

"Understanding Debt Situation and Access to Healthcare Services among Rural Households in Cambodia" A Research Report

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EXECUTIVE SUMMARY

This study took a snapshot of the level of indebtedness among 133 households in 6 villages in Kampong Chhnang and Prey Veng provinces through a survey questionnaire. In addition, there were 22 in-depth interviews conducted with households who took part in the survey and who reported to be presently indebted and experienced borrowing money to pay for healthcare treatment. Key stakeholders are consulted about their perspectives on access to healthcare services, household indebtedness and rice growing situation.

Seventy-five percent of respondent owned farm land sized less than or up to one hectare. Respondents reported to have increasingly investing more and more in the agriculture inputs cost for rice production. Ninety-four percent of respondents grew rice last year; only 42% of respondents reported their rice harvest is sufficient for family consumption for the whole year. Seventy-four percent of respondents reported the cost and amount of chemical fertilizer has increased in the last five years; roughly 36% of respondents responded that the cost of fertilizer increased between 2.75\$-5\$ per sack (50Kg). The imbalance between values of inputs invested and the (rice) output are clearly emphasized and farmers reported to have to sell their rice paddy to repay the cost of chemical fertilizer and others inputs cost. Rice paddy is reported to be sold to both Khmer and Vietