື່ອງຈາກມີນັ້ນແມ່ນຫຍັງ? (ໃຫ້ນັກສາພາດ		ກວ່າເກົ່າ
	ລະບຸເຖິງຊື່ຂອງຊັບພະຍາກອນໃໝ່ຂອງຊຸມຊີນ ເຊັ່ນ: ຊັບພະ	2	ສາມາດໄປຮັບຈ້າງແຮງງາ ຢູ່ໃ
	ຍາກອນທີ່ລະບຸຢູ່ໃນຂໍ້ທີ 5.4 ນັ້ນ)		ວຸງກງາ ກະສິກຳ
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	3	ສາມາດໄປຮັບຈ້າງແຮງງານທີ່ບໍ່
			ແມ່ວງກາງ ກະສິກຳ
		4	ຮູ້ສຶກເພິ່ງພໍໃຈກັບການທີ່ມີ ເຂົ້າກຸ້ມ
			ກິ (ກາ ຄ້າປະກິ ສະບຸງງ
			อาซา )
		5	ເດັກ້ອຍຢາກໄປໂຮງຮູ /ໄປໂຮງ
			ຮຸງນເລື້ອຍໆກ່ວາເກົ່າ
		6	ຮູ້ສຶກມີສຸຂະພາບແຂງແຮງຂຶ້ນ
		7	มิ าัสะอาดใຊ้/ปะยัดเอลาใ
			ກາ ໄປຕັກ ຳ້
		8	ສາມາດຂາຍຜີ ຜະລິດ/ເຮັດກາ
			ຄ້າຂາຍເພີ່ມຂຶ້ນ
		9	ສາມາດເດີ ຫາງອອກຈາກ ອກ
			ບ້ານ/ມີຂໍ້ມູນຂ່າວສານຫຼາຍຂຶ້ນ
		10	ການໄປຢັ່ງມຢາມໝູ່ເພື່ອນ/ຄອບຄົວ
			/ໄປງານລັງງ/ພິທີຕ່າງໆງ່າຍຂຶ້ນ
		11	ຮູ້ສຶກພູມໃຈ/ເພິ່ງພໍໃຈ/ເຊື້ອໝັ້ນກັບ
			ຊີວິດຫຼາຍຂຶ້ນ
		12	ການຄ້າຂາຍ/ຂາຍສິນຄ້າເພີ່ມຂຶ້ນ
		13	ບໍ່ມີກາ ປ່ຽ ແປງ
		999	ບໍ່ແ 'ໃຈ/ບໍ່ມີຄຳຕອບ
		ใຫ້ຊຽ	ື້ອນໆ
		กำตอบ	
		1	1

# ແບບສອບຖາມທີ 6: ກາ ເກັບກູ້ ລບຕ ສຳລັບບຸກຄື ແລະ ຊຸມຊີ

999 | | | ແມ່ ຜູ້ໃຫ້ສຳພາດນັ້ນບໍ່ ອ ຢູ່ໃ ກໍລະ ີນີ້ (ກະລຸນາໃສ່ເຄື່ອງໝາຍ) (ຕົວຢ່າງ: ຜູ້ທີ່ເຂົ້າຮ່ວມກາ ສຳພາດນັ້ນ ແມ່ ອ ຢູ່ໃ ກໍລະ ົກາ ເກັບກູ້ສຳລັບຂູມຊື (ໃຫ້ຖາມຄາຖາມສະເພາະແບບສອບຖາມທີ 5 ເທົ່ານັ້ນ) ຫຼື ອ ຢູ່ໃ ກໍລະ ົກາ ເກັບສຳລັບບຸກຄົ (ໃຫ້ຖາມຄຳຖາມສະເພາະແບບສອບຖາມທີ 4 ເທົ່ານັ້ນ)

# ແບບສອບຖາມທີ 6: ກາ ກວດກູ້ ລບຕ ສຳລັບບຸກຄີ ແລະ ຊຸມຊີ

# ถาน ะ าตาลัย ักตาพาก:

ກະລຸ າອ່າ ຂໍ້ຄວາມລຸ່ມນີ້ໃຫ້ແກ່ຜູ້ທີ່ຈະໃຫ້ສາພາດກ່ອ ເລີ່ມດີ້ ສາພາດ:

ີ ຂ້າພະເຈົ້າຈະຖາມທ່າ ກ່ຽວກັບ**ທີ່ດິນຂອງຄິວເຮືອນທ່ານ**ທີ່ໄດ້ຮັບການກວດກູ້ ລບຕ**ີ ໂດຍອົງການຈັດຕັ້ງຈາກທາງນອກ** (ທີ່ ບໍ່ແມ່ ຄອບຄິວຂອງທ່າ ຫຼື ຄື ໃ ທ້ອງຖິ່ນເປ້ ຜູ້ເກັບກູ້ເອງ) ມື້ນ. ສະນັ້ນ, ກະລຸນາຕອບໃຫ້ຖືກຕ້ອງທີ່ສຸດເທົ່າທີ່ເປ້ ໄປໄດ້ ຊຶ່ງຄາຕອບດັ່ງກ່າວຈະບໍ່ຖືວ່າ**ຖືກ ຫຼື ຜິດ** 

# ถาน ะ าลาลัย ักลาพาก:

ກະລຸນາອ່ານທຸກໆຄຳຖາມ ຍີກເວັ້ນຄຳຊື້ແຈງ. <u>ໂດຍບໍ່ຕ້ອງອ່ານຄຳຕອບຍົກເວັ້ນກໍລະນີຈຳເປັນຈະຕ້ອງໄດ້ອ່ານ.</u> ແລ້ວຂີດອ້ອມເອົາຄຳຕອບດັ່ງກ່າວ

6.1	ດັ່ງທີ່ທ່ານໄດ້ບອກຂ້າພະເຈົ້າໃນກ່ອນໜ້ານີ້ແລ້ວວ່າ ທີ່ດິນຈຳນວນ	1	ແມ່ ແລ້ວ, ໄດ້ ຳໃຊ້ໝົດ
	ໜຶ່ງທີ່ເປັນກຳມະສິດຂອງຄົວເຮືອນທ່ານໄດ້ຮັບການເກັບກູ້ ລບຕ ແລ້ວ ແລະ ປະຈຸບັນນີ້ທີ່ດິນດັ່ງກ່າວນັ້ນໄດ້ມີການນຳໃຊ້ບໍ?	2	ແມ່ ແລ້ວ, ໄດ້ ຳໃຊ້ຈຳ ນວນໜຶ່ງ
	ຂີດອ້ອມເອົາ 1 ຄຳຕອນ	3	ບໍ່ໄດ້ ຳໃຊ້ເລີຍ
6.2	ທ່າ ຮູ້ບໍວ່າ <i>ເຫດຜີ ດີ້</i> ຕໍ່ທີ່ໆທີ່ດິນຂອງທ່ານໄດ້ຖືກຄັດເລືອກສຳລັບ ການເກັບກູ້ນັ້ນແມ່ນຍ້ອນຫຍັງ?	1	ຄອບຄົວຂອງຂ້ອຍທຸກຍາກ /ບໍ່ມີເຂົ້າກັມກິ
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	2	ທີ່ດິນຂອງພວກເຮົາມີລະເບີດ
		73000	ຕົກຄ້າງຫຼາຍ/ມີອຸປະຕິເຫດ ເກີດຂຶ້ນຢູ່ໃນທີ່ດິນຂອງຂ້ອຍ
		3	ອຳ າດກາ ປົກຄອງບ້າ /
			ເມືອງສະເໜີໃຫ້ມີກາ ເກັບກູ້
		4	ຂ້ອຍ/ຄອບຄີວຂອງ
			ຂ້ອຍມີແຜ ກາ ຳໃຊ້ດີ
		5	ມັ ອ ຢູ່ໃ ໂຄງກາ ອາຫາ
			ເພື່ອງາ /ລັດຖະບາ /ອີງກາ
			ຈັດຕັ້ງທີ່ບໍ່ຂຶ້ນກັບລັດຖະບານ/
			ອີງການຈັດຕັ້ງສາກິນ
		6	ຂ້ອຍ/ຄອບຄິວຂອງຂ້ອຍ ສະເໜີ
		7	ຄອບຄົວຂອງຂ້ອຍໂຍກຍ້າຍມາ ຕັ້ງໃໝ່
		999	ບໍ່ແນ່ໃຈ/ອື່ນໆ/ບໍ່ມີຄຳຕອບ
6.3	ທ່າ <i>ມີຄວາມເຊື້ອໝັ້ນແນວໃດ</i> ກໍ່ກັບທີ່ດິນຂອງທ່າ ໄດ້ຮັບກາ ກວດ	1	ມີຄວາມເຊື້ອໝັ້ນຫຼາຍກວ່າເກົ່າ
	ກູ້ແລ້ວ <i>ຮູ້ສຶກປອດໄພບໍ</i> ?	2	ມີຄວາມເຊື້ອໝັ້ນກວ່າເກົ່າ

ກະລຸ າອ່າ ຄາຕອບ	3	ມີຄວາມເຊື່ອໝັ້ນ ແຕ່ຂ້ອຍ
ຂີດອ້ອມເອົາ 1 ຄຳຕອບ		ຈຳຕ້ອງໄດ້ລະມັດລະວັງຢູ່
No Brail Anna Colony (1900) de Colon Salado Brail Colon Colo	4	ບໍ່ມີຄວາມເຊື່ອໝັ້ນເລີຍ
	999	ບໍ່ແນ່ໃຈ/ອື່ນໆ/ບໍ່ມີຄຳຕອບ

ກະລຸ าอ่า ผู้ถอามลุ่มปี้ใช้แท่ผู้ชี้จะใช้สาพากท่อ เลิ่มดี้ สาพาก: 'ช่ามสามากลุ่อยล้าพะเจ้าตื่มล้มูมใส่ในตาตะลาງลุ่มปีใช้ถึบทุ้อมไก้ยำ'

ถาน ะ าสาลัย ักสาพาด:

ໃຫ້ເຕີ້ມຂໍ້ມູນ ໃສ່ຕາຕະລາງຕາມແຕ່ລະຕອນດິນຂອງຄອບຄົວດັ່ງກ່າວທີ່ໄດ້ຮັບການເກັບກູ້

ໂດຍອີງກາ ຈັດຕັ້ງຈາກຫາງນອກ (ທີ່ບໍ່ແມ່ ຄອບຄິວຂອງທ່າ ຫຼື ຄີ ໃ ຫ້ອງຖິ່ນເປັ ຜູ້ເກັບກູ້ເອງ) ໃຫ້ຄົບຖົວ

ໃຫ້ປ່ຽນຫົວໜ່ວຍທີ່ຜູ້ໃຫ້ສຳພາດບອກມານັ້ນ ເປັນຕາແມັດ

รับพะ ยากอ ที	6.4.1 ປະເພດກາ າໃຊ້ທີ່ດີ ກ່ອ ກາ ເກັບກູ້ (ໃຫ້ າໃຊ້ ລະຫັດ)	6.42 ປະເພດກາ ຳໃຊ້ທີ່ ດີ ຫຼັງກາ ເກັບກູ້ (ໃຫ້ ຳໃຊ້ ລະຫັດ)	6.4.3 ພື້ອທີ່ເກັບກູ້ (ມ²)	6.4.4 ເນື້ອທີ່ <sup>1</sup> ໃຊ້ແລ້ວ (ມ <sup>2</sup> )	6.4.5 ປີທີ່ເກັບກູ້ (ປີໃ ປະຕິທິ ສາ ກີ )
R1			ມ <sup>2</sup>	n	_ _  _
R2			n	n²	
R3			J <sup>2</sup>	JJ <sup>2</sup>	

# ລະຫັດຂອງຄຳຕອບສຳລັບຄຳຖາມທີ 6.4.1 ແລະ 6.4.2 1 ໄຮ້ 2 ດີ າ (ສະເພາະ າໄຊງ) 4 ດີ າ ( າປ ແລະ າແຊງ) 5 ປູກພືດຮັກ/ໄມໃຫ້ໝາກ 6 ປູກພືດຮັກ/ເມໃຫ້ໝາກ 6 ປູກໄມ້/ພືດອຸດສາຫະກຳ 7 ທີ່ງຫຍ້າລັງສັດ 9 ຊີ ລະປະທາ 10 ໝອງປາ 11 ເຮືອ ຢູ່ 12 ອື່ນໆ (ໃຫ້ຮຸງ ຄຳຕອບໃສ່)

6.5 (ກໍລະ ລະຫັດທີ 1-8 ສຳລັບຂໍ້ທີ 6.4.2 ): ກໍລະ ື ທຶ່ງຫຍັງລັງງສັດທານະຊາດແມ່ ໃຫ້ໝາຍ 999 ເລີຍ ຄຳແ ບ ຳສຳລັບ ັກສາພາດ: ກະລຸ າຕື່ມຄຳຕອບ ໃສ່ຄຳຖາມລຸ່ມນີ້ໃຫ້ສຳເລັດ ໂດຍກາ ຳ ໃຊ້ລະຫັດຄຳຕອບຢູ່ໃ ຂໍ້ທີ 6.4.2 ຂ້າງເທິງນັ້ນ.

# ใช้ปรุมชิอชม่อยที่ผู้ที่เลิ้าที่ใช้เตาพาดบอกมานั้น เป้ ชิอชม่อย โต่ , ตาแม้ด และ ทีโฉกะลาม ที่เข้ อ่า เขมาะลิม.

ละไ	າດຕະພາບຂອງຜີ ຜະລິດ ໂດຍສະເລ່ຍຂອງພືດດັ່ງກ່າວໃ ແຕ່		ດ້ຮັບກາ ເກັບກູ້ ລບຕ	ໄດ້ຈັກ ໂຕ່ 🕆
	777 ບໍ່ທັ ໄດ້ເກັບຜີ ຜະລິດ/ບໍ່ໄດ້ ເ	າໃຊ້		
พะไ	າດຕະພາບຂອງຜີ ຜະລິດ ໂດຍສະເລ່ຍຂອງພືດດັ່ງກ່າວໃນແຕ່	ລະໆດູ <i>ພາຍຫຼັງ</i> ທີ່ດິ	ໄດ້ຮັບກາ ເກັບກູ້ ລະ	ບຕ ແລ້ວໄດ້
ຈັກໂ	ri ?   _		•	
	777 ບໍ່ຫັ ໄດ້ເກັບຜີ ຜະລິດ	999	ຖ້າບໍ່ກຸ່ງວຂ້ອງເລີຍ	1.1
	10.00		J	-27-32
6.6	(ກໍລະີລະຫັດທີ 9 ສຳລັບຂໍ້ທີ 6.4.2)			
ມີເນື້	ອທີ່ດິ ຈັກ ມ <sup>2</sup> ທີ່ລະບົບຊີ ລະປະທາ ດັ່ງກ່າວຕອບສະໜອງ	ຳເດັ?  _ _		
ละไ	າດຕະພາບຂອງຜົນຜະລິດ ໂດຍສະເລ່ຍຕໍ່ເຮັກຕາໃນແຕ່ລະໆດູ	ຈາກພື້ນທີ່ດິນທີ່ມີລ	ະບົບຊີນລະປະທານດັ່ງ	ງກ່າວ <i>ກ່ອ</i>
ກາ	ເກັບກູ້ ລບຕ ໄດ້ຈັກໂຕ່ ?           777 ບໍ່	ກັ ໄດ້ເກັບຜີ ຜະລິ	ດ/ບໍ່ໄດ້ ຳໃຊ້	
			3 St.	
ละไ	າດຕະພາບຂອງຜົນຜະລິດ ໂດຍສະເລ່ຍຈາກພື້ນທີ່ດິນທີ່ມີລະບົ	ບຊົນລະປະທານດັ່	ງກ່າວ <i>ພາຍຫຼັງ</i> ກາ ເກັບ	ກູ້ ລບຕ
ແລ້ວ	ວໄດ້ຈັກໃຕ່ ?			
	777 ບໍ່ທັ ໄດ້ເກັບຜີ ຜະລິດ 🔲	999	ຖ້າບໍ່ກ່ຽວຂ້ອງເລີຍ	
			0	
6.7	(ກໍລະີລະຫັດທີ 10 ສຳລັບຂໍ້ທີ 6.4.2)			
ละไ	ກົດຕະໜາບຜີ ຜະລິດ <b>ປາ</b> ໂດຍສະເລ່ຍໃ ແຕ່ລະໆລະດູກ່ອ ກ <sub>ຳ</sub>	ເກັບກູ້ ລບຕ ໄດ້ເ	ງາຍປາ ໃດ?   _	ភិ
	າະຣາມ 777 ບໍ່ຫັ ໄດ້ເກັບຜີ ຜະລິ			
ละไ	ກົດຕະໜາບຜີ ຜະລິດ <b>ປາ</b> ໃ ແຕ່ລະໆດູ <i>ໝາຍຫຼັງ</i> ກາ ເກັບກູ້ ລບເ	ກ ແລ້ວ ໄດ້ຫຼາຍປາ	ໃດ?  _ _	_  ភិ
ໂລກ	เคยงา			
	777 ບໍ່ຫັ ໄດ້ເກັບຜີ ຜະລິດ 📋	999	ຖ້າບໍ່ກ່າວຂ້ອງເລີຍ	
6.	8 (ກໍລະີລະຫັດທີ 11 ສຳລັບຂໍ້ທີ 6.4.2)		5	
	ถาน ะ าสาลัย ักสาพาก: ใช้ าใຊ້ละขักถาตอบร	กาลุ่มนี้		
ท่า	ຢູ່ໃສກ່ອນທີ່ມີການເກັບກູ້ ລບຕ ນັ້ນ?			
ມີຫັງ	ໝົດຈັກຄົນທີ່ອາໄສຢູ່ນຳຄອບຄົວຂອງທ່າ ?			
	•			
		999 ຖ້າບໍ່ກ່ຽວຂ້	ອງເລີຍ  _	
ລະຫັດ	ຂອງຄຳຕອບຂໍ້ທີ 6.8	J	_	
	ບ້ານອື່ນ	7		
2 8	ำพี่แม่			
3 8				
	<u> </u>	_		
6.9	ກໍລະີທີ່ດິນດັ່ງກ່າວບໍ່ໄດ້ນຳໃຊ້ນັ້ນ <i>ເຫດ<del>ຜີ</del> ຕີ້ ຕໍແມ່ ຍັອ</i>	1	ບໍ່ມີແຮງງາ	
	ตยัฐ?	2	ບໍ່ມີອຸປະກອ	
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	3	ສະພາບດິ ຟ້າອາກ	າດບໍ່ອຳ ວຍ
				71/2/2015/19/2015

	(ຝ ຕີກ/ແຫ້ງແລ້ງ)
4	ບໍ່ມີທີ່ ຮອ
5	ການກວດກູ້ນັ້ນລ້າຊ້າເກີນໄປ
6	ທີ່ດິນບໍ່ເໝາະສົມ
7	ທີ່ດິນໄດ້ຖືກຂາຍແລ້ວ
8	ຫຍຸ້ງຍາກໃນການເບິ່ງແຍງດູແລ/
	ບໍ່ສະດວກ/ບໍ່ເໝາະສີມ
9	ບໍ່ຕ້ອງກາ
999	ບໍ່ກ່ຽວຂ້ອງ/ ຳໃຊ້ແລ້ວ
ใช้เลา กำ	ອື່ນໆ
ຕອບ	(27)
7,07,000,00	-

6.10	ສິ່ງທີ່ມີການປ່ຽນແປງ <i>ທີ່<b>ສຳຄັນທີ່ສຸດ</b></i> ຢູ່ໃ ຄອບ	1	ຮູ້ສຶກປອດໄພ/ມີຄວາມກັງວີ ໜ້ອຍລິງ
	ຄົວຂອງທ່າ ອັນເນື່ອງມາຈາກມີການກວດກູ້ທີ່	2	ສາມາດຂຸດດິ ເລິກ/ໄວກວ່າເກົ່າ
	ດິ ນັ້ນແມ່ນຫຍັງ?	3	ຕື້ ເຂົ້າແຂງແຮງ/ງາມກວ່າເກົ່າ
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	4	ມີເຂົ້າກຸ້ມກິ /ບໍ່ຈຳເປັ ຕ້ອງກິ ຫິວມັ ອີກ/ບໍ່ໄດ້ຊື້ ເຂົ້າເພີ່ມ
		5	ມີເຂົ້າ/ໝາກໄມ້/ຕັກກຸ້ມກິ ແລະ ໄດ້ຂາຍຈຳ ວ ໜຶ່ງ/ສາມາດແບ່ງປັ ໃຫ້ແກ່ຄອບຄົວ/ໝູ່ເພື່ອນ/ໃຫ້ ຄູບາ/ຈັດງາ ລຸ້ງງພືຫີກາ ຕ່າງໆ
		6	ສູ້ສຶກເພິ່ງພໍໃຈ/ບໍ່ກັງວີ ວ່າຢ້າ ເຂົ້າຈະບໍ່ກຸ້ມກິ
		7	ລູກຈະໄດ້ຮັບມູນມໍລະດີກທີ່ດິນທີ່ມີມູນຄ່າສູງກວ່າ ເກົ່າ
		8	ຖ້າພວກເຮົາຈ່າເປັນຕ້ອງການຂາຍທີ່ດິນຈະໄດ້ເງິນ ຫຼາຍຂຶ້ນ
		9	ບໍ່ມີກາ ປຸ່ງ ແປງແປງ
		999	บ่น 'ใจ/ข้ำมีถาตอบ
		ใช้เลา	ອື່ນໆ
		กำตอบ	

# ถาน ะ าสาลัย ักสาพาก:

ทะลุ าอ่า ล้องามลุ่ม ีใช้แท่ผู้จะใต้สาพากท่อ เลิ่มติ้ สาพาก:

່ຕໍ່ໄປນີ້ຂ້າພະເຈົ້າຈະຖາມຄຳຖາມຈຳນລນໜຶ່ງກ່ຽວກັບທີ່ດີ ສຳລັບໂຄງກາ ພັດທະ າຂອງຊຸມຊີ (ເຊັ່ນ: ສ້າງເສັ້ນຫາງ, ໂຮງຮູງ , ສຸກສາລາ, ວັດ, ແຫຼ່ງນຳສະອາດ, ວິດຖ່າຍ, ທີ່ງຫຍ້າລັງຈັດ ແລະ ທີ່ດີ ທຳກາ ແະລິດກະສິກຳຂອງຊຸມຊີ ) ຢູ່ ພາຍໃ ບ້ານທີ່ໄດ້ກວດກູ້ ລບຕ **ໂດຍອົງການຈັດຕັ້ງຈາກທາງນອກ** (ທີ່ບໍ່ແມ່ ຄອບຄົວຂອງທ່າ ຫຼື ຄື ໃ ທ້ອງຖິ່ນເປ້ ຜູ້ ເກັບກູ້ເອງ) ແລ້ວນັ້ນ. ສະນັ້ , ກະລຸ າຕອບໃຫ້ຖືກຕ້ອງທີ່ສຸດເຄົ່າທີ່ເປ້ ໄປໄດ້ຊຶ່ງຄຳດອບດັ່ງກ່າວຈະບໍ່ຖືວ່າ**ຖືກ ຫຼື ຜິດ**ໍ

### ถาน ะ าสาลัย ักสาพาก:

ກະລຸ າອ່າ ທຸກໆຄຳຖາມລຸ່ມນີ້ ຍິກເວັ້ນຄຳຊີ້ແຈງ. <u>ໂດຍບໍ່ໃຫ້ອາ ຄຳຕອບ ແ</u>ລ້ວຂີດອ້ອມເອົາຄຳຕອບດັ່ງກ່າວ ຍົກ

# ເວັ້ນກໍລະນີຈຳຕ້ອງໄດ້ຂຸ ຄຳຕອບ

6.11	ມີທີ່ດີ ຕອ ໃດໜຶ່ງຢູ່ພາຍໃ ບ່າ ທີ່ ຳໃຊ້ ສຳລັບໂຄງກາ ພັດທະ າຂອງຊຸມຊີນ ທີ່ໄດ້ ກວດກູ້ ລບຕ <i>ໂດຍອີງການຈັດຕັ້ງຈາກທາງ</i> ອກ (ທີ່ບໍ່ແມ່ ຄອບຄິວຂອງທ່າ ຫຼື ຄີ ໃ ທ້ອງຖິ່ນເປັ ຜູ້ເກັບກູ້ເອງ) ແລ້ວບໍ? ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	1 2	มิ - ใช้ทุามต่กาทามต่โป ชั่มิ ใช้ตัวมโปรเบนตอบทามติ 7 เลีย
6.12	ຫ່າ ຮູ້ບໍ່ຈ່າ <i>ເຫດຕີ ດື້ ຕັ້</i> ກີບ່າ ຂອງຫ່າ ໄດ້ຮັບ ກາ ຄັດເລືອກໃຫ້ມີກາ ກວດກູ້ນັ້ນ ແມ່ ຍ້ອ ຫຍັງ? <b>ຂີດອ້ອມເອົາ 1 ຄຳຕອບ</b>	1 2 3 4 999	ບົກ ຂອງພວກເຮົາທຸກຍາກ ທາງບົກ ສະເໜີໃຫ້ມີກາ ເກັບກູ້ເປັ ສ່ວ ໜຶ່ງໃນແຜນການຂອງບ້ານ ທາງເມືອງສະເໜີໃຫ້ມີສ່ວນໜຶ່ງໃນແຜນການຂອງເມືອງ ອົງການຈັດຕັ້ງອື່ນໆ (ເຊັ່ນ: ໂຄງການອາຫານໂລກ, ອົງການຈັດຕັ້ງທີ່ບໍ່ຂຶ້ນກັບລັດຖະບານ) ເປັນຜູ້ສະເໜີ ບໍ່ແນ່ໃຈ/ບໍ່ມີຄຳຕອບ/ອື່ນໆ

# 6.13 ຄຳແ ະ ຳສຳລັບ ັກສຳພາດ:

ทะลุ าอา รี้ถงามลุ่มปีใช้แท่สู่ที่จะใช้ทา ສາພາດກ่อ เลิ่มตี สาພาด: 'ท่ามสามาดลุ่งยล้าพะเจ้าตื่มรั้มูนใส่ในตาตะลาวุลุ่มปีใช้ถิบถ้อมได้ป?'

# ถาน ะ าสาลัย ักสาพาก:

ໃຫ້ຕື່ມຂໍ້ມູນໃສ່ຕາຕະລາງຕາມແຕ່ລະຕອນດິນຂອງຄອບຄົວດັ່ງກ່າວທີ່ໄດ້ຮັບການເກັບກູ້ ໂ**ດຍອົງການຈັດຕັ້ງຈາກ** ທາງ ອກ (ທີ່ບໍ່ແມ່ ຄອບຄົວຂອງທ່າ ຫຼື ຄື ໃ ຫ້ອງຖິ່ນເປ້ ຜູ້ເກັບກູ້ເອງ) ໃຫ້ຄົບຖົວ

ຊັບພະຍາກອ ທີ	6.13.1 ກາ ຳໃຊ້ທີ່ດີ <i>ກ່ອ</i> ກາ ເກັບກູ້ (ໃຫ້ ຳໃຊ້ ລະຫັດຄຳຕອບ)	6.13.2 ກາ ຳໃຊ້ທີ່ດິ ຫຼັງກາ ເກັບກູ້ (ໃຫ້ ຳໃຊ້ ລະຫັດຄຳຕອບ)	6.13.3 ປີເກັບກູ້ (ປີໃ ປະຕິທິ ສາກີ )
R1			
R2			
R3			_ _
R4			
R5			
R6			

# ລະຫັດຄຳຕອບສາລັບຄຳຖາມທີ 6.13.1

# ລະຫັດຄຳຕອບສຳລັບຄຳຖາມທີ່ 6.13.2

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ປະເພດການນຳໃຊ້ທີ່ດິນກ່ອນເກັບກູ້	ປະເພດການນຳໃຊ້ທີ່ດິນຫຼັງເກັບກູ້	
1 ເສັ້ນທາງ-ທາງແດງ ຳໃຊ້ໄດ້ສະເພາະລະດູແລ້ງ	1 ເສັ້ນຫາງ-ຫາງແດງ ຳໃຊ້ໄດ້ສະເພາະລະດູແລ້ງ	
2 ເສັ້ນທາງ-ນາໃຊ້ໃ ລະດູແລ້ງ	2 ເສັ້ນທາງໄດ້ປັບປຸງ-ນາໃຊ້ໃ ລະດູແລ້ງ	
3 ເສັ້ນທາງ-ນາໃຊ້ຕະຫຼອດປີ	3 ເສັ້ນທາງໄດ້ປັບບຸງ-ນາໃຊ້ຕະຫຼອດປີ	
4 ໂຮງຮຸງ	4 ໂຮງຮຸງ ໄດ້ປັບປຸາ/ສ້າງໃໝ່	
5 ແຫ່ງ ້ຳສະອາດ	5 ແຫຼ່ງ ້ຳສະອາດ	

6 ວິດຖ່າຍ	6 ວິດຖ່າຍ		
7 ໜອງປາ	7 ໜອງປາ		
8 ຫໍໄຫວ້ຂອງຊຸມຊີ /ສະຖາ ທີ່ທາງສາດສະໜາ	8 ທໍໄຫວ້ຂອງຊຸມຊີ /ສະຖາ ທີ່ທາງສາດສະໜາ		
9 ຊີ ລະປະທານ (ຝາຍກັ້ນນໍ້າ, ເຂື່ອນ, ຄອງຊີນລະປະທານ)	9 ຊີນລະປະທານ (ຝາຍກັ້ນນໍ້າ, ເຂື່ອນ,		
10 ທີ່ງຫຍ້າ/ບ່ອນລັງງສັດ	ຄອງຊີ ລະປະຫາ )		
ů	10 ທີ່ງຫຍ້າ/ບ່ອນລັງງສັດ		
11 ໄຮ່	11 ໄຮ່		
12 ດິ າ (ສະເພາະ າ <i>ປີ</i> )	12 ດີ ຳ (ສະເພາະ າ <i>ປ</i> ີ)		
13 ດີ ຳ ( <i>ສະໝາະ າແຊງ</i> )	13 ດີ າ ( <i>ສະເພາະ າແຊງ</i> )		
14 ດິ າ (າປີແລະ າແຊງ)	14 ດິ າ ( າປີ ແລະ າແຊງ)		
15 ປູກພືດຜັກ/ໄມ່ໃຫ້ໝາກ	15 ປູກພືດຜັກ/ໄມ້ໃຫ້ໝາກ		
16 ປູກພືດເສດຖະກິດ	16 ປູກພືດເສດຖະກິດ		
17 ປູກໄມ້/ພື້ດອຸດສາຫະກຳ	17 ປູກໄມ້/ພືດອຸດສາຫະກຳ		
18 ທີ່ງຫຍັງ	18 ທີ່ງຫຍ້າ		
19 ສຳນັກງານຂອງອົງການຈັດຕັ້ງລັດ	19 ສຳນັກງານຂອງອົງການຈັດຕັ້ງລັດ		
20 ປຸກສ້າງເຮືອ ຢູ່	20 ປຸກສ້າງເຮືອ ຢູ່		
21 ສຸກສາລາ/ໂຮງໝໍ	21 ສຸກສາລາ/ໂຮງໝ່		
22 ບໍ່ໄດ້ ຳໃຊ້	22 ບໍ່ໄດ້ ຳໃຊ້		
23 ອື່ນໆ (ໃຫ້ຂງນຄຳຕອບ)	23 ອື່ນໆ (ໃຫ້ຂຸງນຄາຕອບ)		
999 ບໍ່ແ 'ໃຈ/ບໍ່ມີຄຳຕອບ	999 ບໍ່ແໍ່ໃຈ/ບໍ່ມີຄຳຕອບ		

# ถาน ะ าตาลับ ักสาพาก:

ໃຫ້ວ່າ ທຸກໆຄຳຖາມລຸ່ມນີ້. ໂດຍບໍ່ຕ້ອງວ່າ ຄຳຕອບ. ແລ້ວໃຫ້ຂີດອ້ອມເອົາຄຳຕອບ

ກະລຸ າຕື່ມຄຳຕອບໃສ່ຄຳຖາມທີ 6.14-6.18 ຕາມ*ແຕ່*ລະຊັບພະຍາກອ ທີ່ລະບຸຢູ່ໃ ຂໍ້ທີ 6.13.2 ນັ້ນ. ໂດຍ*ໃຫ້* ຳ*ໃຊ້ຮ່າງແບບພ່ອມຄຳຕອບໜຶ່ງ ສະເພາະຊັບພະຍາກອ ຊະນິດໜຶ່ງເທົ່ານັ້ນ.* 

# ຊັບພະຍາກອ ທີ 1

ລະຫັດຂອງຄຳຕອບສຳລັບຊັບພະຍາກອ ທີ 1 (ໃຫ້ເອົາຢູ່ໃ ຂໍ້ທີ 6.13.2 ນັ້ນ) R1

6.14	ຍັງ ຳໃຊ້ຢູ່ບໍ່? (ໃຫ້ັກສຳພາດ ລະບຸເຖິງຊື້ຂອງຮັບພະຍາກອນໃໝຂອງຊຸມຊີນ ເຊັ່ນ: ຮັບພະຍາກອນທີ່ລະບຸຢູ່ໃນຂໍ້ທີ 6.13.2 ນັ້ນ) ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	1 2 999 ໃຫ້ຊຸງ ໃສ່	ອັງ ຳໂຮ້ຢູ່ – ໃຫ້ສ້າມໄປຂໍ້ທີ 6.16 ແລະ ໃຫ້ທຶບ ຕໍ່ຖາມຄຳຖາມອື່ນໆຢູ່ໃນແບບສອບ ຖາມທີ 6 ນີ້ ຖ້າບໍ່ໄດ້ ຳໃຊ້ ໃຫ້ຖາມຕໍ່ຄາຖາມທີ 6.15, ຈາກນັ້ນໃຫ້ສ້າມໄປແບບສອບຖາມທີ 7 ເລີຍ ບໍ່ແໍ່ໃຈ/ບໍ່ມີຄຳຕອບ
6.15	ເຫດຜີ ດີ້ ຕໍ່ທີ່ບໍ່ໄດ້ ຳໃຊ້ ນັ້ນແມ່ ຍ້ອ ຫຍັງ? (ໃຫ້ນັກສຳພາດ ລະບຸເຖິງ ຊື່ຂອງຊັບພະຍາ	1 2	ບໍ່ມີຄວາມສະດວກ/ບໍ່ເໝາະລົມ ຫຍຸ້ງຍາກໃ ກາ ເບິ່ງແຍງດູແລ

	ກອນໃໝ່ຂອງຊຸມຊີນ ເຊັ່ນ: ຊັບພະຍາກອນທີ່ລະ	3	ບໍ່ຕ້ອງກາ
	ບຸຢູ່ໃ ຂໍ້ຄື 6.14 ນັ້ນ)	4	ເປ່ເພແລ້ວ
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	5	ບໍ່ມີທີ່ ຮອ
		6	ສະພາບດີ ຟ້າອາກາດບໍ່ອຳ ວຍ (ຝີ ຕົກ/
			ແຫ້ງແລ້ງ)
		7	ບໍ່ມີແຮງງາ
		8	ບໍ່ມີອຸປະກອ
		9	ບໍ່ໄດ້ຄ ະໜາບ
		999	ບໍ່ແ ່ ໃຈ/ອື່ນໆ/ບໍ່ມີຄຳຕອບ
6.16	ແມ່ນໃຜເປັນຜູ້ດູແລຮັກສາ ນັ້ນ?	1	ຊາວບ້າ ທັງໝົດ
	(ໃຫ້ນັກສາພາດ ລະບຸເຖິງຊື່ຂອງຊັບພະຍາກອນ ໃໝ່	2	ອຳ າດກາ ປົກຄອງບ້າ
	ຂອງຊຸມຊົນ ເຊັ່ນ: ຊັບພະຍາກອນທີ່ລະບຸຢູ່ໃ ຂໍ້ທີ 6.14	3	ອາ າດກາ ປົກຄອງເມືອງ
	ນັ້ນ)	4	ប់់្រាំង
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	999	ບໍ່ແນ່ໃຈ/ອື່ນ/ບໍ່ມີຄຳຕອບ
6.17	ແມ່ ໃຜເປັ ຜູ້ໄດ້ຮັບຜີ ປະໄຫຍດສູງສຸດຈາກ	1	ສະເພາະເດັກນ້ອຍຍິງເທົ່ານັ້ນ
	ນັ້ນ? (ໃຫ້ນັກສຳພາດ ລະບຸເຖິງຊື່ຂອງ	2	ສະເພາະເດັກນ້ອຍຕູ້ຊາຍເທົ່ານັ້ນ
	ຊັບພະຍາກອ ໃໝ່ຂອງຊຸມຊີ ເຊັ່ນ: ຊັບພະຍາກອນ	3	ສະເພາະຜູ້ໃຫຍ່ (ຜູ້ຊາຍ ແລະ ແມ່ຍິງ)
	ທີ່ລະບຸຢູ່ໃນຂໍ້ທີ 6.14 ນັ້ນ)		ເທົ່ານັ້ນ
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	4	ສະເພາະເດັກນ້ອຍເທົ່ານັ້ນ
		5	ແມ່ຍິງ ແລະ ເດັກ້ອຍ
		6	ຜ້ຊາຍ ແລະ ເດັກ້ອຍ
		7	ສະເພາະຜູ້ຊາຍ
		8	ສະເພາະແມ່ຍິງ
		9	ທຸກໆຄື ໃ ບ້າ
		10	ບໍ່ມີໃຜ
		999	ບໍ່ແນ່ໃຈ/ອື່ນ/ບໍ່ມີຄຳຕອບ
6.18	ສິ່ງທີ່ມີການປ່ຽນແປງ <i>ທີ່ສຳຄັນທີ່ສຸດ</i> ສຳລັບຄອບຄົວຂອງ	1	ຕື້ນເຂົ້າແຂງແຮງ/ງາມ/ປັກດຳໄດ້ໄວກວ່າເກົ່າ
	ທ່ານເນື່ອງຈາກມີ ນັ້ນແມ່ນຫຍັງ?	2	ສາມາດໄປຮັບຈ້າງແຮງງາ ຢູ່ໃ ວຸງກງາ ກະ
	(ໃຫ້ນັກສຳພາດ ລະບຸເຖິງຊື່ຂອງຊັບພະຍາກອນໃໝ່		ສິກຳ
	ຂອງຊຸມຊົນ ເຊັ່ນ: ຊັບພະຍາກອນທີ່ລະບຸຢູ່ໃນຂໍ້ທີ 6.14	3	ສາມາດໄປຮັບຈ້າງແຮງງານທີ່ບໍ່ແມ່ນວຽກ
	ນັ້ນ)	12.552	ງາ ກະສິກຳ
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	4	ຮູ້ສຶກເພິ່ງພໍໃຈກັບການທີ່ມີ ເຂົ້າກຸ້ມກິນ
			(ກາ ຄ້າປະກັ ສະບຸງອາຫາ )
		5	ເດັກ້ອຍຢາກໄປໂຮງຮຸ /ໄປໂຮງຮຸ
			ເລື້ອຍໆກ່ວາເກົ່າ
		6	ຮູ້ສຶກມີສຸຂະໜາບແຂງແຮງຂຶ້ນ
		7	ມີ ຳສະອາດໃຊ້/ປະຍັດເວລາໃ ກາ ໄປຕັກ ຳ
		8	ສາມາດຂາຍຜີ ຜະລິດ/ເຮັດກາ ຄ້າຂາຍ ເພີ່ມຂຶ້ນ

9	ສາມາດເດີ ຫາງອອກຈາກ ອກບ້າ /ມີຂໍ້ມູ
10	ຂ່າວສານຫຼາຍຂຶ້ນ ການໄປຢູ່[ມຢາມໝູ່ເພື່ອນ/ຄອບຄີວ/ໄປງາ
11	ລັງງ/ພິທີຕ່າງໆງ່າຍຂຶ້ນ ຮູ້ສຶກພູມໃຈ/ເພິ່ງພໍໃຈ/ເຊື່ອໝັ້ນກັບຊີວິດຫຼາຍ ຂຶ້ນ
12	ການຄ້າຂາຍ/ຂາຍສິນຄ້າເພີ່ມຂຶ້ນ
13	ບໍ່ມີກາ ປ່າ ແປງ
999	ບໍ່ແ 'ໃຈ/ບໍ່ມີຄາຕອບ
ໃຫ້ຂຸ	ອື່ນໆ
ຄຳຕອບ	

**ຊັບພະຍາກອ ທີ2** ລະຫັດຂອງຄຳຕອບສຳລັບຊັບພະຍາກອ ທີ 2 (ໃຫ້ເອົາຢູ່ໃ ຂໍ້ຄື 6.13.2 ນັ້ນ) R2

6.14	ຍັງ ຳໃຊ້ຢູ່ບໍ? (ໃຫ້ ັກສາພາດ ລະບຸເຖິງຊື່ຂອງຮັບພະຍາກອນໃໝ່ຂອງຊຸມຊີນ ເຊັ່ນ: ຮັບພະຍາກອນທີ່ລະບຸຢູ່ໃນຂໍ້ທີ 6.13.2 ນັ້ນ) <i>ຂີດອ້ອມເອົາ 1 ຄຳຕອບ</i>	1 2 999 (කිනු දිස්	ອັງ ຳໂຮ້ຢູ່ – ໃຫ້ສ້າມໂປຂໍ້ທີ່ 6.16 ແລະ ໃຫ້ສືບ ຕໍ່ຖາມຄຳຖາມອື່ນໆຢູ່ໃນແບບສອບ ຖາມທີ 6 ນີ້ ຖ້າບໍ່ໄດ້ ຳໂຮ້ ໃຫ້ຖາມຕໍ່ຄຳຖາມທີ 6.15, ຈາກນັ້ນໃຫ້ສ້າມໂປແບບສອບຖາມທີ 7 ເລີຍ ບໍ່ແໍ່ໃຈ/ບໍ່ມີຄຳຕອບ ອື່ນໆ
6.15	ເຫດຕີ ຕີ້ ຕໍ່ທີ່ບໍ່ໄດ້ ຳໃຊ້ ນັ້ນແມ່ ຍ້ອ ຫຍຸ້ງ? (ໃຫ້ນັກສຳພາດ ລະບຸເຖິງ ຊື່ຂອງຊັບພະຍາ ກອນໃໝ່ຂອງຊຸມຊີນ ເຊັ່ນ: ຊັບພະຍາກອນທີ່ລະ ບຸຢູ່ໃນຂໍ້ຄື 6.14 ນັ້ນ) ຂົດອັອມເອົາ 1 ຄຳຕອບ	1 2 3 4 5 6 7 8 9 999	ບໍ່ມີຄວາມສະດວກ/ບໍ່ເໝາະສົມ ຫຍຸ້ງຍາກໃ ກາ ເບິ່ງແຍງດູແລ ບໍ່ຕ້ອງກາ ເປເພແລ້ວ ບໍ່ມີທີ ຮອ ສະພາບດີ ຟ້າອາກາດບໍ່ອຳ ວຍ (ຝີ ຕີກ/ ແຫ້ງແລ້ງ) ບໍ່ມີແຮງງາ ບໍ່ມີອຸປະກອ ບໍ່ໄດ້ຄຸ ະພາບ ບໍ່ແ "ໃຈ/ອື່ນໆ/ບໍ່ມີຄຳຕອບ
6.16	ແມ່ນໃຕປັນຜູ້ດູແລຮັກສາ ນັ້ນ? (ໃຫ້ນັກສາພາດ ລະບຸເຖິງຊື່ຂອງຮັບພະຍາກອນ ໃໝ່ ຂອງຊຸມຊົນ ເຊັ່ນ: ຮັບພະຍາກອນທີ່ລະບຸຢູ່ໃນຂໍ້ທີ 6.14 ນັ້ນ) ຂີດອັອມເອົາ 1 ຄຳຕອບ	1 2 3 4 999	ຊາວບ້າ ທັງໝົດ ອຳ າດກາ ປົກຄອງບ້າ ອຳ າດກາ ປົກຄອງເມືອງ ບໍ່ມີໃຜ ບໍ່ແນ່ໃຈ/ອື່ນ/ບໍ່ມີຄຳຕອບ
6.17	ແມ່ ໃຜຟັ ຜູ້ໄດ້ຮັບຜີ ປະໂຫຍດສູງສຸດຈາກ ນັ້ນ? (ໃຫ້ນັກສາພາດ ລະບຸເຖິງຊື່ຂອງ	1 2	ສະເພາະເດັກນ້ອຍຍິງເທົ່ານັ້ນ ສະເພາະເດັກນ້ອຍຜູ້ຊາຍເທົ່ານັ້ນ

	ຊັບພະຍາກອນໃໝ່ຂອງຊຸມຊົນ ເຊັ່ນ: ຊັບພະຍາກອນ	3	ສະເພາະຜູ້ໃຫຍ່ (ຜູ້ຊາຍ ແລະ ແມ່ຍິງ)
	ທີ່ລະບຸຢູ່ໃນຂໍ້ທີ 6.14 ນັ້ນ)		ເທົ່ານັ້ນ
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	4	ສະເພາະເດັກນ້ອຍເທົ່ານັ້ນ
	Control of the Deliver of the State of the S	5	ແມ່ຍິງ ແລະ ເດັກ້ອຍ
		6	ຜູ້ຊາຍ ແລະ ເດັກ້ອຍ
		7	ສະເພາະຜູ້ຊາຍ
		8	ສະເພາະແມ່ຍິງ
		9	ທຸກໆຄີ ໃ ບ້າ
		10	ບໍ່ມີໃຜ
		999	ບໍ່ແນ່ໃຈ/ອື່ນ/ບໍ່ມີຄຳຕອບ
.18	ສິ່ງທີ່ມີການປ່ຽນແປງ <i>ທີ່ສຳຄັນທີ່ສຸດ</i> ສຳລັບຄອບຄົວຂອງ	1	ຕື່ ເຂົ້າແຂງແຮງ/ງາມ/ປັກດຳໄດ້ໄວກວ່າເກີ່
	ທ່ານເນື່ອງຈາກມີນັ້ນແມ່ນຫຍັງ?	2	ສາມາດໄປຮັບຈ້າງແຮງງາ ຢູ່ໃ ວຸງກງາ ກ
	(ໃຫ້ນັກສາພາດ ລະບຸເຖິງຊື່ຂອງຊັບພະຍາກອນໃໝ່		ສິກຳ
	ຂອງຊຸມຊົນ ເຊັ່ນ: ຊັບພະຍາກອນທີ່ລະບຸຢູ່ໃນຂໍ້ທີ 6.14	3	ສາມາດໄປຮັບຈ້າງແຮງງານທີ່ບໍ່ແມ່ນວຸງກ
	ນັ້ນ)		ງາ ກະສິກຳ
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	4	ຮູ້ສຶກເພິ່ງພໍໃຈກັບການທີ່ມີ ເຂົ້າກຸ້ມກິນ
			(ກາ ຄຳປະກ ສະບຸອາຫາ )
		5	ເດັກ ້ອຍຢາກໄປໂຮງຮຸ /ໄປໂຮງຮຸ
		260	ເລື້ອຍໆກ່ວາເກົ່າ
		6	ຮູ້ສຶກມີສຸຂະພາບແຂງແຮງຂຶ້ນ
		7	ມີ ຳສະອາດໃຊ້/ປະຍັດເວລາໃ ກາ ໄປຕັກ ຳ
		8	ສາມາດຂາຍຜີ ຜະລິດ/ເຮັດກາ ຄ້າຂາຍ ເພີ່ມຂຶ້ນ
		9	ສາມາດເດີ ທາງອອກຈາກ ອກບ້າ /ມີຂໍ້ມູ ຂ່າວສານຫຼາຍຂຶ້ນ
		10	ການໄປຢຸ່ງມຢາມໝູ່ເພື່ອນ/ຄອບຄົວ/ໄປງານ
		10	ລັງງ/ພິທີຕ່າງໆງ່າຍຂຶ້ນ
		11	ສູ່ງາໝາເກງໆງາຍຂຶ້ນ ຮູ້ສຶກພູມໃຈ/ເພິ່ງພໍ່ໃຈ/ເຊື້ອໝັ້ນກັບຊີວິດຫຼາຍ ຂຶ້ນ
		12	ການຄ້າຂາຍ/ຂາຍສິນຄ້າເພີ່ມຂຶ້ນ
		13	ບໍ່ມີກາ ປຸ່ງ ແປງ
		999	ບໍ່ແ ່ໃຈ/ບໍ່ມີຄຳຕອບ
		ใช้เลา	ອື່ນໆ
		ຄຳຕອບ	

ຊັບພະຍາກອ ທີ3 ລະຫັດຂອງຄຳຕອບສຳລັບຊັບພະຍາກອ ທີ3 (ໃຫ້ເອົາຢູ່ໃ ຂໍ້ຄື 6.13.2 ນັ້ນ) R3

6.14		1 2 999 ໃຫ້ຂຸງ	ອັງ ຳໂຂ້ຢູ່ – ໃຫ້ສ້າມໄປເຂົ້ທີ 6.16 ແລະ ໃຫ້ສືບ ຕໍ່ຖາມຄຳຖາມອື່ນໆຢູ່ໃນແບບສອບ ຖາມທີ 6 ນີ້ ຖ້າບໍ່ໄດ້ ຳໃຊ້ ໃຫ້ຖາມຕໍ່ຄຳຖາມທີ 6.15, ຈາກນັ້ນໃຫ້ສ້າມໄປແບບສອບຖາມທີ 7 ເລີຍ ບໍ່ແ່ ໃຈ/ບໍ່ມີຄຳຕອບ ອື່ນໆ
6.15	ເຫດຕີ ດີ້ ຕໍ່ຫີ້ບໍ່ໄດ້ ຳໃຊ້ ນັ້ນແມ່ ຍ້ອ ຫຍັງ? (ໃຫ້ນັກສຳພາດ ລະບຸເຖິງ ຊື້ຂອງຊັບພະຍາ ກອນໃໝ່ຂອງຊຸມຊີນ ເຊັ່ນ: ຊັບພະຍາກອນທີ່ລະ ບຸຢູ່ໃນຂໍ້ຄື 6.14 ນັ້ນ) ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	1 2 3 4 5 6 7 8 9 999	ບໍ່ມີຄວາມສະດວກ/ບໍ່ເໝາະສີມ ຫຍຸ້ງຍາກໃ ກາ ເບິ່ງແຍງດູແລ ບໍ່ຕ້ອງກາ ເປເພແລ້ວ ບໍ່ມີທີ ຮອ ສະພາບດີ ຟ້າອາກາດບໍ່ອາ ວຍ (ຝີ ຕີກ/ ແຫັງແລ້ງ) ບໍ່ມີແຮງງາ ບໍ່ມີອຸປະກອ ບໍ່ໄດ້ຄູ ະພາບ ບໍ່ແ ໃຈ/ອື່ນໆ/ບໍ່ມີຄາຕອບ
6.16	ແມ່ນໃຕເປັນຕູ້ດູແລຮັກສາ ນັ້ນ? (ໃຫ້ນັກສາພາດ ລະບຸເຖິງຊື່ຂອງຊັບພະຍາກອນ ໃໝ່ ຂອງຊຸມຊົນ ເຊັ່ນ: ຊັບພະຍາກອນທີ່ລະບຸຢູ່ໃນຂໍ້ທີ 6.14 ນັ້ນ) ຂີດອ້ອມເອົາ 1 ຄາດອບ	1 2 3 4 999	ຊາວບ້າ ຫັງໝົດ ອຳ າດກາ ປົກຄອງບ້າ ອຳ າດກາ ປົກຄອງເມືອງ ບໍ່ມີໃຜ ບໍ່ແນ່ໃຈ/່ອື່ນ/ບໍ່ມີຄຳຕອບ
6.17	ແມ່ ໃຕ່ປີ ຜູ້ໄດ້ຮັບຜີ ປະໂຫບດສູງສຸດຈາກ	1 2 3 4 5 6 7 8 9 10	ສະເພາະເດັກນ້ອຍຍິງເທົ່ານັ້ນ ສະເພາະເດັກນ້ອຍຜູ້ຊາຍເທົ່ານັ້ນ ສະເພາະເດັກນ້ອຍຜູ້ຊາຍ ແລະ ແມ່ຍິງ) ເທົ່ານັ້ນ ສະເພາະເດັກນ້ອຍເທົ່ານັ້ນ ແມ່ຍິງ ແລະ ເດັກ ້ອຍ ຜູ້ຊາຍ ແລະ ເດັກ ້ອຍ ສະເພາະຜູ້ຊາຍ ສະເພາະຜູ້ຊາຍ ສະເພາະແມ່ຍິງ ທຸກໆຄື ໃ ບ້າ ບໍ່ມີໃຕ
6.18	ສິ່ງທີ່ມີການປຸ່ງນແປງ <i>ທີ່<b>ສຳຄັນທີ່ສຸດ</b>ສ</i> ຳລັບຄອບຄົວຂອງ	1	ຕື້ນເຂົ້າແຂງແຮງ/ງາມ/ປັກດຳໄດ້ໂວກວ່າເກົ່າ

ທ່ານເນື່ອງຈາກມີ	ຼັ້ນແມ່ນຫຍັງ?	2	ສາມາດໄປຮັບຈ້າງແຮງງາ ຢູ່ໃ ວງກງາ ກ
(ໃຫ້ນັກສຳພາດ ລະບຸເຖິງຊື່ຮ	:ອງຊັບພະຍາກອນໃໝ່		ลึกร
ຂອງຊຸມຊົນ ເຊັ່ນ: ຊັບພະຍາ	ກອນທີ່ລະບຸຢູ່ໃນຂໍ້ທີ 6.14	3	ສາມາດໄປຮັບຈ້າງແຮງງານທີ່ບໍ່ແມ່ນວຸງກ
ນັ້ນ)			ງາ ກະສິກຳ
ຂີດອ້ອມເອົາ 1 ຄຳຕອບ		4	ຮູ້ສຶກເພິ່ງພໍໃຈກັບການທີ່ມີ ເຂົ້າກຸ້ມກິນ
			(ກາ ຄຳປະກັ ສະບຸງອາຫາ )
		5	ເດັກ ້ອຍຢາກໄປໂຮງຮຸງ /ໄປໂຮງຮຸງ
			ເລື້ອຍໆກ່ວາເກົ່າ
		6	ຮູ້ສຶກມີສຸຂະໜາບແຂງແຮງຂຶ້ນ
		7	ມີ ຳສະອາດໃຊ້/ປະຍັດເວລາໃ ກາ ໄປຕັກ
			ৰ্
		8	ສາມາດຂາຍຜີ ຜະລິດ/ເຮັດກາ ຄ້າຂາຍ
			ເຫຼາກຮູກ
		9	ສາມາດເດີ ທາງອອກຈາກ ອກບ້າ /ມີຂໍ້ມູ
			ຂ່າວສານຫຼາຍຂຶ້ນ
		10	ການໄປຢຸ່ງມຢາມໝູ່ເພື່ອນ/ຄອບຄົວ/ໄປງານ
			ລັງງ/ພິທີຕ່າງໆງ່າຍຂຶ້ນ
		11	ຮູ້ສຶກພູມໃຈ/ເພິ່ງພໍໃຈ/ເຊື່ອໝັ້ນກັບຊີວິດຫຼາຍ
			ຂຶ້ນ
		12	ການຄ້າຂາຍ/ຂາຍສິນຄ້າເພີ່ມຂຶ້ນ
		13	ບໍ່ມີກາ ປຸ່ງ ແປງ
		999	ບໍ່ແ 'ໃຈ/ບໍ່ມີຄາຕອບ
		ใช้เลา	ື່ອນໆ
		กำตอบ	

# ແບບສອບຖາມທີ 7; ຜີ ກະທິບຈາກກາ ເກັບກູ້ ລບຕ ຕໍ່ກັບຊີວິດກາ ເປັ ຢູ່

### ຄຳແ ະ ຳສຳລັບ ັກສຳພາດ:

ແບບສອບຖາມທີ 7 ນີ້ແມ່ ໃຊ້ສຳລັບຜູ້ທີ່ທຳ ຈະສຳພາດທຸກໆຄົນທີ່ເປັ ຜູ້ທີ່ໄດ້ຮັບຜີ ປະໂຫຍດຈາກກາ ເກັບກູ້ ລບຕ ນັ້ນ (ລວມທັງກາ ເກັບກູ້ສຳລັບບຸກຄົ ຫຼື ສຳລັບຊຸມຊີ )

ໃຫ້ ຳໃຊ້ແບບສອບຖາມນີ້*ກັບຄຳຖາມທີ 7*ຊຶ່ງຜູ້ຊີ້ນຳຈະຈັດເປ້ ຊຸດເອົາໃຫ້ທ່າ ເພື່ອ ຳໃຊ້ໃ ກາ ສຳພາດດັ່ງກ່າວ

### ถาน ะ ำตาลับ ักตาพาก:

ກະລຸ າອ່າ ຂໍ້ຄວາມລຸ່ມນີ້ໃຫ້ແກ່ຜູ້ທີ່ຈະໃຫ້ສາພາດກ່ອ ເລີ່ມຕົ້ ສາພາດ: ຂ້າພະເຈົ້າຈະຖາມທຳ ກຸ່ງວກັບສິ່ງທີ່ມີກາ ປຸ່ງ ແປງໃ ທາງທີ່ດີ ກຼີ ບໍ່ດີ (ຕັາ ລົບ) ຢູ່ໃ ຄອບຄົວຂອງທຳ ັບແຕ່ໄດ້ມີການຈັດຕັ້ງປະຕິບັດວຸງການກາ ເກັບກູ້ ລບຕ ສຳ ເລັດແລ້ວ. ທຳ ມີຄຳຖາມຢາກຖາມຂ້າພະເຈົ້າບໍ? ທຳ ຕ້ອງກາ ໃຫ້ຂ້າພະເຈົ້າອະທິບາຍຄື ໃໝ່ບໍ່? ຂໍອະ ຸຍາດເລີ່ມຄຳ ຖາມເລີຍໄດ້ບໍ່.

### ຄຳແ ະ ຳສຳລັບ ັກສຳພາດ:

ໃຫ້ອ່າ ບັ ດາຄຳຖາມ ແລະ ຄຳຕອບລຸ່ມນີ້ໃຫ້ແກ່ຜູ້ທີ່ຈະໃຫ້ສຳພາດນັ້ນ.

ໂດຍກາ ປຽບທຽບໃສ່ກັບໄລຍະກ່ອ ທີ່ມີກາ ເກັບກູ້ ລບຕ, ລບຕ ທີ່ມີຢູ່ໝາຍໃ ບ້າ ຂອງທ່າ ມີຫຼາຍປາ ໃດ?

- 1. ມີໜ້ອຍກວ່າເກົ່າຫຼາຍ
- 2. ມີໜ້ອຍກວ່າເກົ່າ
- 3. ມີຫຼາຍກວ່າເກົ່າ
- 4. ມີຫຼາຍກວ່າເກົ່າຫຼາຍ

ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ (ບໍ່ມີກາ ປຸ່ງ ແປງ)

ກະລຸ າອ່າ ໃຫ້ແກ່ຜູ້ທີ່ຈະໃຫ້ສຳພາດນັ້ນຟັງ: ແລ້ວໃຫ້ຖາມຄຳຖາມຄີ ອີກ

ໃຫ້ອ່າ ບັ ດາຄຳຖາມ ແລະ ຄຳຕອບລຸ່ມນີ້ໃຫ້ແກ່ຜູ້ທີ່ຈະໃຫ້ສຳພາດນັ້ນ. ໂດຍໃຫ້ປຸງບທຸບໃສ່ກັບໂລຍະກ່ອ ທີ່ມີກາ ເກັບກູ້ ລບຕ ນັ້ນວ່າທ່າ ມີເຂົ້າກີ ຫຼາຍປາ ໃດ?

- 1. ມີໜ້ອຍກວ່າເກົ່າຫຼາຍ
- 2. ມີໜ້ອຍກວ່າເກົ່າ
- 3. ມີຫຼາຍກວ່າເກົ່າ
- ມີຫຼາຍກວ່າເກົ່າຫຼາຍ

ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ (ບໍ່ມີກາ ປຸ່ງ ແປງ)

ຫາກເມື່ອໃດທີ່ທ່ານໝັ້ນໃຈວ່າຜູ້ໃຫ້ສຳພາດນັ້ນເຂົ້າໃຈດີແລ້ວ ແມ່ ໃຫ້ເລີ່ມຕົ້ ຖາມຄາຖາມທີ 7.1 ເລີຍ ແບບສອບຖາມທີ 7: ຜີ ກະທົບຈາກກາ ເກັບກູ້ ລບຕ ຕໍ່ກັບຊີວິດກາ ເປັ ຢູ່ ຄຳແ ຮ ຳສຳລັບ ້າກສຳພາດ:

ແບບສອບຖາມທີ 7 ນີ້ແມ່ ໃຊ້ສຳລັບຕູ້ທີ່ທຳ ຈະສຳພາດທຸກໆຄົນທີ່ໄດ້ຮັບຕີ ປະໂຫຍດຈາກກາ ເກັບກູ້ ລບຕ ນັ້ນ (ລວມທັງກາ ເກັບກູ້ສຳລັບບຸກຄີ ຫຼື ສຳລັບຊຸມຊີ )

# ແບບສອບຖາມທີ 7: ຜີ ກະຫົບຈາກກາ ເກັບກູ້ ລບຕ ຕໍ່ກັບຊີວິດກາ ເປັ ຢູ່

# ถาน ะ าสาลัย ักสาพาก:

ກะลุ าอ่า รั้ดงามลุ่มมีใช้แก่ผู้ที่จะใช้สาพากก่อ เลิ่มดี สาพาก:

'ຕໍ່ໄປນີ້ຂ້າພະເຈົ້າຈະຖາມຄຳຖາມຈຳນວນໜຶ່ງກ່ຽວກັບສິ່ງທີ່ມີກາ ປຸ່ງ ແປງຢູ່ໃ ຄອບຄົວຂອງທຳ ັບແຕ່ໄດ້ມີກາ ຈັດ ຕັ້ງປະຕິບັດວຸງກາ ກາ ເກັບກູ້ ລບຕ *ໂດຍອົງການຈັດຕັ້ງຈາກທາງນອກ (ທີ່ບໍ່ແມ່ ຄອບຄົວຂອງທຳ ຫຼື ຄີ ໃ ຫ້ອງຖິ່ນ ເປ່ ຜູ້ເກັບກູ້ເອງ* ສຳເສັດແລ້ວ. ສະນັ້ນກະລຸນາຕອບໃຫ້ຖືກຕ້ອງທີ່ສຸດເທົ່າທີ່ເປັ ໄປໄດ້ ຊຶ່ງຄຳຕອບດັ່ງກ່າວຈະບໍ່ຖືວ່າຖືກ ຫຼື ຜິດ. ຂ້າພະເຈົ້າຈະເອົາຮູບສະແດງໃຫ້ທຳ ເບິ່ງ ແລະ ອຳ ບັ ດາຄຳຕອບເຫຼົ່ານັ້ນແລ້ວໃຫ້ບອກຂ້າພະເຈົ້າວ່າຄຳຕອບໃດ ທີ່ຖືກຕ້ອງກັບຄອບຄົວຂອງທຳ ທີ່ສຸດ. ກ່ລະ ທີ່ທຳ ຕ້ອງກາ ໃຫ້ຂ້າພະເຈົ້າອ່າ ຄຳຖາມ ຫຼື ຄຳຕອບໃດຄື ໃໝ່ແມ່ ໃຫ້ ຖາມຂ້າພະເຈົ້າໄດ້ເລີຍ.

### ຄຳແ ະ ຳສຳລັບ ັກສຳພາດ:

ກ່ອ ຈະຖາມບັ ດາຄຳຖາມຢູ່ໃ ແບບສອບຖາມທີ 7 ນີ້, ກະລຸ າອະທິບາຍຮູບສະແດງທີ່ຈະ ຳໃຊ້ສຳລັບແບບຟອມ ສອບ ຖາມທີ 7 ນີ້ໃຫ້ແກ່ເຂົາເຈົ້າກ່ອ , ໃ ນັ້ນມີຄຳຖາມ 7.1-7.52. ຕາມດ້ວຍຄຳແ ະ ຳຢູ່ໃ ແບບສອບຖາມດັ່ງກ່າວ.

ໃຫ້ອ່າ ທຸກໆຄຳຖາມ ແລ້ວຂີດອ້ອມເອົາ 1 ຄຳຕອບໃ ແຕ່ລະຄຳຖາມນັ້ນ.

### ຫາງດ້າ ສັງຄົມ

# ถำแะ ำสำลับ ักสำมาก:

ກະລຸ າອ່າ ຂໍ້ຄວາມລຸ່ມນີ້ໃຫ້ແກ່ຜູ້ທີ່ໃຫ້ສາພາດກ່ອ ເລີ່ມຕື້ ສາພາດ:

່ຕໍ່ໄປນີ້ຂ້າພະເຈົ້າຈະຖາມທ່າ ກ່ຽວກັບບັ ດາກິດຈະກຳຫາງດັງ ສັງຄົມຕ່າງໆຂອງຄອບຄົວທ່າ ແລະ ຖາມກ່ຽວກັບສິ່ງທີ່ມີ ກາ ປຸ່ງ ແປງຕໍ່ກັບຄອບຄົວຂອງທ່າ ັບຕັ້ງແຕ່ໄດ້ມີກາ ເກັບກູ້ ລບຕ ສຳເລັດແລັວ. ຖ້າຫາກທ່າ ຕ້ອງກາ ໃຫ້ຂ້າພະ ເຈົ້າອ່າ ຄຳຖາມຫຼື ຄຳຕອບໃດໜຶ່ງຄືນອີກ ແມ່ ບອກຂ້າພະເຈົ້າໄດ້ເລີຍ. ສະນັ້ນຂ້າພະເຈົ້າຂໍອະ ບາດຖາມແຕ່ລະຄຳ ຖາມກ່ຽວກັບສິ່ງທີ່ມີກາ ປຸ່ງ ແປງຕໍ່ກັບຄອບຄົວທ່າ ໂດຍກາ ປຸບທູບກັບໄລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ ທີ່ໄດ້ກ່າວມາ ເບື້ອງຕົ້ນນັ້ນ.

ຖ້າຫາກວ່າຄາຖາມດັ່ງກ່າວນັ້ນບໍ່ຖືກັບຄອບຄົວຂອງທ່າ ຫຼື ບໍ່ມີກາ ປຸງ ແປງເນື່ອງຈາກຊັບພະຍາກອ ດັ່ງກ່າວນັ້ນ ແມ່ ໃຫ້ບອກຂ້ານະເຈົ້າ ແລ້ວພວກເຮົາຈະຖາມຄ້າຖາມຂໍ້ຕໍ່ໄປເລີຍ.

ໃຫ້ອ່າ ທຸກໆຄາຖາມລຸ່ມນີ້ ຍົກເວັ້ນຄາຊີ້ແຈງ. ໂດຍບໍ່ຕ້ອງອ່າ ຄາຕອບ ຍົກເວັ້ນກໍລະນີທີ່ຜູ້ໃຫ້ສາພາດຕ້ອງກາ ຄາອະທິ ບາຍ. ປະໄຫຍກທີ່ຢູ່ໃ ວິງເລັບ () ນັ້ນແມ່ ພຸງແຕ່ເປັ ຄາອະທິບາຍໃຫ້ແກ້ ກສາພາດເທົ່ານັ້ນ, ສະນັ້ນບໍ່ຈາເປັ ອ່າ ຍົກ ເວັ້ນກໍລະນີຜູ້ໃຫ້ສາພາດບໍ່ເຂົ້າໃຈ.

# ໃຫ້ຂີດອ້ອມເອົາ 1 ຄຳຕອບສຳລັບແຕ່ລະຄຳຖາມນັ້ນ

ໃຫ້ອ່າ : ໂດຍໃຫ້ປຸງບທຸງບໃສ່ໃ ໄລຍະກ່ອ ທີ່ມີກາ ເກັບກູ້ ..

S1	ຫ່າ ຫຼື ຄອບຄົວຂອງຫ່າ ເຄີບເຂົ້າຮ່ວມງາ	1	ຫຍຸ້ງຍາກກວ່າເກົ່າຫຼາຍ
	ຕ່າງໆຢູ່ໃ ສັງຄົມບໍ່ ຖ້າບໍ່ເຄີຍໃຫ້ໝາຍ 999 ແລ້ວ	2	ຫຍຸ້ງຍາກກວ່າເກົ່າ
	<i>ล้ามไปลี้ต่ไป ที่ ก้าเดียใต้ถาม</i> ต่ำ โดยปุบทุบ	3	ສະດວກກວ່າເກົ່າ
	ໃສ່ໄລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/ກ່ອ ປີເກັບ	4	ສະດວກກວ່າເກົ່າຫຼາຍ
	ກູ້/ກ່ອ ທີ່ມີຊັບພະຍາກອນດັ່ງກ່າວນັ້ນ, ທ່າ	999	<b>ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ</b> (ບໍ່ມີກາ ປ່ຽ
	ສາມາດເຂົ້າໄປຮ່ວມງາ ບຸ ຕ່າງໆຢູ່ໃ ສັງຄົມ		ແປງ/ພວກເຮົາບໍ່ເຄີຍໄປງາ ສັງຄົມໃດໆເລີຍ)

	(ງາ ແຕ່ງງາ ຫຼືສູ່ຂັວ ຫຼືງາ ສົບຄື ຕາຍຢູ່ ພາຍໃ ບ້ານ) ນັ້ນສະດວກຄືແ ວໃດ?		
S2	ທຳ ຫຼື ຄອບຄົວຂອງທຳ ເຄີນໄປຢຸ່ງມຢາມໝູ່ ເພື່ອນທີ່ມ້ອງຢູ່ບ້າ ອື່ນໆປ່? ຖ້າບໍ່ເຄີຍໃຫ້ໝາຍ 999 ແລ້ວຂ້າມໄປຂໍ້ຕໍ່ໄປ ຫຼື ຖ້າເຄີຍໃຫ້ຖາມຕໍ່ ໄດຍປຸງບທຸງບໃສ່ໄລຍະກ່ອ ມີກາ ເກັບກູ້ ລຸບຕ/ ກ່ອ ປີຕັບກູ້/ກ່ອ ທີ່ມີຊັບພະຍາກອນດັ່ງກ່າວນັ້ນ, ໃ ໄລຍະເວລາ 1 ເດືອ ທຳ ສາມາດໄປຢຸ່ງມຢາມ ໝູ່ເພື່ອນ ແລະ ຍາດພື້ນ້ອງທີ່ຢູ່ບ້ານອື່ນ ( ອກ ບ້າ ) ຂອງທ່ານເລື້ອຍໆປານໃດ?	1 2 3 4	ໜ້ອຍກວ່າເກົ່າຫຼາຍ (ເຊັ່ນ: ພວກເຮົາສາມາດໄປ ຢ່ຽມຢາມເຂົາເຈົ້າຢູ່ບ້າ ອື່ນໜ້ອຍຫຼາຍ/ມັນຫຍຸ້ງ ຍາກກວ່າເກົ່າ ຫຼາຍກວ່າເກົ່າ ຫຼາຍກວ່າເກົ່າ ຫຼາຍກວ່າເຄົ່າຫຼາຍ (ເຊັ່ນ: ພວກເຮົາສາມາດໄປ ຢ່ຽມຢາມເຂົາເຈົ້າຢູ່ບ້າ ອື່ນຫຼາຍຄັ້ງ/ມັນສະດວກ ກວ່າເກົ່າຫຼາຍ) ບໍ່ຖືກກັບຄອບຄວຂອງຮ້ອຍ (ບໍ່ມີກາ ປຸ່ງ ແປງ/
			ພວກເຮົາບໍ່ເຄີຍເດີ ທາງອອກໄປບ້າ ອື່ນເລີຍ)
S3	ท่า ติลอบถิ่ฉะอๆท่า เลิบเอ้าอาฑา ไป ร่อยเชื้อໝู่เพื่อปราจบ้านใ ก๋ฉะ ๊เล้า เจ้าต้อๆทา ถอามร่อยเชื้อป่? ทุ้าป่เถีย ให้เพาย 999 แล้วล้ามไปล่ำไป ติ ทุ้าเถียใต้ ทามต์โดยปฏบทุบใล่โลยะก่อ มีกา เทับกู้	2 3	ໜ້ອຍກວ່າເກົາຫຼາຍ (ເຊັ່ນ: ພວກເຮົາມີອາຫາ ສ່ວ ເກີ ສຳລັບກາ ບໍລິໄພກສຳລັບໄປຊ່ວຍເຫຼືອ ຄີ ອື່ນໜ້ອຍຫຼາຍ) ໜ້ອຍກວ່າເກົ່າ ຫຼາຍກວ່າເກົ່າ
	ລບຕ/ກ່ອ ປີເກັບກູ້/ກ່ອ ທີ່ມີຊັບພະຍາກອນດັ່ງ ກ່າວນັ້ນ, ຄອບຄົວຂອງທຳ ຈະຕ້ອງໄດ້ເອົາ ອາຫາ (ເຊັ່ນ: ໝາກໄມ້, ພືດສັກ, ເຂົ້າກີ , ໝາກ ເຟັດ) ໄປຊ່ວຍເຫຼືອຊາວບ້າ /ໝູ່ເພື່ອນ ໃ ກໍລະ ີ ເຂົາເຈົ້າຕ້ອງກາ ຄວາມຊ່ວຍເຫຼືອ ຫຼາຍປາ ໃດ?	999	ມືຫຼາຍກວ່າເກົ່າຫຼາຍ (ເຊັ່ນ: ພວກເຮົາມີອາຫາ ຂ່ວ ເກີ ຫຼາຍສຳລັບກາ ບໍລິໂພກທີ່ສາມາດ ຳ ໄປຊ່ວຍເຫຼືອຄີ ອື່ນໃ ເມື່ອເຂົາເຈົ້າມີຄວາມຈຳ ເປັ )  ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ (ບໍ່ມີກາ ປຸ່ງ ແປງ/ ພວກເຮົາບໍ່ເຄັຍເອົາອາຫາ ໄປຊ່ວຍເຫຼືອຄີ ອື່ນ ເລີຍ)
S4	ໂດຍປຽບທຸງບໍ່ໃສ່ ໂລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/ກ່ອ ປີຕັບກູ້/ກ່ອ ທີ່ມີຊັບພະຍາກອນດັ່ງກ່າວນັ້ນ, ຄອບຄີດຂອງທ່າ ໄດ້ຮັບຂໍ້ມູ ຂ່າວສາ ກຸ່ງວກັບ ລາຄະ ຄ້າໃ ທ້ອງຕະຫຼາດ, ແ ວຄວາມຄິດ ໃໝ່ໆເລັກ "ກທາງດ້າ ກະສຶກໃໝ່ ແລະ ອື່ນໆ ຈາກພໍ່ຄ້າ, ບຸກຄີ ທີ່ຢູ່ໃ ຕະຫຼາດ, ບຸກຄີ ທາງ ອກ ທີ່ເຂົ້າມາໃ ບ້າ ຫຼາຍປາ ໃດ?	1 2 3 4	ໜ້ອຍກວ່າເກົາຫຼາຍ (ເຊັ່ນ: ພວກເຮົາໄດ້ຮັບຂໍ້ມູ ຂ່າວສາ ຈາກບຸກຄີ ທາງ ອກໜ້ອຍກວ່າເກົາ ຫຼາຍ) ໜ້ອຍກວ່າເກົ່າ ຫຼາຍກວ່າເກົ່າ ໄດ້ຮັບຫຼາຍກວ່າເກົາຫຼາຍ (ເຊັ່ນ: ພວກເຮົາໄດ້ຮັບ ຂໍ້ມູ ຂ່າວສາ ຈາກບຸກຄີ ທາງ ອກຫຼາຍກວ່າ ເກົາຫຼາຍ) ບໍ່ຖືກກັບຄອບຄີວຂອງຂ້ອຍ (ບໍ່ມີກາ ປຸ່ງ ແປງ)
S5	ໂດຍປຽບທຸງບໍໃສ່ໂລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/ ກ່ອ ປີຕັບກູ້/ກ່ອ ທີ່ມີຊັບພະບາກອນດັ່ງກ່າວນັ້ນ, ໃ ໂລຍະພາຍໃ <i>1 ເດືອ</i> ບັ ດາສະມາຊິກໃ ຄອບຄິວຂອງທ່າ ໄປຕະຫຼາດເລື້ອຍໆປານໂດ?	1 2 3 4	ໜ້ອຍກວ່າເກົ່າຫຼາຍ (ເຊັ່ນ: ເມື່ອກ່ອ ພວກເຮົາ ເຄີຍໄປຕະຫຼາດຂ້ອ ຂ້າງເລື້ອຍໆ ແຕ່ວ່າດງວນີ້ ພວກເຮົາໄປໜ້ອຍຫຼາຍ) ໜ້ອຍກວ່າເກົ່າ ຫຼາຍກວ່າເກົ່າ ໄປເລື້ອຍໆຫຼາຍກວ່າເກົ່າຫຼາຍ (ເຊັ່ນ: ເມື່ອກ່ອ ພວກເຮົາໄປຕະຫຼາດໜ້ອຍຫຼາຍແຕ່ດງວນີ້ພວກ

			ເຮົາໄປຕະຫຼາດຫຼາຍກວ່າ)
		999	ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ (ບໍ່ມີກາ ປ່ງ ແປງ)
S6	ໂດຍປ່າບທຸງບໍໃສ່ໂລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/ ກ່ອ ປີຕັບກູ້/ກ່ອ ທີ່ມີຊັບພະຍາກອນດັ່ງກ່າວນັ້ນ, ໃ ໂລຍະພາຍໃ <i>1 ເດືອ</i> ບັ ດາສະມາຊິກໃ ຄອບຄິວຂອງທ່າ ໄປເທດສະບາ ເມືອງ ເລື້ອຍໆປານໃດ?	1 2 3 4	ໜ້ອຍກວ່າເກົາຫຼາຍ (ເຊັ່ນ: ເມື່ອກ່ອ ພວກເຮົາ ເຄີຍໄປເທດສະບາ ເມືອງຂ້ອ ຂ້າງເລື້ອຍ ແຕ່ວ່າ ດງວນີ້ ພວກເຮົາໄປໜ້ອຍຫຼາຍ) ໜ້ອຍກວ່າເກົ່າ ຫຼາຍກວ່າເກົ່າ ໄປເລື້ອຍໆຫຼາຍກວ່າເກົ່າຫຼາຍ (ເຊັ່ນ: ເມື່ອກ່ອ ພວກເຮົາໄປເທດສະບາ ເມືອງໜ້ອຍຫຼາຍແຕ່ ດງວ ນີ້ພວກເຮົາໄປຫຼາຍກວ່າ)
	200000000000000000000000000000000000000	999	ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ (ບໍ່ມີກາ ປ່ງ ແປງ)
S7	ໂດຍປ່ຽນທູນໃສ່ໄລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/ ກ່ອ ປີຕັບກູ້/ກ່ອ ທີ່ມີຊັບພະຍາກອນດັ່ງກ່າວນັ້ນ, ທ່າ ຮູ້ສຶກວ່າທ່າ ໄດ້ມີ <i>ປິດບາດ ແລະ ເປັ</i>	1	ຮູ້ສຶກວ່າບໍ່ມີບົດບາດ ແລະ ມີສ່ວ ປະກອບໃ ກາ ພັດທະ າຢູ່ໃ ບ້າ ພງງແຕ່ຢ່າງໃດເລີຍ (ໜ້ອຍກວ່າເກົ່າຫຼາຍ)
	ส่อมชี้ๆใ ภา ปะกอบต่อ เลิ้าใ อุกๆา ภา ขัดทะ ายู่ใ บ้า ຫຼາยปา ใด?	2	ຮູ້ສຶກວ່າບໍ່ມີບົດບາດ ຫຼື ປະກອບສ່ວ ໃ ວງກງາ ກາ ພັດທະ າຢູ່ໝາຍໃ ບ້າ ຫຼາຍປາ ໃດ (ໜ້ອຍກວ່າ)
		3	ຮູ້ສຶກວ່າມີບົດບາດ ແລະປະກອບສ່ວ ເຂົ້າໃ ວຽກງາ ກາ ພັດທະ າຢູ່ພາຍໃ ບ້າ ຫຼາຍໝໍ ສົມຄວ
		999	(ຫຼາຍກວ່າ) ຮູ້ສຶກວ່າມີບົດບາດ ແລະ ປະກອບສ່ວ ເຂົ້າໃ ວງກ ງາ ກາ ພັດທະ າຢູ່ໃ ບ້າ ຫຼາຍທີ່ສຸດ (ຫຼາຍກວ່າເກົ່າຫຼາຍ) <b>ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ</b> (ບໍ່ມີກາ ປຸ່ງ ແປງ)
S8	ໂດຍປຸງບທຸງບໃສ່ໄລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/	1	ມີໜ້ອຍກວ່າເກົ່າຫຼາຍ
	ກ່ອ ປີຕັບກູ້/ກ່ອ ທີ່ມີຊັບພະຍາກອນດັ່ງກ່າວນັ້ນ,	2	ມີໜ້ອຍກວ່າເກົ່າ
	ຢູ່ພາຍໃ ບ້າ ຂອງທ່າ ມີຫຼາຍຄົ ປາ ໃດທີ່	3	ມີຫຼາຍກວ່າເກົ່າ
	ຈະສາມາດຊ່ວຍຫ່າ ໄດ້ໃ ກໍລະີຫ່າ ພົບບັ ຫາ	4	ມີຫຼາຍກວ່າເກົ່າຫຼາຍ
	ຫຍຸ້ງຍາກ/ຫ່າ ຕ້ອງກາ ຄວາມຊ່ວຍເຫຼືອ?	999	ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ (ບໍ່ມີກາ ປຸ່ງ ແປງ)

ຫາງດ້າ ກາຍຍະພາບ (ທາງດ້າ ວັດຖຸ)

# ถาน ะ าลาลัย ักลาพาก:

กะลุ าอ่า น้ำถวามลุ่มนี้ใช้แก่ผู้ที่ใช้ตาพากก่อ เลิ่มกิ้ ตำพาก:

'ຕໍ່ໄປນີ້ຂ້າພະເຈົ້າຈະຖາມທ່າ ກ່ຽວກັບກາ ເຂົ້າເຖິງສິ່ງອາ ວຍຄວາມສະດວກທາງດັາ ກາຍຍະພາບຂອງຄອບຄົວທ່າ ແລະ ຖາມກ່ຽວກັບສິ່ງທີ່ມີກາ ປຸ່ງ ແປງຕໍ່ກັບຄອບຄົວຂອງທ່າ ັບຕັ້ງແຕ່ໄດ້ມີກາ ເກັບກູ້ ລບຕ ສຳເລັດແລ້ວ. ຖ້າຫາກ ທ່າ ຕ້ອງກາ ໃຫ້ຂ້າພະເຈົ້າອ່າ ຄຳຖາມ ຫຼື ຄຳຕອບໃດໜຶ່ງຄືນໃໝ່ອີກ ແມ່ ບອກຂ້າພະເຈົ້າໄດ້ເລີຍ. ສະນັ້ນຂ້າພະ ເຈົ້າຂ້ອະ ູຍາດຖາມແຕ່ລະຄຳຖາມກ່ຽວກັບສິ່ງທີ່ມີກາ ປຸ່ງ ແປງຕໍ່ກັບຄອບຄົວທ່າ ໄດຍກາ ປຸງບທຸງບກັບໄລຍະກ່ອ ມີ ກາ ເກັບກູ້ ລບຕ ທີ່ໄດ້ກ່າວມາເບື້ອງຕົ້ນນັ້ນ'

ຖ້າຫາກວ່າຄາຖາມດັ່ງກ່າວນັ້ນບໍ່ຖືກັບຄອບຄົວຂອງທ່າ ຫຼື ບໍ່ມີກາ ປ່ງ ແປງເນື່ອງຈາກຊັບພະຍາກອ ດັ່ງກ່າວນັ້ນ ແມ່ ໃຫ້ບອກຂ້າພະເຈົ້າ ແລ້ວພວກເຮົາຈະຖາມຄໍາຖາມຂໍ້ຕໍ່ໄປເລີຍ.

ໃຫ້ອ່າ ທຸກໆຄຳຖາມລຸ່ມນີ້ ຍຶກເວັ້ນຄຳຣີແຈງ. ໂດຍບໍ່ຕ້ອງອ່າ ຄຳຕອບ ຍົກເວັ້ນກໍລະບີທີ່ຜູ້ໃຫ້ສຳພາດຕ້ອງກາ ຄຳອະທິ ບາຍ. ປະໂຫຍກທີ່ຢູ່ໃ ວິງເລັບ () ນັ້ນແມ່ ພຸງແຕ່ເປີ ຄຳອະພິບາຍໃຫ້ແກ່ ັກສຳພາດເທົ່ານັ້ນ, ສະນັ້ນບໍ່ຈຳເປີ ອ່າ ຍົກ ເວັ້ນກໍລະນີຜູ້ໃຫ້ສຳພາດບໍ່ເຂົ້າໃຈ.

ໃຫ້ຂີດອ້ອມເອົາ 1 ຄຳຕອບສຳລັບແຕ່ລະຄຳຖາມນັ້ນ ໃຫ້ອ່າ :ໄດຍໃຫ້ປາບທາບໃສ່ໃ ໄລຍະກ່ອ ທີ່ມີກາ ເກັບກໍ

	: ໂດຍໃຫ້ປຸງບທຸງບໃສ່ໃ ໄລຍະກ່ອ ທີ່ມີກາ ເກັບກູ້.	10000	1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
P1	ໂດຍປຸງບທຸງບໃສ່ໄລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/ ກ່ອ ປີເກັບກູ້/ກ່ອ ທີ່ມີຊັບພະຍາກອນດັ່ງກ່າວນັ້ນ,	1	<i>ຫຍຸ້ງຍາກຫຼາຍກວ່າເກົ່າ</i> (ເຊັ່ນ: ມັນມີຄວາມຫຍຸ້ງ ຍາກກວ່າເກົ່າໃ ກາ ເຂົ້າໄປສຸກສາລາທີ່ໃກ້ທີ່ສຸດ
	ກາ ເຂົ້າໄປບໍລິກາ ຢູ່ສຸກສາລາ/ໂຮງໝໍທີ່ໃກ້ທີ່ສຸດ		ນັ້ນ-ຕົວຢ່າງ: ເສັ້ນທາງທຸລະກັນດານກວ່າເກົ່າ)
	(ສຸກສາ ລາເຂດ) ຂອງຄອບຄົວທ່າ ມີຄວາມ	2	ຫຍຸ້ງຍາກກວ່າເກົາ
	ສະດວກຄີແ ວໃດ?	3	ສະດວກກວ່າເກົ່າ
		4	<b>ສະດວກກວ່າເກົ່າຫຼາຍ</b> (ຕີວຢ່າງ: ມັ ງ່າຍກວ່າ
			ເກົ່າໃ ກາ ເຂົ້າໄປສຸກສາລາທີ່ໃກ້ທີ່ສຸດນັ້ນ-
			ເຊັ່ນ: ມີເສັ້ນທາງ/ກາ ຂີ ສິ່ງທີ່ດີກວ່າ)
		999	ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ (ບໍ່ມີກາ ປ່ງ ແປງ)
P2	ຄອບຄິວຂອງທ່າ ມີເດັກ ້ອຍທີ່ມີອາຍຸຢູ່ໃ ໄວເຂົ້າ	1	<b>ຂື້ຮ້າຍກວ່າເກົາຫຼາຍ</b> (ເຊັ່ນ:ຄຸນ ະພາບຂອງອາ
	ໂຮງຮູງ ບໍ? ຖ້າບໍ່ມີ ໃຫ້ໝາຍ 999 ແລ້ວຂ້າມໄປຂໍ້ທີ		ຄາ ໂຮງຮູງ ແລະສິ່ງອຳ ວຍຄວາມສະດວກ
	7.21 ເລີຍ, ຖ້າມີໃຫ້ສືບຕໍ່ຖາມ: ໂດຍປງບທງບໃສ່		ຕ່າງໆຂີ້ຮ້າຍກວ່າເກົ່າຫຼາຍ)
	ໄລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/ກ່ອ ປີເກັບກູ້/ <b>ກ່ອ</b>	2	ຂີ້ຮາຍກວ່າເກົ່າ
	ທີ່ມີຊັບພະຍາກອນດັ່ງກ່າວນັ້ນ, ຄຸ ະພາບຂອງ	3	ດີຂຶ້ນກວ່າເກົ່າ
	ໂຮງຮຸງນທີ່ລູກຂອງທ່າ ໄປເຂົ້າຮຸງນນັ້ນ (ເຊັ່ນ:	4	<i>ດີຂຶ້ນກວ່າເກົ່າຫຼາຍ</i> (ເຊັ່ນ: ຄຸນ ະພາບຂອງອາ
	ຄວາມປອດໄພ, ຂະໜາດ, ຄຸ ະພາບຂອງ		ຄາ ຮູງ ແລະ ສິ່ງອຳ ວຍຄວາມສະດວກຕ່າງໆ
	ອາຄາ ຮູ ,ຫ້ອງ ຳ້ ແລະ ຳສະອາດ) ໄດ້ມີກາ		ດີ/ໄດ້ຮັບກາ ປັບປຸງກວ່າເກົ່າຫຼາຍ)
	ປ່ງ ແປງແ ວໃດ?	999	<b>ບໍ່ຖືກກັບຄອບຄົວຂອງຂັອຍ</b> (ເຊັ່ນ: ບໍ່ມີລູກທີ່ເຂົ້າ
			ໂຮງຮູງ ຫຼືບໍ່ມີກາ ປຸ່ງ ແປງ)
P3	ໂດຍປຸງທຸງບໃສ່ໂລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/	1	<b>ຂື້ຮ້າຍກວ່າເກົ່າຫຼາຍ</b> (ເຊັ່ນ: ພວກເຮົາມີ ຳ້ສະ
	ກ່ອ ປີເກັບກູ້/ກ່ອ ທີ່ມີຊັບພະຍາກອນດັ່ງກ່າວນັ້ນ,		ອາດໜ້ອຍກວ່າເກົາຫຼາຍ)
	ກາ ຳໃຊ້ ຳ້ສະອາດ ຂອງຄອບຄົບໜ່າ ໄດ້ມີກາ	2	ຂີ້ຮາຍກວ່າເກົ່າ
	ປ່ງ ແປງແ ວໃດ? (ເຊັ່ນ: ມີ ນາດື່ມບໍລິສຸດ,	3	ດີຂຶ້ນກວ່າເກົ່າ
	້ຳສ້າງ, ້ຳບາດາ , ້ຳລິ ,ບໍ່ຕ້ອງ ຳໃຊ້ ້ຳຈາກ	4	<i>ດີຂຶ້ນກວ່າເກົ່າຫຼາຍ</i> (ເຊັ່ນ: ພວກເຮົາມີ ຳ້ລະ
	ແມ່ ຳ້ອີກແລ້ວ)		ອາດຫຼາຍກວ່າເກົ່າຫຼາຍ)
		999	ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ (ເຊັ່ນ: ບໍ່ມີກາ ປ່ຽ
			ແປງ)
P4	ໂດຍປງນທງບໃສ່ໄລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/	1	<i>ຫຍຸ້ງຍາກຫຼາຍກວ່າເກົ່າ</i> (ເຊັ່ນ: ມັນມີຄວາມຫຍຸ້ງ
	ກ່ອ ປີເກັບກູ້/ກ່ອ ທີ່ມີຊັບພະຍາກອນດັ່ງກ່າວນັ້ນ,		ຍາກກວ່າເກົ່າໃ ກາ ເຂົ້າໄປເທດສະບາ ເມືອງ/
	ກາ ເຂົ້າໄປເຫດສະບາ ເມືອງຫຼື ແຂວງ ຂອງຜູ້		ແຂວງນັ້ນ-ດົວຢ່າງ: ເສັ້ນທາງທຸລະກັນ ດານ, ບໍ່ມີ
	ໃຫຍ່ໃ ຄອບຄົວທ່າ ມີຄວາມສະດວກຄືແ ວໃດ?		බ්ගඞ් බ්უ)

2	ຫຍຸ້ງຍາກກວ່າເກົ່າ
3	ສະດວກກວ່າເກົ່າ
4	<b>ສະດວກກວ່າເກົ່າຫຼາຍ</b> (ຕີວຢ່າງ: ມັ ງ່າຍກວ່າ
	ເກົ່າໃ ກາ ເຂົ້າໄປເຫດສະບາ ເມືອງ/ແຂວງ
	ນັ້ນ-ເຊັ່ນ: ມີເສັ້ນຫາງ/ກາ ຂີ ສິ່ງຫີດີກວ່າ)
999	ບໍ່ຖືກກັບຄອບຄິວຂອງຂ້ອຍ (ບໍ່ມີກາ ປ່າ ແປງ)

P5	ໂດຍປ່ຽນທ່ຽບໃສ່ໂລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/ ກ່ອ ປີເກັບກູ້ເກ່ອ ທີ່ມີຊັບພະຍາກອນດັ່ງກ່າວນັ້ນ, ຊັບສີ ທາງດັາ ວັດກູ (ເຊັ່ນ: ລິດໂຖ າ, ລິດຈັກ, ໂຖງ າ, ໂຮງສີເຂົ້າ) ຂອງຄອບຄົວທຳ ໄດ້ມີກາ ປ່ງ ແປງແ ວໃດ?	2 3 4	ຂື້ຮ້າຍກວ່າເກົ່າຫຼາຍ (ເຊັ່ນ: ພວກເຮົາມີຮັບສື ໜ້ອຍຫຼາຍ ຕີວຢ່າງ: ພວກເຮົາຈຳຕ້ອງໄດ້ຂາຍ ຮັບສື ຈຳນວນໜຶ່ງ, ສິ່ງຄື ເຈົ້າຂອງເດີມ/ເອົາ ໃຫ້ຄື ອື່ນ) ຂື້ຮ້າຍກວ່າເກົ່າ ດີຂຶ້ນກວ່າເກົ່າ ຫຼາຍກວ່າເກົ່າຫຼາຍ (ເຊັ່ນ: ພວກເຮົາມີຮັບສີ ຫຼາຍກວ່າເກົ່າ-ພວກເຮົາສາມາດປົມ, ຊື້ ແລະ
		999	ເຊົ້າ) ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ (ເຊັ່ນ: ບໍ່ມີກາ
P6	ເຮືອ ຂອງທ່າ ເຄີຍມີກາ ປັບປຸງສ່ວ ໃດໜຶ່ງບໍ? ຖ້າບໍ່ເຄືຍໃຫ້ໝາຍ 999 ແລັວຂ້າມໄປຂໍ້ຕໍ່ໄປ ຫຼື	1	ປ່ງ ແປງ) <i>ບໍ່ມີກາ ປັບປຸງແຕ່ຢ່າງໃດເລີຍ</i> (ເຊັ່ນ: ບໍ່ມີກາ ປັບປຸງເຮືຣ ເລີຍ)
	ຖ້າເຄີຍໃຫ້ຖາມຕໍ່ ໂດຍປຽບທຽບໃສ່ ໂລຍະກ່ອ ມີ ກາ ຫັບກູ້ ລບຕ/ ກ່ອ ບີເກັບກູ້/ກ່ອ ທີ່ມີ ຮັບພະຍາກອນດັ່ງກ່າວນັ້ນ, ຄຸ ະພາບຂອງ	2	ມີກາ ປັບປຸງຂຶ້ນໜ້ອຍໜຶ່ງ (ເຊັ່ນ: ໄດ້ປົວແປງ ບາງສ່ວ , ມີວັດຖຸຈານວນໜຶ່ງເພື່ອຈະປັບປຸງ ແຕ່ຍັງບໍ່ໄດ້ປັບປຸງເທື່ອ)
	ເຮືອ ຂອງຄອບຄົວທຳ ໄດ້ມີກາ ປັບປຸງຄືແ ວ ໃດ?	3	ມືກາ ປັບປຸງຂົອ ຂ້າງຫຼາຍ (ເຊັ່ນ: ໄດ້ປັບປຸງ ຫຼື ປຸ່ງ ຫຼັງຄະໃໝ່, ມີໄມ້ແປ້ ສຳລັບແອັມຝາຈຳ ນວນໜຶ່ງ, ໄດ້ປັບປຸງພື້ນເຮືອ )
		4	ມີກາ ປັບປຸງຫຼາຍ (ເຊັ່ນ: ທ່ານອາດຈະມີກາ ປັບປຸງຝາເຮືອ ແລະ ຫຼັງຄາ/ອາດຈະຂະຫຍາຍ ເຮືອ ໃຫ້ຫົວາງອອກ ແລະ/ຫຼື ຂະຫຍາຍຫ້ອງ ເພີ່ມ)
		999	ບໍ່ຖືກກັບຄອບຄິວຂອງຂ້ອຍ (ເຊັ່ນ: ບໍ່ມີກາ ປຸ່ງ ແປງ ຫຼື ບໍ່ມີເຮືອ ເປັ ຂອງຕິ ເອງ)
P7	ໂດຍປຸງບທຸງບໃສ່ໄລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/	1	ມີໜ້ອຍກວ່າເກົ່າຫຼາຍ
	ກ່ອ ປີເກັບກູ້/ກ່ອ ທີ່ມີຊັບພະຍາກອນດັ່ງກ່າວນັ້ນ,	2	ມີໜ້ອຍກວ່າເກົ່າ
	ທ່າ ມີເຄື່ອງເຮືອນທີ່ຈຳເປັ (ເຊັ່ນ: ໝໍ້ແຕ່ງກິ ,	3	ມີຫຼາຍກວ່າເກົ່າ
	ເສື້ອ ອ ,ຜ້າຫິ່ມ,ໂຕະ)ຫຼາຍປາ ໃດ?	4	ມີຫຼາຍກວ່າເກົ່າຫຼາຍ
		999	ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ (ເຊັ່ນ: ບໍ່ມີກາ ປ່ຽ ແປງ ຫຼື ບໍ່ມີເຮືອ ເປັ ຂອງຕິ ເອງ)
P8	ຄອບຄິວຂອງທ່າ ເຄີຍ ຳໃຊ້ ຳຊົ ລະປະທາ ເຂົ້າໃ ກາ ພະລິດປ່? ຖ້າບໍ່ເຄີຍໃຫ້ໝາຍ 999	1	ໜ້ອຍກວ່າເກົາຫຼາຍ (ເຊັ່ນ: ພວກເຮົາມີ ຳຊົ ລະປະທາ ໜ້ອຍກວ່າເກົາຫຼາຍ/ລະບົບຊີ ລະ

ແລ້ວຂ້າມໄປຂໍ້ຕໍ່ໄປ ຫຼື ຖ້າເຄີຍໃຫ້ຖາມຕໍ່ ໂດຍ
ປ່ງບທ່ຽບໃສ່ເລ້າຂອງຄອນຄົວທ່າ ມີຫຼາຍປາ
ໂດ?
ປ່ອທາ ແມ່ ໃຊ້ໄດ້ດີໃ ໂລຍະຜ່າ ມາແຕ່ດງວ
ນັ້ນ ໂຂ້ໄດ້ດີໃ ໂລຍະຜ່າ ມາແຕ່ດງວ

ຫາງດັາ ກາ ເງິ

### ถาน ะ าสาลัย ักสาพาก:

ກະລຸ าอ่า ຂໍ้ถวามลุ่มนี้ใช้แก่ผู้ชี่ใช้สาพากก่อ เลิ่มติ์ สาพาก:

'ຕໍ່ໄປນີ້ຂ້າພະເຈົ້າຈະຖາມທ່າ ກ່ຽວກັບກາ ເຂົ້າເຖິງຊັບສີ ທາງດ້າ ກາ ເງິ ຂອງຄອບຄົວທ່າ ແລະ ຖາມກ່ຽວກັບສິ່ງທີ່ມີ ກາ ປຸ່ງ ແປງຕໍ່ກັບຄອບຄົວຂອງທ່າ ັບຕັ້ງແຕ່ໄດ້ມີກາ ເກັບກູ້ ລບຕ ສຳເລັດແລ້ວ. ຖ້າຫາກທ່າ ຕ້ອງກາ ໃຫ້ຂ້າພະ ເຈົ້າອ່າ ຄຳຖາມຫຼື ຄຳຕອບໃດໜຶ່ງຄືນໃໝ່ອີກ ແມ່ ບອກຂ້າພະເຈົ້າໄດ້ເລີຍ. ສະນັ້ນຂ້າພະເຈົ້າຂໍອະ ບາດຖາມແຕ່ລະຄຳ ຖາມກ່ຽວກັບສິ່ງທີ່ມີກາ ປຸ່ງ ແປງຕໍ່ກັບຄອບຄົວທ່າ ໂດຍກາ ປຸງບທຸງບກັບໂລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ ທີ່ໄດ້ກ່າວມາ ເບື້ອງຕົ້ນນັ້ນ'

ຖ້າຫາກວ່າຄາຖາມດັ່ງກ່າວນັ້ນບໍ່ຖືກັບຄອບຄິວຂອງທ່າ ຫຼື ບໍ່ມີກາ ປຸງ ແປງເນື່ອງຈາກຊັບພະບາກອ ດັ່ງກ່າວນັ້ນ ແມ່ ໃຫ້ບອກຂ້າພະເຈົ້າ ແລ້ວພວກເຮົາຈະຖາມຄຳຖາມຂໍ້ຕໍ່ໄປເລີຍ.

ໃຫ້ອ່າ ທຸກໆຄາຖາມລຸ່ມນີ້ ຍົກເວັ້ນຄາຂີ້ແຈງ. *ໂດຍບໍ່ຕ້ອງອ່າ ຄາຕອບ ຍົກເວັ້ນກໍລະນີທີ່ຜູ້ໃຫ້ສາພາດຕ້ອງກາ ຄາອະທີ* ບາຍ. ປະໂຫຍກທີ່ຢູ່ໃ ວິງເລັບ () ນັ້ນແມ່ ພຸງແຕ່ເປັ ຄາອະທິບາຍໃຫ້ແກ່ ັກສາພາດເທົ່ານັ້ນ, ສະນັ້ນບໍ່ຈຳເປັ ອ່າ ຍົກ ເວັ້ນກໍລະນີຜູ້ໃຫ້ສາພາດບໍ່ເຂົ້າໃຈ.

ໃຫ້ຂີດອ້ອມເອົາ 1 ຄຳຕອບສຳລັບແຕ່ລະຄຳຖາມນັ້ນ ໃຫ້ອຳ : ໂດຍໃຫ້ປຽບທຽບໃສ່ໃ ໂລຍະກ່ອ ທີ່ມີກາ ເກັບກູ້ . ໝາຍເຫດ: ຂໍ້ທີ່ 7.31, 7.33, 7.36 ຄຳຄອບ*ໂປທາງກິງ*ກັ ຂ້າມ

F1 ທຳ ຄຶດວ່າມູ ຄ່າທີ່ດີ ຂອງຄ່າ ມີກາ ປຸ່ງ ແປງ ປຸ ບໍ່ ເນື່ອງຈາກມີຮັບພະຍາກອ ດັ່ງກ່າວ? ຖ້າບໍ່ມີ ໃຫ້ໝາຍ 999 ແລ້ວຂ້າມໄປຂໍ່ຕໍ່ໄປ ຫຼື ຖ້າມີໃຫ້ 2 ຖາມຕໍ່ ໂດຍປຸງບທຸງປໃສ່ໂລຍະກ່ອ ມີກາ ເກັບກູ້ 3 ລບຕ/ກ່ອ ປີເກັບກູ້/ກ່ອ ທີ່ມີຮັບພະຍາກອນດັ່ງ 4 ກ່າວນັ້ນ, ມູ ຄ່າທີ່ດີ ຂອງທຳ ພາຍຫຼັງທີ່ໄດ້ເກັບກູ້ ລບຕ ແລ້ວມີກາ ປຸ່ງ ແປງແ ວໃດ?

ໜ້ອຍກວ່າເກົ່າຫຼາຍ (ເຊັ່ນ: ຖ້າຂ້ອຍຈຳຕ້ອງ ຂາຍແມ່ ຈະຕ້ອງຂາຍໃ ມູ ຄຳທີ່ຕ<sup>ຳ</sup>ກວ່າເກົ່າ ຫຼາຍ)

ໜ້ອຍກວ່າເກົ່າ ຫຼາຍກວ່າເກົ່າ

ຫຼາຍກວ່າທົ່າຫຼາຍ (ເຊັ່ນ: ຖ້າຂ້ອຍຕ້ອງກາ ຂາຍ ຈະຂາຍໄດ້ໃ ມູ ຄ່າທີ່ສູງກວ່າເກົ່າຫຼາຍ) ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ (ບໍ່ມີກາ ປຸ່ງ ແປງ)

F2 ໂດຍປຽບທຽບໃສ່ໄລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/ 1 *ໜ້ອຍກວ່າເກົ່າຫຼາຍ* (ເຊັ່ນ: ເມື່ອກ່ອ ພວກເຮົາ

	ກ່ອ ປີເກັບກູ້/ກ່ <b>ອ ທີ່ມີຊັບພະຍາກອນດັ່ງກ່າວນັ້ນ</b> , ພາຍໃ ໂລຍະເວລາ 1 ເດືອ ຫ່າ ສາມາດຂາຍຜີ ຜະລິດ (ຫິດຜັກ/ໝາກໄມ້/ໂຂ່/ໜໍ່ໄມ້/ກີບຂູງດ) ຫຼື ສຶ ຄຳ (ເຊັ່ນ: ເຄື່ອງຫັດຖະກຳ/ຈັກສາ ) ສຳລັບເປັ ລາຍຮັບເພີ່ມຂອງຄອບຄົວ (ແຕ່ບໍ່ແມ່ ຂາຍໃ ກໍລະ ຊຶກເສີ ) ໄດ້ຫຼາຍປາ ໃດ?	2 3 4	ສາມາດໄດ້ຂາຍຈຳນວນໜຶ່ງ ແຕ່ດງວນີ້ແມ່ ຍາກ ຫີຈະໄດ້ຂາຍຜີ ຜະລິດໃດໜຶ່ງ) ໜ້ອຍກວ່າເກົ່າ ຫຼາຍກວ່າເກົ່າ ຫຼາຍກວ່າເກົ່າຫຼາຍ (ເຊັ່ນ: ພວກເຮົາໄດ້ຂາຍຫຼາຍ ກວ່າເກົ່າຕິວຢ່າງ: ໄດ້ຂາຍໃຫ້ແກ່ພໍ່ຄັາ, ັກທ່ອງ ຫ່ງວ) ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ (ບໍ່ມີກາ ປຸ່ງ ແປງ)
F3	ໂດຍປຽບທຸງບໃສ່ໂລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/ ກ່ອ ປີເກັບກູ້ເກ່ <b>ອ ທີ່ມີຊັບພະບາກອນດັ່ງກ່າວນັ້ນ</b> , ໃ ໂລຍະເວລາ 1 ເດືອ ຄອບຄົວຂອງທຳ ສາມາດ ຫ້ອ ເງີ (ເກັບເງີ )ໄດ້ຫຼາຍປາ ໃດ?	1 2 3 4	ໜ້ອຍກວ່າເກົ່າຫຼາຍ (ເຊັ່ນ: ເມື່ອກ່ອ ພັວກເຮົາ ສາມາດຫ້ອ ໄດ້ຈຳນວນໜ້ອຍໜຶ່ງ ແຕ່ດງວນີ້ບໍ່ ສາມາດຫ້ອ ໄດ້ຈັກກີບເລີຍ) ໜ້ອຍກວ່າເກົ່າ ຫຼາຍກວ່າເກົ່າ ຫຼາຍກວ່າເກົ່າຫຼາຍ (ເຊັ່ນ: ພວກເຮົາສາມາດຫ້ອ ໄດ້ຢ່າງໜ້ອຍແມ່ ສອງເທົ່າຂອງເມື່ອກ່ອ ) ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ (ບໍ່ມີກາ ປຸ່ງ ແປງ)
F4	ໂດຍປຸງພາງບໃສ່ໂລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/ກ່ອ ປີເກັບກູ້ເກ່ອ ທີ່ມີຊັບພະຍາກອນດັ່ງກ່າວນັ້ນ, ໂ ໂລຍະເວລາພາຍໃ 1 ເດືອ ຈຳ ວ ເງີ ທີ່ ຄອບຄິວຂອງທ່າ ຈຳຕ້ອງໄດ້ຊື້ສຶ່ງຈຳເປັ ອັ ພື້ນ ຖານ (ສິ່ງທີ່ຈຳເປັ ຕ້ອງໄດ້ມີເຊັ່ນ: ເຂົ້າ, ໝາກເພັດ, ແປ່ງ ົວ)ມີຫຼາຍປາ ໃດ?	1 2 3 4	ໜ່ອຍກວ່າກົ່າຫຼາຍ (ເຊັ່ນ: ເມື່ອກ່ອ ພວກເຮົາມີ ເງື ຈຳນວນໜ້ອຍໜຶ່ງ ແຕ່ດງວນີ້ບໍ່ມີເງື ຈັກກີບ ເລີຍ) ໜ້ອຍກວ່າກົ່າ ຫຼາຍກວ່າກົ່າ ຫຼາຍກວ່າກົ່າ ຫຼາຍກວ່າກົ່າຫຼາຍ (ເຊັ່ນ: ພວກເຮົາມີຢ່າງໜ້ອຍ ແມ່ ສອງເທົ່າຂອງເມື່ອກ່ອ ສຳລັບຊື້ສິ່ງຈຳເປັ ພື້ນຖານນັ້ນ) ບໍ່ຖືກກັບຄອບຄົວຂອງຮ້ອຍ (ບໍ່ມີກາ ປຸ່ງ ແປງ)
F5	ໂດຍປຸງບາງບໃສ່ໂລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/ກ່ອ ບິເກັບກູ້ເກ່ອ ທີ່ມີຮັບພະຍາກອນດັ່ງກ່າວນັ້ນ, ທ່າ ມີຄວາມກັງວີ ກ່ຽວກັບຄວາມສາມາດໃ ກາ ຕອບສະໜອງສິ່ງຈາເປັ ອັ ພື້ນຖານ ເສິ່ງທີ່ຕ້ອງໄດ້ ມີເຊັ່ນ: ອາຫານກາ ກິ , ເຄື່ອງນຸ່ງທີ່ມ, ຢາປິວ ພະຍາດ) ໃ ອະ າຄິດຂອງຄອບຄິວທ່າ ຫຼາຍປາ ໃດ?	1 2 3 4	ຂ້ອຍກັງວີ ຫຼາຍກວ່າເກົ່າ (ເຊັ້ນ: ເມື່ອກ້ອ ຂ້ອຍ ບໍ່ມີຄວາມກັງວີ ເລີຍ, ພວກເຮົາມີພຸງພໍແລ້ວ) ຂ້ອຍມີຄວາມກັງວີ ກວ່າເກົ່າ ຂ້ອຍມີຄວາມກັງວີ ຫ້ອຍກວ່າເກົ່າ ຂ້ອຍມີຄວາມກັງວີ ໜ້ອຍກວ່າເກົ່າຫຼາຍ (ເຊັ້ນ: ຂ້ອຍເຊື້ອໝັ້ນວ່າດຸງວນີ້ພວກເຮົາຈະມີສິ່ງນັ້ນພຸງງ ພໍ ແລະ ຈະບໍ່ມີຄວາມກັງວີ ຫຼາຍ) ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ (ບໍ່ມີກາ ປຸ່ງ ແປງ/ ບໍ່ກັງວີ ກຸ່ງເກັບອະ າຄິດເລີຍ)
F6	ໂດຍປຸງພາງບໃສ່ໂລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/ ກ່ອ ປີເກັບກູ້ເກ່ອ ທີ່ມີຮັບພະຍາກອນດັ່ງກ່າວນັ້ນ, ໃ ໂລຍະເວລາພາຍໃ 1 ເດືອ ຈຳ ວ ເງິ ທີ່ ຄອບຄົວຂອງທ່າ ຈຳຕ້ອງຊື້ສິ່ງຂອງທີ່ບໍ່ແມ່ ອາຫາ ຫຼື ສິ່ງຈຳເປັ ອັ ພື້ນຖານອື່ນໆ (:ຊັ້ນ: ຄວາມ ສາມາດໃ ກາ ຊື້ເຄື່ອງເຮືອ , ເຄື່ອງມີທຳກາ	1 2 3 4	ໜ້ອຍກວ່າເກົ່າຫຼາຍ (ເຊັ່ນ: ເມື່ອກ່ອ ພວກເຮົາມີ ເງິ ຈຳນວນໜ້ອຍໜຶ່ງ ແຕ່ດງວນີ້ບໍ່ມີເງິ ຈັກກີບ ເລີຍສຳລັບສິ່ງຂອງດັ່ງກ່າວ) ໜ້ອຍກວ່າເກົ່າ ຫຼາຍກວ່າເກົ່າ ຫຼາຍກວ່າເກົ່າຫຼາຍ (ເຊັ່ນ: ພວກເຮົາມີຢ່າງໜ້ອຍ

ຜະລິດ) ຫຼາຍປາ ໃດ?	999	ແມ່ ສອງເທົ່າຂອງເມື່ອກ່ອນສຳລັບສິ່ງຂອງດັ່ງ ກ່າວ) <b>ບໍ່ຖືກກັບຄອບຄົວຂອງຮ້ອຍ</b> (ບໍ່ມີກາ ປຸ່ງ ແປງ)

F7	ໂດຍປຸບທຸບໃສ່ໄລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/	1	ມີໜອຍກວ່າເກົາຫຼາຍ
	ກ່ອ ປີເກັບກູ້/ກ່ອ ທີ່ມີຊັບພະຍາກອນດັ່ງກ່າວ	2	ມີໜ້ອຍກວ່າເກົ່າ
	ນັ້ນ, ໃ ປີໜຶ່ງທ່າ ມີເຂົ້າກິ (ເຂົ້າທີ່ໄດ້ມາຈາກ	3	ມີຫຼາຍກວ່າເກົ່າ
	ກາ ແະລິດເອງ ຫຼື ຈາກກາ ຊື້ ຫຼື ຈາກແຫຼ່ງອື່ນໆ)	4	ມີຫຼາຍກວ່າເກົ່າຫຼາຍ
	ຫຼາຍກວ່າເກົ່າຫຼາຍປາ ໃດ? ¹	999	<b>ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ</b> (ບໍ່ມີກາ ປຸງ ແປງ
F8	ຄອບດີວຂອງທ່າ ມີສັດລັງງບໍ່ (ງິວຄວາຍ, ໝູ,	1	ມີໜ້ອຍກວ່າເກົ່າຫຼາຍ
	แบ้, เปิดไท่)? กุ้าย่มิใช้เพาย 999 แล้วล้าม	2	ມີໜ້ອຍກວ່າເກົ່າ
	ไปผู้ชี 7.36 เฉีย, ทุ๊ามิใช้สับต่ำกาม: โดย	3	ມີຫຼາຍກວ່າເກົ່າ
	ປຸນທຸບໃສ່ໄລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/	4	ມີຫຼາຍກວ່າເກົ່າຫຼາຍ
	ກ່ອ ປີເກັບກູ້/ກ່ອ ທີ່ມີຊັບພະຍາກອນດັ່ງກ່າວນັ້ນ,	999	ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ (ບໍ່ມີກາ ປຸ່ງ ແປງ
	ທ່າ ມີສັດລັງງ ຫຼາຍປາ ໃດ?		
F9	ຄອບຄົວຂອງທ່າ ເຄີຍຂາຍຊັບສິ ໃດໜຶ່ງບໍ່ໃ	1	<i>ຫຼາຍກວ່າເກົ່າຫຼາຍ</i> (ເຊັ່ນ: ເມື່ອກ່ອ ພວກເຮົາບໍ່
	ກໍລະ ສຸກເສີ ບໍ? ຖ້າບໍ່ເຄີຍໃຫ້ໝາຍ 999 ແລ້ວ		ຈຳເປັ ຕ້ອງຂາຍຊັບສຶ ຫຼາຍປາ ໃດເພື່ອໃຊ້
	ຂ້າມໄປຂໍ້ທີ 7.34 ເລີຍ ຫຼື ຖ້າເຄີຍໃຫ້ຖາມຕໍ່ ໂດຍ		ຈ່າຍເຫດສຸກເສີ ດັ່ງກ່າວ)
	ປງບທຸບໃສ່ໄລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/	2	ຫຼາຍກວ່າເກົ່າ
	ກ່ອ ປີເກັບກູ້/ກ່ອ ທີ່ມີຊັບພະຍາກອນດັ່ງກ່າວ	3	ໜ້ອຍກວ່າເກົ່າຫຼາຍ
	ນັ້ນ, ໃ ໄລຍະເວລາພາຍໃ 1 ປີ ຄອບຄົວຂອງ	4	<i>ໜ້ອຍກວ່າເກົ່າຫຼາຍ</i> (ເຊັ່ນ: ເມື່ອກ່ອ ພວກເຮື
	ຫ່າ ຈຳຕ້ອງໄດ້ຂາຍຊັບສິ ເພື່ອໃຊ້ຈ່າຍໃ ເຫດ	23404	ຈຳຕ້ອງຂາຍຊັບສິ ຫຼາຍເພື່ອໃຊ້ຈ່າຍໃ ເຫດ
	ສຸກເສີ (ເຊັ່ນ: ການເຈັບປ່ວຍ, ອຸປະຕິເຫດ, ໄພ		ສຸກເສີ ດັ່ງກ່າວ)
	ຳ້ຖ້ວມ, ໄພແຫ້ງແລ້ງ, ສັດຕຸພືດລະບາດ, ໄຟໄໝ້)	999	ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ (ບໍ່ມີກາ ປຸ່ງ ແປງ
	ເລື້ອຍໆປານໃດ?		
F10	ໂດຍປຸບທຸງບໃສ່ໄລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/	1	ມີໜ້ອຍກວ່າເກົ່າຫຼາຍ
	ກ່ອ ປີເກັບກູ້/ກ່ອ ທີ່ມີຊັບພະຍາກອນດັ່ງກ່າວ	2	ມີໜ້ອຍກວ່າເກົ່າ
	ນັ້ນ, ໂດຍສະເລ່ຍແລ້ວໃນໜຶ່ງເດືອ ມີພໍ່ຄ້າ/ແມ່	3	ມີຫຼາຍກວ່າເກົ່າ
	ຄ້າ (ພໍ່ຄ້າ/ແມ່ຄ້າທີ່ເຂົ້າມາພາຍໃ ບ້າ  ຫຼື ຢູ່	4	ມີຫຼາຍກວ່າເກົ່າຫຼາຍ
	ຕະຫຼາດ) ທີ່ທ່າ ສາມາດຂາຍຜີ ຜະລິດໃຫ້	999	<b>ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ</b> (ບໍ່ມີກາ ປຸ່ງ ແປງ
	ฐายปา ใด?		8 8 8 8
F11	ທ່າ ຫຼື ສະມາຊິກຄີ ອື່ນໆພາຍໃ ຄອບຄິວຂອງ	1	ເລື້ອຍໆຫຼາຍກວ່າເກົາຫຼາຍ
	ຫ່າ ເຄີຍຢືມເງິ ເພື່ອມາຊື້ສິ່ງຂອງທີ່ຈຳເປັ	2	ເລື້ອຍໆກວ່າເກົ່າ
	ພື້ນຖານ (ສິ່ງທີ່ຕ້ອງໄດ້ມີ) ບໍ? ຖ້າບໍ່ເຄີຍໃຫ້ໝາຍ	3	ໜ້ອຍກວ່າເກົ່າ
	999 ແລ້ວຂ້າມໄປຂໍ້ທີ່ 7.37 ເລີຍ, ຖ້າເຄີຍໃຫ້	4	ໜ້ອຍກວ່າເກົ່າຫຼາຍ
	1 (2)		
	ສືບຕໍ່ຖາມ: ໂດຍປຸງບທຸງບໃສ່ໄລຍະກ່ອ ມີກາ	999	<b>ບໍ່ຖືກກັບຄອບຄິວຂອງຂ້ອຍ</b> (ບໍ່ມີກາ ປຸ່ງ ແປງ

<sup>່</sup> ສະເພາະເມືອງ ອງ ແມ່ ຳໃຊ້ຟອມ:ກິ່າ (1=ມີຫຼາຍກວ່າເກົ່າຫຼາຍ...ແລະ 4=ມີໜ້ອຍກວ່າເກົ່າຫຼາຍ)

**ຊັບພະຍາກອນດັ່ງກ່າວນັ້ນ**, ທ່າ ຈຳຕ້ອງຢືມເງິ ເພື່ອມາຊື້ອາຫານກິ ເລື້ອຍໆ ປາ ໃດ?

ສະມາຊິກໃ ຄອບຄົວ (ຄົ )

#### ຄຳແ ະ ຳສຳລັບ ັກສຳພາດ:

ทะลุ าอ่า ล้องามลุ่มนี้ใช้แก่ผู้ใช้สาพากก่อ เลิ่มติ้ สาพาก:

'ຕໍ່ໄປນີ້ຂ້າພະເຈົ້າຈະຖາມຄຳຖາມຈຳນວນໜຶ່ງກ່ງວກັບສິ່ງທີ່ມີກາ ປຸ່ງ ແປງຢູ່ໃ ຄອບຄົວຂອງທ່າ ັບແຕ່ໄດ້
ມີການຈັດຕັ້ງ ປະຕິບັດວຸງກງາ ກາ ເກັບກູ້ ລບຕ ສຳເລັດແລ້ວ. ກໍລະ ທີ່ໜ່າ ຕ້ອງກາ ໃຫ້ຂ້າພະເຈົ້າອ່າ ຄຳຖາມ ຫຼື ຄຳ ຕອບໃດຄື ໃໝ່ແມ່ ໃຫ້ຖາມຂ້າພະເຈົ້າໄດ້ເລີຍ. ຂ້າພະເຈົ້າຂໍອະນຸຍາດເລີ່ມຖາມແຕ່ລະຄຳຖາມກ່ຽວກັບສິ່ງຕ່າງທີ່ມີກາ ປຸ່ງ ແປງຕໍ່ກັບຄອບຄົວຂອງທ່າ ໄດຍກາ ປຸງບທຸງບກັບໄລຍະກ່ອ ທີ່ມີກາ ເກັບກູ້ ລບຕ ດັ່ງທີ່ໄດ້ກ່າວມາກ່ອນໜ້ານີ້ ຖ້າຫາກວ່າຄຳຖາມດັ່ງກ່າວນັ້ນບໍ່ຖືກັບຄອບຄົວຂອງທ່າ ຫຼື ບໍ່ມີກາ ປຸ່ງ ແປງເນື່ອງຈາກຂັບພະບາກອ ດັ່ງກ່າວນັ້ນ ແມ່ ໃຫ້ບອກຂ້າພະເຈົ້າ ແລ້ວພວກເຮົາຈະຖາມຄຳຖາມຂໍ່ຕໍ່ໄປເລີຍ.

ໃຫ້ອ່າ ທຸກໆຄາຖາມລຸ່ມນີ້ ຍົກເວັ້ນຄາຂໍ້ແຈງ. ໂດຍບໍ່ຕ້ອງອ່າ ຄາຕອບ ຍົກເວັ້ນກໍລະບີທີ່ຜູ້ໃຫ້ສາພາດຕ້ອງກາ ຄາອະທິ ບາຍ. ປະໂຫຍກທີ່ຢູ່ໃ ວົງເລັບ () ນັ້ນແມ່ ພຸງແຕ່ເປັ ຄາອະທິບາຍໃຫ້ແກ່ ກສາພາດເທົ່ານັ້ນ, ສະນັ້ນບໍ່ຈາເປັ ອ່າ ຍົກ ເວັ້ນກໍລະນີຜູ້ໃຫ້ສາພາດບໍ່ເຂົ້າໃຈ.

ຂີດອ້ອມເອົາ 1 ຄາຕອບໃ ແຕ່ລະຄຳຖາມນັ້ນ

ใช้อ่า : โดยปุ่นทุบใส่โลยะก่อ มิกา เกับกู้ ลบต ... ขนายเขต: ชั้งที่ 7.1 และ 7.3 กำตอบจะไปทาวกิวกั ล้าม

H1	ຄອບດິວຂອງຫ່າ ມີເດັກ ້ອຍທີ່ມີອາຍຸຢູ່ໃ ໄວເຂົ້າ	1	<i>ເລື້ອຍໆຫຼາຍກວ່າຜ່າ ມາ</i> (ຕີວຢ່າງ: ແຕ່ກ່ອ
	โธรธุร บำ? ท้าบ่มิ ใช้ขมาย 999 แล้วล้ามไปล้		ໃນພາກຮຸງນໜຶ່ງພວກເຂົາຂາດໂຮງຮຸງ <i>ພງງຈ</i> ຳ
	ທີ 7.2 ເລີຍ, ຖ້າມີແມ່ ໃຫ້ຖາມຕໍ່: ໂດຍປງບທງບ ໃສ່ໄລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/ ກ່ອ ປີເກັບ		ວ ໜ້ອບມື້ເທົ່ານັ້ນ ແຕ່ດງວນີ້ພວກເຂົາ <i>ບໍ່ໄປ</i> ໂຮງເປັ ເວລາຫຼາຍມື້ກວ່າເກົ່າ)
	ກູ້/ກ່ອ ທີ່ມີຊັບພະຍາກອນດັ່ງກ່າວນັ້ນ, ໃ	2	ເລື້ອຍໆກວ່າເກົ່າ
	<i>ພາກຮຽນໜຶ່ງໆ</i> ເດັກ້ອຍັກຮ <sub>ໄ</sub> ຢູ່ໃ ຄອບ	3	ໜ້ອຍກວ່າເກົ່າ
	ຄົວຂອງທ່າ <i>ຂາດ</i> ໂຮງຮູງ <i>ເປັ ໄລຍະເວລາເຖິງ 1</i>	4	<i>ໜ້ອຍກວ່າເກົ່າຫຼາຍ</i> (ຕີວຢ່າງ: ເມື່ອກ່ອ ເຂົາ
	<i>ຫຼື ຫຼາຍກວ່າ 1 ອາທິດ</i> ອັນເນື່ອງຈາກວ່າ <i>ມີບັ ຫາ</i>		ເຈົ້າ ຂາດໂຮງຮູງ ເປັ ໄລຍະເວລາຫຼາຍມື້ແຕ່
	<i>ດ້າ ສຸຂະພາບ ຫຼື ອິດຫີວ</i> ເລື້ອຍໆປານໃດ?		ດງວ ີໃນພາກຮຸງນໜຶ່ງເຂົາເຈົ້າໄປ
		999	ໂຮງຮຸງ ຫຼາຍກວ່າເກົາ)
		999	ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ (ຕົວຢ່າງ: ບໍ່ມີ ັກຮຸງ ຢູ່ໃ ຄອບຄົວຂອງຂ້ອຍ ຫຼື ບໍ່ມີກາ
			ຖຸ່ງ ແຖ້ນ)
H2	ໂດຍປ່ຽນທ່ຽນໃສ່ໄລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/	1	ມີຄວາມເຊື້ອໝັ້ນໜ້ອຍກວ່າເກົ່າຫຼາຍ (
	ກ່ອ ປີເກັບກູ້/ກ່ອ ທີ່ມີຊັບພະຍາກອນດັ່ງກ່າວນັ້ນ		ຕົວຢ່າງ:ເມື່ອກ່ອ ຂ້າພະເຈົ້າມີຄວາມ
	ໂດຍລວມແລ້ວທ່າ <i>ຮູ້ສຶກມີຄວາມເຊື້ອໝັ້ນ</i> ກ່ຽວກັບ ຄວາມສາມາດໃ ກາ ຕອບສະໜອງຕໍ່ກັບຄວາມ		ເຊື່ອໝັ້ນຕໍ່ກັບອະ າ ຄິດຂອງຄອບຄົວຂ້ອຍ ແຕ ດຽວນີ້ຂ້ອຍເຊື້ອໝັ້ນ ໜ້ອຍກວ່າ)
	ຕ້ອງກາ ອາຫາ ຂອງຄອບຄິວທ່າ ແ ວໃດ?	2	ເຊື່ອໝັ້ນໜ້ອຍກວ່າເກົ່າ
		3	ເຊື່ອໝັ້ນຫຼາຍກວ່າເກົ່າ
		4	ຂ້ອຍ <i>ມີຄວາມເຊື່ອໝັ້ນຫຼາຍກວ່າເກົ່າຫຼາຍ</i>
			(ຕົວຢ່າງ: ເມື່ອກ່ອ ຂ້ອຍບໍ່ມີ
			ຄວາມເຊື້ອໝັ້ນເລີຍ ແຕ່ດງວນີ້ຂ້ອຍມີຄວາມ

			ເຊື້ອໝັ້ນກວ່າເກົ່າ/ດີກວ່າ /ບໍ່ມີຄວາມ
		999	ກັງວີ ຫຼາຍກ່ຽວກັບອະ າຄິດຂອງຄອບຄີວອີກ) ບໍ່ຖືກກັບຄອບຄີວຂອງຂ້ອຍ (ຕິວຢ່າງ: ຂ້ອຍບໍ່ ໄດ້ຄິດກ່ຽວກັບອະ າຄິດເລີຍ)
нз	ທ່າ ຫຼື ຜູ້ໃຫຍ່ຄົ ອື່ນໆຢູ່ໃ ຄອບຄົວຂອງທ່າ ເຄີຍເຈັບເປັ ແລ້ວບໍ່ສາມາດເຮັດວຸງກໄດ້ບໍ? ຖ້າບໍ່ ເຄີຍໃຫ້ໝາຍ 999 ແລ້ວຂ້າມໄປຂໍ້ທີ 7.4 ຫຼື ຖ້າ ເຄີຍໃຫ້ຖາມຕໍ່ ໂດຍປຸງບທຸງບໃສ່ ໂລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/ ກ່ອ ປີເກັບກູ້/ກ່ອ ທີ່ມີ ຂັບພະຍາກອນດັ່ງກ່າວນັ້ນ, ໃ ໂລຍະເວລາ 1 ເດືອ ຜູ້ໃຫຍ່ໃ ຄອບຄົວຂອງທ່າ ບໍ່ສາມາດອອກ ແຮງງາ ໄດ້ປີ ໂລຍະເວລາ ເຖິງ 1 ອາທິດ ຫຼື ຫຼາຍກວ່ານັ້ນ ຮັ ເນື່ອງຈາກກາ ເຈັບໄຂ້ໄດ້ປ່ວຍ ( ແຕ່ບໍ່ລວມເຖິງກາ ຖີພາ) – ນັ້ນ ເລື້ອຍໆປານໃດ?	2 3 4 999	ເລື້ອຍໆກວ່າກົກຫຼາຍ (ຕິວຢ່າງ: ເນື້ອກ່ອ ສາ ມາດອອກແຮງງາ ໄດ້ທຸກໆມື້/ມີພຸງ ແຕ່ຈາ ວ ້ອຍມື້ເທົ່າ ນັ້ນທີ່ບໍ່ສາມາດອອກແຮງງາ ໄດ້ ແຕ່ວ່າປະຈຸ ບັນນີ້ ມີຫຼາຍນົກວ່າເກົ່າທີ່ບໍ່ສາມາດອອກ ແຮງງາ ໄດ້ ໝ້ອຍກວ່າເກົ່າ ໜ້ອຍກວ່າເກົ່າ ໜ້ອຍກວ່າເກົ່າຫຼາຍ (ຕິວຢ່າງ: ເຂົາເຈົ້າສາມາດ ອອກແຮງງາ ໄດ້ຫຼາຍກວ່າເກົ່າ, ການເຈັບໄຮ້ ໄດ້ປວຍໜ້ອຍລີງ) ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ (ຕິວຢ່າງ: ບໍ່ມີໃຜ ໃ ຄອບຄົວຂອງຂ້ອຍເຮັດວຸງກ ຫຼື ບໍ່ມີກາ ປຸງ ແປງ)
H4	ໂດຍປ່ຽນທູບໃສ່ໄລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/ ກ່ອ ນີເກັບກູ້/ກ່ອ ທີ່ມີຊັບພະຍາກອນດັ່ງກ່າວ ນັ້ນ, <i>ໂດຍລວມແລ້ວ</i> ທ່າ ຮູ້ສຶກ <i>ພູມໃຈ</i> ກັບຄວາມ ສຳເລັດຂອງຄອບຄົວທ່າ ຫຼາຍປາ ໃດ (ເຊັ່ນ: ຄວາມສຳເລັດທາງດ້າ ວຸງກຸງາ , ກາ ສຶກສາ, ກາ ຮຸງ ຮູ້ ບິດຮຸງ ໃໝ່)?	1 2 3 4 999	ມືຄວາມພູມ ໃຈໝ້ອຍກວ່າເກົ່າຫຼາຍ (ຕີວຢ່າງ: ຂ້າ ພະເຈົ້າພູມໃຈເພິ່ງພໍໃຈໜ້ອຍກວ່າເກົ່າ ພູມໃຈຫຼ້ອຍກວ່າເກົ່າ ພູມໃຈຫຼາຍກວ່າເກົ່າ ພູມໃຈຫຼາຍກວ່າເກົ່າຫຼາຍ (ຕີວຢ່າງ: ພູມໃຈ/ ເພິ່ງພໍໃຈກວ່າເກົ່າ) ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ (ຕີວຢ່າງ: ບໍ່ມີກາ ປຸ່່ງ ແປງ)
H5	ຄອບທິວຂອງທ່າ ເຄີຍຈ້າງຜູ້ອື່ນມາເຮັດວຸງກໃຫ້ ຄອບທິວທ່າ ບໍ? ຖ້າບໍ່ເຄີຍ ໃຫ້ໝາຍ 999 ແລ້ວ ຂ້າມໄປຂໍ້ຫຼື 7.6 ເລີຍ, ຖ້າເຄີຍແມ່ ໃຫ້ລືບຕໍ່ຖາມ: ໂດຍປ່ຽນກູປທີ່ລ ທີ່ມີຊັບພະຍາກອນດັ່ງກ່າວນັ້ນ, ທ່າ ຄາມາດຈ້າງຄື ອື່ນ (ຈ່າຍຄ່າຈ້າງເປັ ເຂົ້າກີ, ຫຼື ເງີ ຫຼື ວິທີອື່ນໆ) ເພື່ອເຮັດວຸງກໃຫ້ແກ່ທ່າ ອັ ເນື່ອງຈາກທ່າ ມີລາຍຮັບສູງກວ່າ/ມີດີ ຫຼາຍກວ່າ ເລື້ອບໆປານໃດ?	1 2 3 4 999	ໜຶ່ອຍກວ່າເກົາຫຼາຍ (ຕິວຢ່າງ: ເມື່ອກ່ອ ໄດ້ ຈ້າງຄື ອື່ນມາເຮັດວຸງກໃຫ້ ແຕ່ດງວນີ້ບໍ່ໄດ້ຈ້າງ ເລີຍ) ໜ້ອຍກວ່າເກົ່າ ຫຼາຍກວ່າເກົ່າ ຫຼາຍກວ່າເກົ່າຫຼາຍ (ຕິວຢ່າງ: ຮ້ອຍມີລາຍຮັບ/ທີ່ ດີ ຫຼາຍກວ່າ ສະນັ້ນຈຶ່ງຈ້າງຄື ອື່ນເພີ່ມຂຶ້ນ) ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ (ຕິວຢ່າງ: ບໍ່ມີກາ ປຸ່ງ ແປງບໍ່ເຄີຍຈ້າງຄື ອື່ນເລີຍ)
H6	ໂດຍປ່າບທຸງບໍ່ໃສ່ໄລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/ ກ່ອ ນີ້ເກັບກູ້/ກ່ <b>ອ ທີ່ມີຮັບພະຍາກອນດັ່ງກ່າວນັ້ນ</b> ກັບປະຈຸບັນນີ້ <i>ໂດຍລວມແລ້ວທ່າ ຮູ້ສຶກເພື່ງພໍ່ໃຈ</i> ກັບບັ ຫາສຸຂະພາບຂອງຄອບຄົວຂອງທ່າ ໃ ປະຈຸບັນນີ້ແ ວໃດ?	1 2 3 4 999	ຮູ້ສຶກເພິ່ງພໍໃຈໜ້ອຍກວ່າເກົ່າຫຼາຍ ຮູ້ສຶກເພິ່ງພໍໃຈໜ້ອຍກວ່າເກົ່າ ຮູ້ສຶກເພິ່ງພໍໃຈຫຼາຍກວ່າເກົ່າ ຮູ້ສຶກເພິ່ງພໍໃຈຫຼາຍກວ່າເກົ່າຫຼາຍ ບໍ່ຖືກກັບຄອບຄິວຂອງຂ້ອຍ (ບໍ່ມີກາ ປຸ່ງ ແປງ)

H7	ໂດຍປຸງບທຸງບໃສ່ໄລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/	1	ມີໜ້ອຍກວ່າເກົ່າຫຼາຍ
L Partie	ກ່ອ ປີເກັບກູ້/ກ່ອ ທີ່ມີຊັບພະຍາກອນດັ່ງກ່າວນັ້ນ	2	ມີໜ້ອຍກວ່າເກົ່າ
	ກັບປະຈຸບັນນີ້ <i>ຄອບຄິວຂອງຫ່າ ມີເຂົ້າກິ ສຳລັບ</i>	3	ມີຫຼາຍກວ່າເກົ່າ
	ກີ ພຸງພໍກັບຄວາມຕ້ອງກາ ໃ ແຕ່ລະມື້ຫຼາຍປານ	4	ມີຫຼາຍກວ່າເກົ່າຫຼາຍ
	202	999	ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ (ບໍ່ມີກາ ປຸ່ງ ແປງ)
H8	ໂດຍປຸນທຸງບໃສ່ໄລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/	1	<b>ມີຄວາມກັງວິ ຫຼາຍກວ່າເກົ່າຫຼາຍ</b> (ເຊັ່ນ: ເມືອ
	ກ່ອ ປີເກັບກູ້/ກ່ອ ທີ່ມີຊັບພະຍາກອນດັ່ງກ່າວນັ້ນ,		ກ່ອ ຂ້ອຍບໍ່ມີຄວາມກັງວີ ກ່ຽວກັບ
	ທ່າ ມີຄວາມກັງວິ ກ່ຽວກັບຜູ້ໃຫຍ່ຄົ ອື່ນໆຢູ່ໃ		ບັນຫານີ້ຫຼາຍ ປານໃດ/ແຕ່ດງວນີ້ຄິດວ່າຜູ້ໃຫຍ່
	ຄອບຄົວຂອງທ່າ ຈະໄດ້ຮັບອຸປະຕິເຫດຈາກ ລບຕ		ຄີ ອື່ນຢູ່ໝາຍໃ ຄອບຄົວແມ່ ມີຄວາມສ່ຽງສູງ
	<b>ฏาย</b> ปา ใด?		ທີ່ຈະໄດ້ຮັບອຸປະຕິເຫດຈາກ ລບຕ ນັ້ນ)
	1 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (	2	ມີຄວາມກັງວິ ຫຼາຍກວ່າເກົ່າ
		3	ມີຄວາມກັງວິ ໜ້ອຍກວ່າເກົ່າ
		4	ມີຄວາມກັງວິ ໜ້ອຍກວ່າເກົ່າຫຼາຍ (ເຊັ່ນ: ເມື່ອ
			ກ່ອ ຂ້ອຍເຄີຍກັງວິ ກັບບັນຫານີ້ ແຕ່ດງວນີ້ບໍ່
			ໄດ້ມີຄວາມກັງວີ ຕໍ່ກັບບັນຫານີ້ຫຼາຍປານໃດ
			ແລ້ວ?
		999	ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ (ບໍ່ໄດ້ກັງວີ ເລື່ອງ
			ອະ າຄິດ/ບັ ຫາອຸປະຕິເຫດເລີຍ)
H9	ໂດຍປຽບທຽບໃສ່ໄລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/	1	<i>ເພິ່ງພໍໃຈໜ້ອຍກວ່າເກົ່າຫຼາຍ</i> (ເຊັ່ນ: ເມື່ອກ່ອ
	ກ່ອ ປີເກັບກູ້/ກ່ອ ທີ່ມີຊັບພະຍາກອນດັ່ງກ່າວ		ຂ້ອຍມີຄວາມເພິ່ງພໍໃຈ/ມີຄວາມສຸກກັບຄວາມ
	<b>ນັ້ນ</b> , ໂດຍລວມແລ້ວທ່າ ມີຄວາມ <i>ເໜື່ງພໍໃຈ</i> ກັບ		ປອດໄພຂອງພວກເຮົາ ແຕ່ວ່າດງວນີ້ຂ້ອຍມີ
	ຄວາມປອດໄພຂອງຄອບຄົວທຳ ແ ວໃດ?		ຄວາມສຸກກັບບັນຫານີ້ໜ້ອຍຫຼາຍ)
		2	ເພິ່ງພໍໃຈໜ້ອຍກວ່າເກົ່າ
		3	ເພິ່ງພໍໃຈຫຼາຍກວ່າເກົ່າ
		4	<i>ເພິ່ງພໍໃຈຫຼາຍກວ່າເກົ່າຫຼາຍ</i> (ເມື່ອກ່ອ ຂ້ອຍ
			ບໍ່ມີຄວາມເພິ່ງພໍໃຈຕໍ່ບັນຫານີ້ຫຼາຍປານໃດ
			ແຕ່ດງວນີ້ ມີຄວາມສຸກ/ເພິ່ງພໍໃຈຫຼາຍກວ່າ)
		999	ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ
			(ຄວາມເພິ່ງພໍໃຈຂອງ
			ຂັອຍແມ່ ບໍ່ໄດ້ປ່ງ ແປງເລີຍ)
H10	ຄອບດີວຂອງທ່າ ມີເດັກ ້ອຍບໍ? ຖ້າບໍ່ມີໃຫ້ໝາຍ	1	<b>ມີຄວາມກັງວິ ຫຼາຍກວ່າເກົ່າຫຼາຍ</b> (ເຊັ່ນ: ເມືອ
	999 แล้วล้ามไปลั่ต่ไปเลีย ตู๊ ຖ້າมิใต้ຖາมต่		ກ່ອ ຂ້ອຍບໍ່ມີຄວາມກັງວີ ກຸ່ງວກັບ
	ໂດຍປງບທງບໃສ່ໄລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/		ບັນຫານີ້ຫຼາຍ ປານໃດ/ດງວນີ້ຄິດວ່າເດັກ ້ອຍ
	ກ່ອ ປີເກັບກູ້/ກ່ອ ທີ່ມີຊັບພະຍາກອນດັ່ງກ່າວນັ້ນ,		(ລູກ) ຢູ່ໃ ຄອນ ຄີວແມ່ ມີຄວາມສ່ງງສູງທີ່ຈະ
	ທ່າ ມີຄວາມກັງວີ ຢ້າ ວ່າເດັກ ້ອຍ (ລູກ) ຢູ່ໃ		ໄດ້ຮັບອຸປະຕິເຫດຈາກ ລບຕ ນັ້ນ)
	ຄອບຄົວຂອງທ່າ ຈະໄດ້ຮັບອຸປະຕິເທດຈາກ ລບຕ	2	ມີຄວາມກັງວີ ຫຼາຍກວ່າເກົ່າ
	ฐายปา ใด?	3	ມີຄວາມກັງວີ ໜ້ອຍກວ່າເກົ່າ
	1000	4	ມີຄວາມກັງວິ ໜ້ອຍກວ່າເກົ່າຫຼາຍ (ເຊັ່ນ: ເມື່ອ
			ກ່ອ ຂ້ອຍເຄີຍກັງວີ ກັບບັນຫານີ້ ແຕ່ດງວນີ້ບໍ່
			ໄດ້ມີຄວາມກັງວິ ຕໍ່ກັບບັນຫານີ້ຫຼາຍປານໃດ

		999	ແລ້ວ?  ບໍ່ຖືກກັບຄອບຄີວຂອງຂ້ອຍ (ຄອບຄີວຂອງຂ້ອຍ ບໍ່ມີເດັກ ອຍ/ບໍ່ໄດ້ກັງວີ ເລື່ອງອະ າຄິດ/ ບັ ຫາ ອຸປະຕິເຫດເລີຍ)
H11	ໂດຍປຸງບຫຼຸຍໃສ່ໂລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/ ກ່ອ ປີເກັບກູ້/ <b>ກ່ອ ທີ່ມີຮັບພະຍາກອນດັ່ງກ່າວນັ້ນ</b> , ທ່າ ພິບເຫັ ລບຕ ຢູ່ບ່ອ ທີ່ທ່າ ຫຼຸວໄປຢ່າງ ປົກກະຕິ ເລື້ອຍໆປານໃດ?	1 2 3 4 999	พิบเลื้อยๆกว่าเก๊าฏาย เลื้อยๆกว่าเก๊า พอยกว่าเก๊า พ้อยกว่าเก๊าฏาย บ่ฤ๊กกับถอบถิวลอๆล้อย/ป่มีกา ปุ่า แปว
H12	ໂດຍປ່ຽນຫຼັບໃສ່ໂລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/ ກ່ອ ປີເກັບກູ້/ກ່ອ ທີ່ມີຊັບພະຍາກອນດັ່ງກ່າວ ນັ້ນ, ເຕັກ ້ອຍຢູ່ໃ ຄອບຄີວຂອງທຳ ພີບເຫັ ລບຕ ເລື້ອຍໆປານໃດ?	1 2 3 4 999	พิบเลื้อยๆกว่าเก๊าตูาย เลื้อยๆกว่าเก๊า ໜ້ອຍກວ່າເກົ່າ ໜ້ອຍກວ່າເກົ່າຫຼາຍ ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ/ບໍ່ມີກາ ປຸ່ງ ແປງ

ທາງດ້າ ສະພາບແວດວັອມ

#### ถาน ะ าสาลัย ักสาพาก:

ກะลุ าอ่า ຂໍ้ถวามลุ่มนี้ใช้แก่ผู้ที่ใช้สาพากก่อ เลิ่มติ้ สาพาก:

'ຕໍ່ໄປນີ້ຂ້າພະເຈົ້າຈະຖາມທ່າ ກ່ຽວກັບກາ ເຂົ້າເຖິງຊັບສິ ທາງດັາ ຊັບພະຍາກອ ທຳມະຊາດຂອງຄອບຄົວທ່າ ແລະ ຖາມກ່ຽວກັບສິ່ງທີ່ມີກາ ປ່ງ ແປງຕໍ່ກັບຄອບຄົວຂອງທ່າ ັບຄັ້ງແຕ່ໄດ້ມີກາ ເກັບກູ້ ລບຕ ສຳເລັດແລ້ວ. ຖ້າຫາກທ່າ ຕ້ອງກາ ໃຫ້ຂ້າພະເຈົ້າອ່າ ຄຳຖາມ ຫຼື ຄຳຕອບໃດໜຶ່ງຄືນໃໝ່ອີກ ແມ່ ບອກຂ້າພະເຈົ້າໄດ້ເລີຍ. ສະນັ້ນຂ້າພະ ເຈົ້າຂໍອະ ຸຍາດຖາມແຕ່ລະຄຳຖາມກ່ຽວກັບສິ່ງທີ່ມີກາ ປ່ງ ແປງຕໍ່ກັບຄອບຄົວທ່າ ໂດຍກາ ປຸງບທຸງບກັບໄລຍະກ່ອ ມີ ກາ ເກັບກູ້ ລບຕທີ່ໄດ້ກ່າວມາເບື້ອງຕື້ນນັ້ນ'

ຖ້າຫາກວ່າຄາຖາມດັ່ງກ່າວນັ້ນບໍ່ຖືກັບຄອບຄົວຂອງທ່າ ຫຼື ບໍ່ມີກາ ປ່ງ ແປງເນື່ອງຈາກຊັບພະຍາກອ ດັ່ງກ່າວນັ້ນ ແມ່ ໃຫ້ບອກຂ້າພະເຈົ້າ ແລ້ວພວກເຮົາຈະຖາມຄໍາຖາມຂໍ້ຕໍ່ໄປເລີຍ.

ใช้เอ่า ทุกๆกากกุมมุ่มมี ยิกเอ็มการ์แจๆ โดยย่ต้อງอ่า กาตอบ ยิกเอ็มก์ละพิติสู่ใต้สาพาดต้องกา กาอะติ บาย. ปะโทยทที่ยู่ใ อิงเลับ () นั้มแม่ พูงแต่เปี กาอะติบายใต้แก่ กลาพากเติกนั้ม, ละนั้นปัจาเปี อ่า ยิก เอ็มก์ละนิสู่ใต้ลาพาดย์เล็กใจ.

ໃຫ້ຂີດອ້ອມເອົາ 1 ຄຳຕອບສຳລັບແຕ່ລະຄຳຖາມນັ້ນ

ໃຫ້ວ່າ :ໂດຍໃຫ້ປຸງບທຸງບໃສ່ໃ ໄລຍະກ່ອ ທີ່ມີກາ ເກັບກູ້ .

E1	(ใช้ถามละเพาะก่อะ ซากอ่าชี้ถึ ได้มีภา	1	ພວກເຮົາ <i>ມືໜ້<b>ອຍຫຼາຍກວ່າເກົ່າ</b> (ເ</i> ຊັ່ນ: ດງວນີ້
	เทียภูละเพาะภา ภะลึกาเทิ่ามั้นเริ่ม: มา, ไธ่,		ພວກເຮົາມີທີ່ດິ ທີ່ມີ ລບຕ ຕຶກຄ້າງຫຼາຍກວ່າ)
	ພື້ນທີ່ປູກພືດເສດຖະກິດ, ປູກພືດຕັກ, ສາລີ, ຖ້າ	2	ພວກເຮົາ <i>ມື້ໜ<b>້ອຍກວ່າເກົ່າ</b></i>
	ຫາກບໍ່ມີແມ່ ໃຫ້ໝາຍ 999 ແລ້ວຂ້າມໄປຂໍ້ທີ	3	ພວກເຮົາມີຫຼາຍກວ່າເກົ່າ
	7.39 ເລີຍ) ໂດຍປຸນທຸບໃສ່ໄລຍະກ່ອ ມີກາ	4	ພວກເຮົາ <i>ມີຫຼາຍກວ່າເກົ່າຫຼາຍ</i> (ຕິວຢ່າງ: ທີ່ດິ
	ເກັບກູ້ ລບຕ/ ກ່ອ ປີເກັບກູ້/ <b>ກ່ອ ທີ່ມີ</b>		ສ່ວ ໃຫຍ່ທີ່ທ່າ ຳໃຊ້ໃ ກາ ປູກພືດນັ້ນແມ່ນ
	ຊັບພະຍາກອນດັ່ງກ່າວນັ້ນ, ຄອບຄິວຂອງທ່າ ມີທີ່		ໄດ້ຮັບກາ ເກັບກູ້ ລບຕ ແລ້ວ)
	ດິ ສຳລັບກາ ຜະລິດ (ເຊັ່ນ: ເຮັດໄຮ່, ປູກເຂົ້າ,	999	ບໍ່ຖືກກັບຄອບຄິວຂອງຂ້ອຍ (ບໍ່ມີທີ່ດີ ສຳລັບ

	ສາລີ, ພຶດເສດຖະກິດ) ທີ່ປອດໄພຈາກ ລບຕ ແລ້ວ ຫຼາຍປາ ໃດ?		ປູກພືດ/ພື້ນທີ່ດີ ກະສິກຳບໍ່ໄດ້ຮັບກາ ກວດກູ້ ລບຕ ເລີຍ)
E2	ໃຫ້ຖາມກໍລະ ທີ່ມີກາ ເກັບກູ້ສາລັບດິ ຊຸມຊົ ເທົ່ານັ້ນຖ້າບໍ່ມີໃຫ້ໝາຍ 999 ແລ້ວຂ້າມໄປຂໍ້ຕໍ່ໄປ ຫຼື ຖ້າມີໃຫ້ຖາມຕໍ່ໄດຍປຸງບາງບໃສ່ໄລຍະກ່ອ ມີ ກາ ເກັບກູ້ ລບຕ/ກ່ອ ບໍ່ເຕັບກູ້ກ່ອ ທີ່ມີ ຮັບພະຍາກອນດັ່ງກ່າວນັ້ນ, ທີ່ດີ ລວມຂອງບ້າ (ທີ່ດີ ຂອງຊຸມຊົ ) ທີ່ປອດໄພຈາກ ລບຕ ແລ້ວ ຢູ່ ພາຍໃ ບ້າ ຂອງທ່າ ມີ ຫຼາຍປາ ໃດ?	1 2 3 4	ມືໜ້ອຍຫຼາຍກວ່າເກົ່າ (ເຊັ່ນ: ດງວນີ້ທີ່ດີ ຂອງ ຊຸມຊີ ຢູ່ພາຍໃ ບ້າ ແມ່ ມີ ລບຕ ຕິກຄ້າງ ຫຼາຍກວ່າ) ມືໜ້ອຍກວ່າເກົ່າ ພວກເຮົາ <i>ມີຫຼາຍກວ່າເກົ່າຫຼາຍ</i> (ຕິວຢ່າງ: ທີ່ດີ ຂອງຊຸມຊີ ສ່ວ ໃຫຍ່ແມ່ ໄດ້ຮັບກາ ເກັບກູ້ ລບຕ ແລ້ວ) ບໍ່ຖືກກັບຄອບຄິວຂອງຂ້ອຍ (ພື້ນທີ່ດີ ຂອງຊຸມ ຊີ ບໍ່ໄດ້ຮັບກາ ກວດກູ້ ລບຕ ເລີຍ)
E3	(ໃຫ້ຖາມສະເພາະກໍລະ ໂຂອງກາ ເກັບກູ້ສາລັບ ຊີ ລະປະທາ , ອ່າງເກັບກ າ້, ເຂື່ອນກັ້ນນາ້, ກໍສ້າງ ຫຼື ແຫຼ່ງນາ້ອື່ນໆ)ຖ້າບໍ່ມີແມ່ ໃຫ້ໝາຍ 999 ແລ້ວຂ້າມໄປຂໍ້ຕໍ່ໄປຖ້າມີໃຫ້ຖາມ ໂດຍ ປຸງບຖຸງບໃສ່ໄລຍະກ່ອ ມີກາ ເກັບກູ້ ລບຕ/ກ່ອ ປິເກັບກູ້ເກ່ອ ທີ່ມີຊັບສະຍາກອນດັ່ງກ່າວ ນັ້ນ, ຄອບຄິວຂອງທ່າ ສາມາດ ຳໃຊ້ ຳເພື່ອ ເຮັດ າ/ສວ ຫຼາຍປາ ໃດ?	1 2 3 4 999	ໜ້ອຍກວ່າເກົ່າຫຼາຍ ໜ້ອຍກວ່າເກົ່າ ຫຼາຍກວ່າເກົ່າ ຫຼາຍກວ່າເກົ່າຫຼາຍ ບໍ່ຖືກກັບຄອບຄົວຂອງຂ້ອຍ

7.1 ທ່າ ຄິດວ່າຕິ ກະທິບທາງດ້າ ລິບ (ບໍ່ດີ) ຈາກກາ ເກັບກູ້ ລບຕ ມີຫຍັງແດ່?

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## ລາຍຮັບຂອງຄອບຄົວ

## ถาน ะ าสาลับ ักสาพาก:

ทะลุ าอ่า ลั้งจามลุ่มนี้ให้แก่ผู้ที่ให้สำพากก่อ เลิ่มติ๊ สำพาก:

'ຕໍ່ໄປນີ້ຂ້າພະເຈົ້າຈະຖາມທ່າ ກ່ຽວກັບລາຍຮັບຂອງຄອບຄົວຫາ . ສະນັ້ນ, ກະລຸນາດອບໃຫ້ຖືກຕ້ອງທີ່ສຸດເທົ່າທີ່ໄປ້ ໄປ ໄດ້ ຊຶ່ງຄາດອບດັ່ງກ່າວຈະບໍ່ຖືວ່າ**ຖືກ ຫຼື ນິດ**'

ໃຫ້ອ່າ ບັ ດາຄຳຖາມລຸ່ມນີ້ ຍິກເວັ້ນຄຳຊື້ແຈງ. <u>ໂດຍບໍ່ໃຫ້ອ່າ ຄຳຕອບ,</u> ແລ້ວຂີດອ້ອມເອົາຄຳຕອບນັ້ນ ຍິກເວັ້ນກໍລະນີທີ່ ຈະຕ້ອງໄດ້ຕື່ມໃສ່.

7.2	ພາຍໃ ໄລຍະເວລາ 1 ເດືອ ລາຍຮັບຂອງທ່າ ໄດ້ມີ	1	ເພີ່ມຂຶ້ນເລັກໜ້ອຍ
	ກາ ປຸ່ງ ແປງແ ວໃດ ັບຕັ້ງແຕ່ໄດ້ມີກາ ເກັບກູ້	2	ເພີ່ມຂຶ້ນປະມາ 50%/ທິບເຄິ່ງ
	ແລະ ມີຊັບພະຍາກອ (ເຊັ່ນ: ເສັ້ນທາງ, ທີ່ດິ ລວມ	3	ເພີ່ມຂຶ້ນຫຼາຍ
	ຂອງບ້ານ ຫຼື ທີ່ດິ ກະສິກຳ) ທີ່ໄດ້ມາຈາກກາ ເກັບກູ້ທີ່	999	ບໍ່ແ ່ ໃຈ/ອື່ນໆ/ບໍ່ມີຄຳຕອບ/ສາເກົ່າ/ <b>ບໍ່ຖືກກັບ</b>
	ດີ ນັ້ນ?		ຄອບຄົວຂອງຂ້ອຍ ໃຫ້ຂ້າມໄປຄຳຖາມທີ 7.56
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ		ເລີຍ

7.3	<i>ສ່ວ ໃຫຍ່ແລ້ວ</i> ທ່າ ໃຊ້ຈ່າຍເງິ ທີ່ເພີ່ມຂຶ້ນນັ້ນ (ເພີ່ມ	1	ສຳລັບອາຫາ ກາ ກິ
	ຂຶ້ນຈາກຂໍ້ທີ 7.54) ສຳລັບເຮັດຫຍັງ?	2	ເຄື່ອງໃຊ້ໃ ເຮືອ ຊາ
	Submissional cells - Continues and the submission submission of the cells of the ce	3	ສຳລັບກາ ສຶກສາ (ເຊັ່ນ: ຄ່າຮຽນ, ເຄື່ອງນຸ່ງ
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ		(ຊຸດ) ນັກຮຸງນ. ປື້ມຮຸງນ ແລະ ອື່ນໆ)
		4	ສາລັບສັດລັງງ
		5	ສຳລັບທຳກາ ຜະລິດ/ອຸປະກອ /ເຄື່ອງມືການ
			ຜະລິດ/ລິດຈັກ/ພາຫະ ະຮັບໃຊ້/ ຳ້ມ /ລິດຖີບ
		999	ບໍ່ແ 'ໃຈ/ບໍ່ຮູ້
		ใช้เลา	ອື່ນໆ
		දින්	328

# ບັຫາ ລບຕ ໃ ປະຈຸບັ

#### ถาน ะ าสาลับ ักสาพาก:

ราน - โดย เลือง เกลาแก้น. กะลุ าอ่า ล็กงานลุ่มนี้ใช้แก่ผู้ที่ใช้ตาพากก่อ เลิ้มติ้ ภาพาก: 'ก็ไปนี้เร็าพะเจ้าจะทุามกำทุามจางกงมพึ่งก่าอกับละพาบปักจุบั ก่าอกับ ลบด. ละนั้น, กะลุมาตอบใช้ที่กักต้องที่ ลุกเทิ่าที่ไป ไปไก้ เร็ากำตอบถั่งก่าอจะบ้ที่อ่า**ทึก ตี ติก**'

## ถาน ะ าสาลับ ักสาพาก:

ໃຫ້ອ່າ ທຸກໆຄຳຖາມ ຍົກເວັ້ນຄຳຊື້ແຈ້ງ ໂດຍບໍ່ໃຫ້ອ່າ ຄຳຕອບ, ແລ້ວຂີດອ້ອມເອົາຄຳຕອບດັ່ງກ່າວ

7.4	ທ່າ ຍັງມີດິ ຕອ ໃດໜຶ່ງຢູ່ພາຍໃ ບ້ານ ທີ່ຕ້ອງກາ	1	มิ– ใช้เดียต์ทามกาทามที่ 7.58 บໍ่มิ – ใช้ล้ามไปกาทามที่ 7.59 เลีย
	ຢາກເກັບກູ້ ລບຕ ບໍ? <i>ຂີດອ້ອມເອົາ 1 ຄຳຕອບ</i>	2	บม – เขเขามาเบลารฤาเมช 7.59 เลย
7.5	<i>ີດີ ກະທົບຕື້</i> ຕໍ່ ຂອງ ລບຕ/ມິ່ນ ຕໍ່ຄອບຄົວຂອງທ່າ ແມ່ ຫຍັງ?	1	ບໍ່ສາມາດ ຳໃຊ້ທີ່ດີ ເຂົ້າໃ ກາ ຜະລິດ/ສູ ເສຍກາ ຜະລິດອາຫາ
	ຂີດອ້ອມເອົາ 1 ຄຳຕອບ	2	ບໍ່ສາມາດກໍ່ສ້າງສິ່ງອຳ ວບຄວາມສະດວກສຳ ລັບຂຸມຊີ (ເຊັ່ນ: ໂຮງຮູງ , ເສັ້ນທາງ, ນຳ້ສ້າງ,
			ຊີ ລະປະທາ )
		3	ຮູ້ສຶກບໍ່ມີຄວາມປອດໄພ/ມີຄວາມກັງວີ
		4	ບໍ່ມີຜີ ກະທິບຫຍັງເລີຍ
		999	ບໍ່ແ ່ ໃຈ/ຂື່ນໆ/ບໍ່ມີຄຳຕອບ

7.6 ท่า	ມີຂໍ້ຄິດໜັ	ອື່ນໆອີກບໍ?			

ກ່າວຂອບໃຈຜູ້ທີ່ໃຫ້ສຳພາດ ແລະ ສຳເລັດກາ ສຳພາດ

# Appendix 10: Tables used to Evaluate the Livelihood Asset Scale in Phase 3

Table 10.1: Individual Item Fit Statistics for the Social Asset Scale Showing no Misfit to the Model, Phase 3, Nong District

Item <sup>a</sup>	Loc	SE	Fit Resid	DF	Chi Sq DF
S1 How easy is it for you to participate	0.59	0.15	-0.86	135	4.31 4
S2 Visit friends and relatives outside of your village	0.65	0.13	-1.01	149	7.52 4
S3 How much food share villagers/friends	1.33	0.17	-1.00	92	10.75 4
S4 How much information	-1.74	0.13	-0.38	144	7.65 4
S5 Go to the markets	-0.39	0.14	-2.80	144	4.68 4
S6 Go to the district centre	-0.24	0.14	-2.02	145	2.19 4
S7 Part of village life	-0.17	0.14	-0.09	151	12.39 4

<sup>&</sup>lt;sup>a</sup>For full text see Appendix 9

Table 10.2: Person-Item Correlation Matrix, Social Sub-Scale Showing Local Dependency (>2.5) for Items S5 and S6 Phase 3 Nong District

Item <sup>a</sup>	S1	S2	S3	S4	S5	<b>S6</b>	S7
S1 How easy is it for you to participate	1						
S2 Visit friends and relatives outside of your village	-0.06	1					
S3 How much food share villagers/friends	-0.07	-0.12	1				
S4 How much information	-0.00	-0.23	-0.18	1			
S5 Go to the markets, local events	-0.46	-0.20	-0.40	-0.23	1.00		
S6 Go to the district centre	-0.43	-0.21	-0.31	-0.33	0.61 <sup>b</sup>	1	
S7 Part of village life	-0.14	-0.33	0.04	0.00	-0.36	-0.31	1

<sup>&</sup>lt;sup>a</sup>For full text see Appendix 9

<sup>&</sup>lt;sup>b</sup>Indicates local dependency

Table 10.3: Individual Item Fit Statistics for the Physical Asset Scale Showing no Misfitting Items (> 2.5), Phase 3 Nong District

Itei	m <sup>a</sup>	Loc	SE	Fit Resid	DF	ChiSq D	F Prob
P1	Health centre	-1.07	0.17	-0.434	132	0.297 2	0.86
P2	Access school	-1.75	0.19	-0.95	119	8.06 2	0.01
Р3	Clean drinking water	1.50	0.16	-1.73	110	7.31 2	0.02
P4	Access district	-0.54	0.18	0.49	122	3.23 2	0.19
P5	Physical assets	-0.95	0.47	-0.88	60	1.60 2	0.44
P6	Quality of your household's house	0.40	0.24	0.08	82	1.48 2	0.47
P7	Basic household equipment	2.43	0.13	-0.06	114	8.01 2	0.01

<sup>&</sup>lt;sup>a</sup>For full text see Appendix 9

Table 10.4: Person-Item Correlation Matrix, Physical Sub-Scale Showing no Local Dependency (>.3), Phase 3 Nong District

Item <sup>a</sup>	P1	P2	Р3	P4	P5	P6	P7
P1 Health centre	1						
P2 Access school	-0.08	1					
P3 Clean drinking water	-0.20	-0.09	1				
P4 Access district	0.18	-0.28	-0.21	1			
P5 Physical assets	-0.32	-0.22	0.08	0.07	1		
P6 Quality of your household's house	-0.49	0.04	-0.15	-0.48	-0.13	1	
P7 Basic household equipment	-0.36	-0.29	-0.33	-0.43	-0.25	0.04	1

<sup>&</sup>lt;sup>a</sup>For full text see Appendix 9

Table 10.5: The Loadings for the First Component of a Principal Component Analysis of the Item Residuals of the Physical Scale Ordered to Show the Two Most Different Sub-sets, Phase 3 Nong District

Subsets	Item <sup>a</sup>	PC1
Subset 1 <sup>b</sup>	P4 Access district	0.77
	P1 Health centre	0.68
	P8 Irrigation for your farmland	0.11
	P3 Clean drinking water	0.02
	P2 Access school	-0.16
Subset 2 b	P7 Basic household equipment	-0.59
	P5 Physical assets	-0.74

<sup>&</sup>lt;sup>a</sup>For full text see Appendix 9

Table 10.6: Person-Item Correlation Matrix, Human Sub-Scale Showing no Misfitting Items (> 2.5), Phase Site 3 Nong District

Item <sup>a</sup>	Loc	SE	Fit Resid	DF	ChiSq D	F Prob
H1 Miss school	-2.00	0.22	-0.10	50.1	2.60 2	0.27
H2 Confident future	0.26	0.10	-0.56	118.34	8.85 2	0.01
H3 Not work due to illness	-0.09	0.14	0.08	97.29	1.15 2	0.56
H4 Pride in household achievements	0.09	0.11	-0.85	117.62	6.61 2	0.03
H5 Hire labour	1.20	0.41	-0.25	8.71	2.34 2	0.30
H6 Sell labour	0.53	0.14	0.47	84.95	2.84 2	0.24

<sup>&</sup>lt;sup>a</sup>For full text see Appendix 9

<sup>&</sup>lt;sup>b</sup>Subsets of Items from which Locations were Derived for the Post-hoc t-test, Phase 3 Nong District

Table 10.7: Person-Item Correlation Matrix, Human Sub-Scale Showing no Local Dependency (>.3), Phase 3 Nong District

Item <sup>a</sup>	H1	Н2	Н3	H4	Н5	Н6
H1 Miss school	1					
H2 Confident future	-0.11	1				
H3 Not work due to illness	-0.09	-0.37	1			
H4 Pride in household achievement s	-0.19	-0.36	-0.29	1		
H5 Hire labour	-0.54	0.21	0.54 <sup>b</sup>	-0.56	1	
H6 Sell labour	-0.57	-0.43	-0.36	-0.18	-1	1

<sup>&</sup>lt;sup>a</sup> For full text see Appendix 9 <sup>b</sup> Fit residual = > .3

Table 10.8: The Loadings for the First Component of a Principal Component Analysis of the Item Residuals of the Human Scale Ordered to Show the Two Most Different Sub-sets, Phase 3 Nong District

	Item <sup>a</sup>	PC1
Subset 1 <sup>b</sup>	H5 Hire labour	1.03
	H3 Not work due to illness	0.58
	H2 Confident future	0.36
	H1 Miss school	-0.04
Subset 2 <sup>b</sup>	H4 Pride in household achievements	-0.48
	H6 Sell labour	-0.85

<sup>&</sup>lt;sup>a</sup>For full text see Appendix 9

<sup>&</sup>lt;sup>b</sup>Subsets of Items from which Locations were Derived for the Post-hoc t-test, Phase 3 Nong District

Table 10.9: Individual Item Fit Statistics for the Finance Asset Scale Showing no Misfitting Items (> 2.5), Phase 3 Nong District

Iter	m <sup>a</sup>	Loc	SE	Fit Resid	DF	ChiSq DF	Prob
F1	Value of the land	-3.53	0.17	-0.30	127	9.57 2	0.00
F2	How much produce sell	-0.25	0.21	-0.67	95	1.58 2	0.45
F3	How much money save or invest	-0.46	0.21	-0.75	136	1.65 2	0.43
F4	Meet its basic needs	-0.67	0.16	0.89	159	5.00 2	0.08
F5	Worry about meeting basic needs	1.06	0.12	-1.11	159	3.21 2	0.20
F6	Money buy non-food items	0.32	0.20	-0.18	154	0.12 2	0.94
F7	More rice	0.98	0.17	0.67	74	0.02 2	0.98
F8	Access to healthy livestock	2.407	0.15	0.21	136	0.74 2	0.68
F10	Number of traders coming to your village to buy	0.14	0.14	0.10	82	0.72 2	0.69

<sup>&</sup>lt;sup>a</sup>For full text see Appendix 9

Table 10.10: Person-Item Correlation Matrix Showing no Local Dependency Finance Sub-Scale, Phase 3 Nong District

Item <sup>a</sup>	F1	F2	F3	F4	F5	F6	F7	F8	F10
F1 Value of the land	1								
F2 How much									
produce sell	-0.18	1							
F3 How much									
money save or invest	-0.11	0.24	1						
F4 Meet its basic needs	-0.15	0.12	0.16	1					
F5 Worry about	-0.13	0.12	0.10	1					
meeting basic needs	0.01	-0.37	-0.16	-0.29	1				
F6 Money buy non-									
food items	-0.42	0.28	0	0.11	-0.16	1			
F7 More rice	-0.09	-0.37	-0.26	-0.23	-0.19	-0.38	1		
F8 Access to healthy									
livestock	-0.05	-0.21	-0.31	-0.24	-0.18	-0.16	-0.15	1	
F10 Number of									
traders coming to your village to buy	-0.08	-0.5	-0.44	-0.49	-0.21	-0.24	0.08	-0.08	1
ar call and the	1: 0	0.5	0.11	0.17	0.21	V. <u>2</u> I	0.00	0.00	

<sup>&</sup>lt;sup>a</sup>For full text see Appendix 9

Table 10.11: The Loadings for the First Component of a Principal Component Analysis of the Item Residuals of the Finance Scale Ordered to Show the Two Most Different Sub-sets, Phase 3 Nong District

Subset	Item	PC1
Subset 1 <sup>b</sup>	F2 How much produce sell	0.74
	F4 Meet its basic needs	0.59
	F3 How much money save or invest	0.58
	F6 Money buy non-food items	0.56
	F5 Worry about meeting basic needs	-0.23
	F7 More rice	-0.26
	F1 value of the land	-0.28
Subset 2 <sup>b</sup>	F4 Meet its basic needs	-0.49
	F10 Number of traders coming to your village to buy	-0.68

<sup>&</sup>lt;sup>a</sup>For full text see Appendix 9

Table 10.12: Individual Item Fit Statistics for the Social Asset Scale, Phase 3 Paksong and Pek District

			Fit				
Item <sup>a</sup>	Location	SE	Resid	DF	ChiSq	DF	Prob
Paksong					•		
S1 Social event	-0.53	0.15	0.99	174	4.67	2	0.09
S2 Visit friends and relatives	1.13	0.12	-1.41	168	2.64	2	0.26
S3 Food share	-0.03	0.20	0.07	135	0.37	2	0.82
S4 Information available	0.60	0.14	-0.50	176	2.97	2	0.22
S5 Go to the market / local							
events	-0.84	0.13	-0.80	167	0.97	2	0.61
S6 Go to the district centre							
and	-0.96	0.14	0.06	169	2.46	2	0.29
S7 Part of village life	-0.91	0.15	1.45	175	0.84	2	0.65
S8 Confident a people in							
community	1.55	0.13	-0.30	163	4.54	2	0.10
Pek							
S1 Social event	-2.26	0.10	1.20	407	14.98	8	0.05
S2 Visit friends and relatives	-0.34	0.10	-1.40	381	20.75	8	0.00
S3 Food share	1.97	0.08	-0.68	312	27.28	7	0.00
S4 Information available	-0.14	0.11	-1.70	399	18.24	8	0.01
S5 Go to the market / local							
events	0.85	0.09	-2.72	368	32.19	8	0.00
S6 Go to the district centre							
and	-0.32	0.10	-2.20	377	13.65	8	0.09
S7 Part of village life	0.16	0.10	0.58	408	17.16	8	0.02
S8 Confident a people in							
community	0.07	0.11	0.09	352	13.28	8	0.10

<sup>&</sup>lt;sup>a</sup>For full text see Appendix 9

<sup>&</sup>lt;sup>b</sup>Subsets of Items from which locations were derived for the post-hoc t-test

Table 10.13: Person-Item Correlation Matrix Showing no Local Dependency, Social Sub-Scale, Phase 3, Paksong and Pek Districts

Item <sup>a</sup>	S1	<b>S2</b>	<b>S3</b>	S4	<b>S5</b>	<b>S6</b>	<b>S7</b>	<b>S8</b>
Paksong								
S1 Social event	1							
S2 Visit friends and								
relatives	-0.14	1						
S3 Food share	-0.02	-0.27	1					
S4 Information available	-0.13	-0.13	-0.13	1				
S5 Go to the market / local								
events	-0.27	-0.21	-0.16	-0.16	1			
S6 Go to the district centre								
and	-0.26	-0.22	-0.03	-0.16	0.00	1		
S7 Part of village life	0.03	-0.22	-0.18	-0.11	-0.23	-0.10	1	
S8 Confident a people in								
community	-0.26	-0.05	-0.06	-0.15	-0.10	-0.18	-0.29	1
Pek								
S1 Social event	1							
S2 Visit friends and								
relatives	-0.03	1						
S3 Food share	-0.17	-0.13	1					
S4 Information available	-0.16	-0.10	-0.26	1				
S5 Go to the market / local								
events	-0.22	-0.23	-0.22	-0.07	1			
S6 Go to the district centre								
and	-0.15	-0.18	-0.30	-0.04	0.15	1		
S7 Part of village life	-0.17	-0.22	-0.07	-0.10	-0.26	-0.20	1	
S8 Confident a people in								
community	-0.17	-0.15	-0.04	-0.11	-0.16	-0.20	-0.11	1

<sup>&</sup>lt;sup>a</sup>For full text see Appendix 9

Table 10.14: The Loadings for the First Component of a Principal Component Analysis of the Item Residuals of the Social Scale Ordered to Show the Two Most Different Sub-sets, Phase 3, Paksong and Pek District

Subsets	Item <sup>a</sup>	PC1
Paksong		
Subset 1 <sup>b</sup>	S1 Social event	0.70
	S7 Part of village life	0.62
	S4 Information available	0.06
	S3 Food share	0.03
	S2 Visit friends and relatives	-0.10
	S6 Go to the district centre	-0.29

Subsets	Item <sup>a</sup>	PC1
Subset 2 <sup>b</sup> Pek	S8 Confident a people in community help S5 Go to the market / local events	-0.49 -0.53
Subset 1 b	S6 Go to the district centre S5 Go to the market / local events	0.71 0.67
	S4 Information available S1 Social event S2 Visit friends and relatives S8 Confident a people in community help	0.29 -0.16 -0.19 -0.27
Subset 2 <sup>b</sup>	S7 Part of village life S3 Food share	-0.32 -0.57

Table 10.15: Individual Item Fit Statistics for the Physical Asset Scale Showing no Misfitting Items (> 2.5), Phase 3 Paksong and Pek Districts

Item <sup>a</sup>	Location	SE	FitResid	DF	ChiSq	DF	Prob
Paksong							
P1 Health centre	-0.66	0.14	1.11	194	0.55	3	0.90
P2 Access school	-0.85	0.17	0.10	135	4.89	3	0.18
P3 Clean drinking water	-0.63	0.16	-0.13	164	3.26	3	0.35
P4 Access district	-0.78	0.14	0.67	192	5.54	3	0.13
P5 Physical assets	0.97	0.14	-0.54	183	11.03	3	0.01
P6 Quality of your household's house P7 Basic household	1.85	0.11	0.12	145	0.74	3	0.86
equipment	0.10	0.16	-1.53	193	5.24	3	0.15
Pek							
P1 Health centre	0.05	0.10	-0.07	377	13.62	7	0.05
P2 Access school	-0.69	0.12	1.35	255	7.03	7	0.42
P3 Clean drinking water	-1.20	0.11	0.03	329	19.09	7	0.00
P4 Access district	-1.01	0.10	1.54	376	13.58	7	0.05
P5 Physical assets	0.39	0.11	-1.06	359	12.64	7	0.08
P6 Quality of your							
household's house	1.95	0.08	-0.86	294	4.90	6	0.55
P7 Basic household equipment	0.49	0.12	-0.72	371	6.63	7	0.46

<sup>&</sup>lt;sup>a</sup>For full text see Appendix 9

<sup>&</sup>lt;sup>a</sup>For full text see Appendix 9 <sup>b</sup>Subsets of Items from which locations were derived for the post-hoc t-test

Table 10.16: Person-Item Correlation Matrix, Physical Sub-Scale Showing no Local Dependency (> 3), Phase 3, Paksong District

Item <sup>a</sup>	P1	P2	Р3	P4	P5	P6	P7
Paksong							
P1 Health centre	1						
P2 Access school	-0.06	1					
P3 Clean drinking water	-0.26	-0.15	1				
P4 Access district	0.05	-0.13	-0.14	1			
P5 Physical assets	-0.23	-0.18	-0.15	-0.18	1		
P6 Quality of your							
household's house	-0.40	-0.33	-0.17	-0.47	-0.06	1	
P7 Basic household	0.26	0.20	0.00	0.20	0.00	0.04	1
equipment	-0.26	-0.20	-0.09	-0.20	-0.09	-0.04	1
Pek							
P1 Health centre	1						
P2 Access school	-0.13	1					
P3 Clean drinking water	-0.18	-0.03	1				
P4 Access district	-0.08	-0.30	-0.14	1			
P5 Physical assets	-0.14	-0.24	-0.08	-0.19	1		
P6 Quality of your							
household's house	-0.30	-0.11	-0.29	-0.36	-0.18	1	
P7 Basic household							
equipment	-0.20	-0.29	-0.18	-0.05	-0.01	-0.19	1

<sup>&</sup>lt;sup>a</sup>For full text see Appendix 10

Table 10.17: The Loadings for the First Component of a Principal Component Analysis of the Item Residuals of the Physical Scale Ordered to Show the Two Most Different Sub-sets, Phase 3, Paksong and Pek District

Subsets	Item <sup>a</sup>	PC1	<u> </u>
Subset 1 <sup>b</sup>	Paksong		
	P6 Quality of your household's house	0.77	
	P7 Basic household equipment	0.37	
	P5 Physical assets	0.28	
	P3 Clean drinking water	0.13	
	P2 Access school	-0.34	
Subset 2 <sup>b</sup>	P4 Access district	-0.63	
	P1 Health centre	-0.66	
	Pek		
Subset 1 <sup>b</sup>	P6 Quality of your household's house	0.65	
	P2 Access school	0.62	
	P3 Clean drinking water	0.03	
			•

Subsets	Item <sup>a</sup>	PC1
	P1 Health centre	-0.20
	P4 Access district	-0.22
Subset 2 <sup>b</sup>	P7 Basic household equipment	-0.44
	P5 Physical assets	-0.65

<sup>&</sup>lt;sup>a</sup>For full text see Appendix 9

Table 10.18: The Loadings for the First Component of a Principal Component Analysis of the Item Residuals of the Human Scale Ordered to Show the Two Most Different Sub-sets, Phase 3, Paksong and Pek District

Subsets	Item <sup>a</sup>	PC1
	Paksong	
Subset 1 <sup>b</sup>	H9 How much land do you work that has ERW	0.69
	H11 Find ERW / UXO	0.61
	H8 Satisfied sense of safety	0.39
	H12 Children in report seeing UXO	0.28
	H7 Rice household have	0.03
	H4 Pride	-0.36
Subset 2 <sup>b</sup>	H6 Satisfied a current health	-0.44
	H2 Confident meet food demands	-0.45
D-1-	H1 Children miss school	-0.48
Pek Subset 1 <sup>b</sup>	H8 Satisfied sense of safety	0.77
	H6 Satisfied a current health	0.75
	H7 Rice household have	0.24
	H9 How much land do you work that has ERW?	0.04
	H1 Children miss school	-0.06
Subset 2 <sup>b</sup>		
	H11 Find ERW / UXO	-0.09
	H12 Children in report seeing UXO	-0.40
	H9 How much land do you work that has ERW	-0.42
	H2 Confident meet food demands	-0.47

<sup>&</sup>lt;sup>a</sup>For full text see Appendix 9

<sup>&</sup>lt;sup>b</sup>Subsets of Items from which locations were derived for the post-hoc t-test

<sup>&</sup>lt;sup>b</sup>Subsets of Items from which locations were derived for the post-hoc t-test

Table 10.19: Individual Item Fit Statistics for the Human Asset Nine-Item Scale Showing no Misfitting Items (>2.5), Phase 3 Paksong and Pek District

			Fit				
Item <sup>a</sup>	Location	SE	Resid	DF	ChiSq	DF	Prob
Paksong District							
H1 Children miss school	-0.03	0.21	-0.10	74	2.86	2	0.23
H2 Confident meet food							
demands	1.83	0.12	0.12	147	8.30	2	0.01
H4 Pride	-1.47	0.16	1.02	148	0.20	2	0.90
H6 Satisfied a current health	2.83	0.14	0.81	60	1.83	2	0.40
H7 Rice household have	1.32	0.13	-1.03	148	1.80	2	0.40
H8 Satisfied sense of safety	0.16	0.17	0.28	143	2.08	2	0.35
H9 How much land do you							
work that has ERW	0.89	0.14	-0.56	149	3.30	2	0.19
H11 Find ERW UXO	-1.63	0.17	0.39	148	1.14	2	0.56
H12 Children in report							
seeing UXO	-1.82	0.18	-1.14	148	4.27	2	0.11
Pek District							
H1 Children miss school	0.53	0.18	2.10	112	5.45	6	0.48
H2 Confident meet food							
demands	-1.12	0.11	1.15	328	6.84	6	0.33
H4 Pride	-1.46	0.11	0.26	333	19.60	6	0.00
H6 Satisfied a current health	1.48	0.10	-0.01	331	8.63	6	0.19
H7 Rice household have	-1.12	0.12	2.55	285	8.18	6	0.22
H8 Satisfied sense of safety	0.07	0.11	-0.87	334	14.89	6	0.02
H9 How much land do you							
work that has ERW	0.33	0.17	-0.63	125	6.49	6	0.37
H11 Find ERW / UXO	0.05	0.12	0.50	326	6.61	6	0.35
H12 Children in report						-	
seeing UXO	1.23	0.13	0.34	216	7.07	6	0.31

<sup>&</sup>lt;sup>a</sup>For full text see Appendix 10

Table 10.20: Individual Item Fit Statistics for the Finance Asset Scale Showing no Misfitting Items, Phase 3 Paksong and Pek Districts

			T10.				
Item <sup>a</sup>	Location	SE	Fit Resid	DF	ChiSq	D F	Prob
Paksong District							
F1 value of the land	-2.00	0.13	-0.56	236	18.07	4	0.07
F2 How much produce sell	-0.69	0.13	-1.69	344	4.95	4	0.29
F3 How much money save							
or invest	0.77	0.12	-2.35	358	2.73	4	0.60
F4 Meet its basic needs	0.89	0.12	-1.71	351	13.26	4	0.01
F5 Worry about meeting							
basic needs	0.46	0.09	-0.13	363	6.10	4	0.19
F6 Money buy non-food	0.74	0.10	1.00	250	1.10		0.00
items	-0.74	0.12	-1.32	358	1.10	4	0.89
F7 More rice	-0.86	0.12	-1.39	321	2.56	4	0.63
F8 Access to healthy	1.20	0.00	1.45	222	5.46	4	0.24
livestock F10 Number of traders	1.38	0.08	-1.45	333	5.46	4	0.24
coming to your village to buy	-0.10	0.26	1.15	360	1.23	4	0.87
Pek District	-0.10	0.20	1.13	300	1.23	4	0.67
	0.41	0.16	0.57	170	12.20	2	0.00
F1 value of the land	-2.41	0.16	-0.57	172	12.29	3	0.00
F2 How much produce sell	-0.34	0.18	-0.98	178	3.93	3	0.26
F3 How much money save	0.27	0.10	1.06	107	1 41	2	0.70
or invest	-0.37	0.18	-1.96	187	1.41	3	0.70
F4 Meet its basic needs	-0.21	0.15	-0.28	187	0.96	3	0.80
F5 Worry about meeting	1.66	0.10	1.74	100	21.00	2	0.00
basic needs F6 Money buy non-food	1.66	0.10	1.74	188	21.89	3	0.00
F6 Money buy non-food items	0.04	0.16	-0.88	187	1.30	3	0.72
F7 More rice	0.04	0.10	-0.86	167	3.84	3	0.72
F8 Access to healthy	0.00	0.17	-0.96	167	3.84	3	0.27
livestock	2.02	0.12	-0.21	143	6.06	3	0.10
F10 Number of traders	2.02	0.12	-0.41	173	0.00	5	0.10
coming to your village to buy	-0.38	0.15	-1.90	188	13.51	3	0.00
are a full tout one Amount in O	3.20	0.10	***	100			3.00

<sup>&</sup>lt;sup>a</sup>For full text see Appendix 9

Table 10.21: Person-Item Correlation Matrix Showing no Local Dependency, Finance Sub-Scale, Phase 3 Paksong and Pek District

Item	F1	F2	F3	F4	F5	F6	F7	F8	F10
Paksong	,								
F1	1								
F2	-0.016	1							
F3	-0.156	-0.034	1						
F4	-0.206	0	-0.085	1					
F5	-0.226	-0.371	-0.135	-0.284	1				
F6	-0.049	-0.058	-0.089	0.026	-0.284	1			
F7	-0.078	-0.148	-0.121	0.059	-0.14	-0.021	1		
F8	-0.18	-0.023	-0.109	-0.174	-0.077	-0.344	-0.297	1	
F10	-0.012	-0.04	-0.021	-0.164	-0.24	0.046	-0.083	-0.225	1
Pek									
F1	1								
F2	0.092	1							
F3	-0.202	-0.098	1						
F4	-0.182	-0.119	-0.024	1					
F5	-0.196	-0.24	-0.058	-0.076	1				
F6	-0.181	-0.131	-0.105	0.007	0.028	1			
F7	-0.174	-0.103	-0.048	-0.145	-0.203	-0.201	1		
F8	-0.255	-0.149	-0.194	-0.16	-0.242	-0.198	-0.064	1	
F10	0.075	-0.017	-0.137	-0.188	-0.335	-0.178	-0.119	-0.14	1

Table 10.22: The Loadings for the First Component of a Principal Component Analysis of the Item Residuals of the Finance Scale Ordered to Show the Two Most Different Sub-sets, Phase 3, Paksong and Pek District

Subsets	Item <sup>a</sup>	PC1	
	Paksong		
Subset 1 <sup>b</sup>	F5 Worry about meeting basic needs	0.71	
	F8 Access to healthy livestock	0.61	
	F3 How much money save or invest	0.00	
	F1 value of the land	-0.20	
	F2 How much produce sell	-0.26	
	F7 More rice	-0.30	
Subset 2 <sup>b</sup>	F10 Number of traders coming to your village to buy	-0.35	
	F4 Meet its basic needs	-0.38	
Pek	F6 Money buy non-food items	-0.61	
Subset 1 <sup>b</sup>	F5 Worry about meeting basic needs	0.63	
	F6 Money buy non-food items	0.43	
			207

Subsets	Item <sup>a</sup>	PC1
	F4 Meet its basic needs	0.36
	F3 How much money save or invest	0.24
	F8 Access to healthy livestock	-0.07
	F7 More rice	-0.09
Subset 2 <sup>b</sup>	F2 How much produce sell	-0.44
	F1 value of the land	-0.55
	F10 Number of traders coming to your village to buy	-0.60

<sup>&</sup>lt;sup>a</sup>For full text see Appendix 9 <sup>b</sup>Subsets of Items from which locations were derived for the post-hoc t-test

# **Appendix 11: Scale Items Included in Final Solutions**

Scale	Item
Social	
S1	When there is a social event (e.g. wedding, a ceremony, a religious event or a funeral) in your village), how easy is it for you to participate?
S2	On average in one month how often in is your household able to visit friends and relatives outside of your village?
S3	How much food (e.g. fruit, vegetables, rice, chilli) does your household have to share with other villagers/friends when they need it?
S4	How much information/news is available to your household from people
S5	outside of your village traders? In one month how often do members of your household go to the market / local events outside of your village?
S6 S7	On average in one month how often do members of your household go to the district centre and to meet new people outside of your village? How much do you feel your household is involved and part of village life?
S8	How confident are you that there are people in your community who would help your household if needed?
Physical	
P1	How has access for your household to get to the nearest health centre (souksala, e.g. at cluster level) changes?
P2	How has access to school for your household's children changed?
Р3	How has your household's access to clean drinking water changed?
P4	How has your household's access to go the district or provincial centre changed?
P5	How have your household's physical assets changed (e.g., tractor, motorbike, plough, milling machine) changed?
P6	How has the quality of your household's house changed (e.g. new roof, some
P7	timber or stone or metal sheeting)? How much basic household equipment do you have (e.g. cooking pots, mattress, blankets, table)?
Finance	
F1	How has the (financial) value of the land that has been cleared (of UXO) for your household changed (increased or decreased)?
F2	On average in one month how much produce or goods (e.g. vegetables/fruit/eggs/bamboo/frogs) or goods (e.g. handicrafts/baskets) can you sell for extra income (e.g. not because of an emergency)?
F3	On average in one month how much money can your household save or invest (e.g. in a buffalo or cash) to use in the future?
F4	How much in one month does your household have to buy basic items?
F5	How much do you worry about your household having enough to meet its basic needs (things you must have) in the future?

Scale	Item
F6	On average in one month how much money does your household have to buy non-food items (e.g. ability to buy household items or work tools)?
F7	On average in one year how much more rice (or other crop/most important crop) have you had (for own consumption or sell)?
F8	How has your access to healthy livestock changed?
F10	How has the number of traders coming to your village to buy your household's produce changed?
Human	
HI	How often this semester did children in your household miss school for two days or more due to poor health or tiredness?
H2	How confident do you feel about your household's ability to meet its food demands?
H4	How much pride do you feel for your household's current achievements?
Н6	How satisfied are you with your household's current health?
H7	How much rice does your household have to meet your daily needs?
Н8	How satisfied are you with your sense of safety for your household?
Н9	How much land do you work that has ERW?
H11	How often do you find ERW in the areas where you go on a regular basis?
H12	How often do the children in your household report seeing UXO?

**Appendix 12: Estimates of Each of the Items in the Final Solution in Logits** 

Scale	Item <sup>a</sup>	Logits
Social		
S1	When there is a social event (e.g. wedding, a ceremony, a religious event or a funeral) in your village), how easy is it for you to participate?	-0.50
S2	On average in one month how often in is your household able to visit friends and relatives outside of your village?	0.72
S3	How much food (e.g. fruit, vegetables, rice, chilli) does your household have to share with other villagers/friends when they need it?	1.72
S4	How much information/news is available to your household from people <i>outside</i> of your village traders?	0.83
S5	In one month how often do members of your household go to the market / local events outside of your village?	-0.40
S6	How easy is it for your household to meet new people outside of your village?	-0.38
S7	How much do you feel your household is involved and part of village life?	-0.28
S8	How confident are you that there are people in your community who would help your household if needed?	1.16
Physical		
P1	How has access for your household to get to the nearest health centre (souksala, e.g. at cluster level) changed?	-1.71
P2	How has access to school for your household's children changed?	-1.62
Р3	How has your household's access to clean drinking water changed?	-1.54
P4	How has your household's access to go the district or provincial centre changed?	-1.60
P5	How have your household's physical assets changed (e.g., tractor, motorbike, plough, milling machine) changed?	-0.12
P6	How has the quality of your household's house changed (e.g. new roof, some timber or stone or metal sheeting)?	1.16

Scale	Item <sup>a</sup>	Logits
P7	How much basic household equipment do you have (e.g. cooking pots, mattress, blankets, table)?	-0.37
Finance		
F1	How has the (financial) value of the land that has been cleared (of UXO) for your household changed (increased or decreased)?	-1.83
F2	On average in one month how much produce or goods (e.g. vegetables/fruit/ eggs/bamboo/frogs) or goods (e.g. handicrafts/baskets) can you sell for extra income (e.g. not because of an emergency)?	-0.15
F3	On average in one month how much money can your household save or invest (e.g. in a buffalo or cash) to use in the future?	1.08
F4	How much in one month does your household have to buy basic items?	1.11
F5	How much do you worry about your household having enough to meet its basic needs (things you must have) in the future?	1.44
F6	On average in one month how much money does your household have to buy non-food items (e.g. ability to buy household items or work tools)?	-0.26
F7	On average in one year how much more rice (or other crop/most important crop) have you had (for own consumption or sell)?	0.02
F8	How has your access to healthy livestock changed?	1.64
F10	How has the number of traders coming to your village to buy your household's produce changed?	0.88
Human		
HI	How often this semester did children in your household miss school for two days or more due to poor health or tiredness?	0.25
H2	How confident do you feel about your household's ability to meet its food demands?	1.01

Scale	Item <sup>a</sup>	Logits
H4	How much pride do you feel for your household's current achievements?	-1.70
Н6	How satisfied are you with your household's current health?	0.63
Н7	How much rice does your household have to meet your daily needs?	0.00
Н8	How much do you worry about people in your household having a UXO accident?	0.38
Н9	How satisfied are you with your sense of safety for your household?	-0.46
H11	How often do you find ERW in the areas where you go on a regular basis?	-0.58
H12	How often do the children in your household report seeing UXO?	-0.50

<sup>&</sup>lt;sup>a</sup> Fit statistics provided only for items included in final solution

# Appendix 13: Example of Indicators Which can be Used to Assess Impacts of UXO Clearance

## Based on a report by Durham, J and Nanhthavong, V. (2010)

#### **Process monitoring**

A key finding of this assessment has been that current participation and communication practices limit participation of the people the program aims to serve. Indicators of participation, effective communication and satisfaction are provided below. Data should be aggregated by sex, ethnicity and level of wealth especially at the household/community level.

#### **Effective communication**

When considering effective communication, the issue of gender should be taken into account. Communication for development interventions are highly gender sensitive. Often men and women have unequal access to information and it is vital to mainstream gender into all communication for development interventions. The very poor and poor also typically have less access to information so the communication strategy and monitoring also needs to take this into account. At the household, community and district level the following indicators could be used to monitor effective communication:

- Number of people who are aware of the service
- Number of people who are aware of the criteria for accessing the service
- Number of people who are aware of the process
- Number of household visits undertaken by clearance staff
- Number of people who feel they are able to access the service (have skills and are eligible)
- Percentage of people who have requested clearance
- Extent of leadership role undertaken by village head e.g. did the village head help people apply for clearance
- Accuracy of the information reported by households
- Is the language of the communication appropriate for the population (ethnicity, level of education etc)
- Extent of dialogue and debate within households/communities about the UXO issue and areas to be cleared
- Number of community members (disaggregated by gender) who have participated actively in meetings/discussions about areas to be cleared and post-clearance land use

## Community participation

#### Individual level

 Individual level – extent to which individuals feel they were involved in the decision-making process in which land should be cleared

- Individual level extent to which individuals feel they were involved in the planning of clearance
- Individual level extent to which individuals feel they understood the process and clearance undertaken
- Individual level information is easily available in an accessible format for all households to access
- Individual level individual households are given the support they need to access the UXO clearance services

## **Community level**

- Community level community participation plan developed with community and operator
- Community level records of clearance undertaken maintained by the community and available for community members and organisations wanting to work with community
- Community level community map showing areas cleared
- Community level community volunteer system established and working effectively with regular liaison between operator and community volunteer

#### District level

- District level extent to which district feels it has been involved in the planning of UXO clearance
- District level extent to which district authorities understand the process and clearance undertaken
- District level information is easily available in an accessible format for all relevant district authorities to access and share with potential investors (donor, NGO, commercial)

## Household/Community satisfaction

At the individual and community level, quantitative and qualitative information should be collected on:

- Satisfaction with clearance quality (from end user perspective rather than technical perspective)
- Satisfaction with timing of clearance (e.g. extent to which it disrupted other work due to timing)
- Satisfaction with quality and amount of participation and communication
- Satisfaction with task selection process and perceived fairness of process
- Satisfaction with behaviour of team while in village
- Satisfaction with their level of knowledge, general performance and helpfulness of the clearance operator

- Perception of the operator's staff's responsiveness
- Satisfaction that their needs have been met

# **Outcomes and Impacts**

#### At the local level

- Develop indicators with community
- Focus on interventions most likely to affect (based on type of post-clearance land use and livelihood systems)

The livelihood scale used in this research was developed based on qualitative research with communities and tried to represent their voice. Nevertheless, the final indicators and the examples below are from the research team. Program planners may decide to work more closely with communities to develop indicators but using the livelihood framework as a guide. Examples of indicators based on this assessment, the literature and the livelihoods framework include:

Human	A ryang as myangle an of temporal IV() and Ferry I seek as Ferry in a
	Average number of times UXO are found when farming
	Average number of times children report seeing UXO
	Number of UXO injuries
	Labour released for other activities (e.g. by provision of safe water
;	after clearance, more efficient land preparation)
	Increase in proportion of children attending school (e.g. due to labour
1	being released, improved food security, investments in school
	following clearance)
	Increased food diversity (e.g. number of times include vegetables in
	meal from area cleared for vegetable garden)
	Increased ability to provide 3 meals a day for all family members
	Ability to provide appropriate clothes for household members (e.g.
	able to provide cold weather clothes in cold season due to increase in
	income from released asset)
	Reported satisfaction with being able to meet basic needs
	Changes in yields
	Crop diversity
	*Number of people working outside village daily/capita
	*Number of people leaving village to work outside for extended
	periods/capita
	*Qualitative data also needed to see if this is due to distress or
	diversification of livelihoods due to improved access to labour
	markets/improved skills)
	Able to participate in village social activities without cost to basic
	needs (e.g. have enough rice to participate in social activities without
	hardship)
	Number of people/communities who have their basic human right to
	live and work in safety fulfilled by not living/working in UXO
	contaminated area
	Proportion of people in the community able to regularly participate in
	community events

	Number of times people report being able to go to the district/market	
	Increased access to information through increased contact with	
	people from outside of the village including NGOs	
	Extent to which feel part of and able to contribute to community	
	Linkages to social/political groups	
Physical	Changes in access to physical assets (e.g. road, water, markets)	
	Improvements to home (for example through increased labour to	
	work on home due to being able to farm more efficiently, less times	
	spent moving goods to markets)	
	Household property items improved or increased e.g. house	
	improved, has motorbike, TV, hand tractor	
	Average travel time (or cost?) to nearest market/district centre	
Finance	Changes in number of traders coming into the village	
	Changes in cash income from on/off farm labour	
	Increase in ability to purchase basic items	
	Increase in ability to purchase non-basic items	
	Reduced distress sales (e.g. selling good due to an emergency)	
	Changes in the value of land	
Environment	Area of productive land per capita without UXO contamination	
	Area under irrigation as a result of access to water through clearance	
	(e.g. clearance for weir, dam, irrigation canal)	
	Average time saved per capita as a result of better access to water	
	(e.g. if clearance has been to provide safe water supply/irrigation)	
	Annual rice production (kg)/capita	
	Improved quality of crops	

# Community level indicators may include

Human	Average number of times UXO are found when farming	
	Average number of times children report seeing UXO	
	Number of UXO injuries	
	No of households categorised as very poor, poor, not poor	
	Changes in school enrolment	
	Changes in children completing school	
	Increased knowledge of labour market, farming practices	
Social	Changes in demand for community support	
	Changes in social equity	
	Changes in village participation	
Physical	Area of irrigated land/capita	
	Changes in physical assets (e.g. tractor, bicycle) Number of	
	functioning tractors/capita	
	Accessible to market, road, Suksala, school and etc.	
	Number of functioning water pumps/capita	
Finance	Changes in aggregate community income	
	Changes in expenditure in local business	
	Changes in the number of village traders/small village business	
	Changes in the value of land	
Environment	Area of UXO cleared land in the community	
	Increase in land under production	
	Changes in crop diversity	

#### At the district level

At the district level indicators should be based on key district level indicators and priorities and could include:

- Changes in the number of households considered very poor/poor
- Changes in the number of villages considered very poor/poor
- Number of villages with access roads/water/irrigation etc which have been facilitated by clearance
- Enrolment of school rate of children increased
- Changes in the number of UXO injuries
- Changes in the number of UXOs reported
- Changes in the number of communities with UXO impact
- Number of agriculture land increased

#### At the national level

- Use program theory to monitor and evaluate program
- Use livelihood scale (quick to administer, already tested for reliability and use with different ethno-linguistic groups)

In addition to the indicators mentioned here, the report strongly supports the recommendation of the MAG Gender Assessment that the Gender Guidelines for Mine Action and indicators be incorporated into the national program that all data should be disaggregated by sex.

# **Appendix 14: Program Theory Flowcharts**

Figure 14.1: Program theory of the possible process from landmine/UXO clearance to outcomes and impacts when land is cleared for agricultural land for subsistence farmers in the Lao PDR

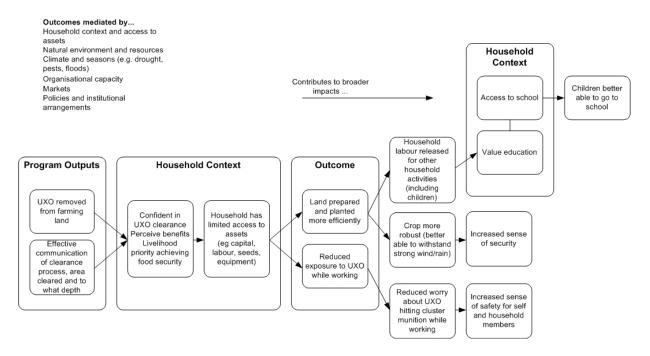


Figure 14.2. Program theory of the possible process from landmine/UXO clearance to outcomes and impacts when land is cleared for a village access road

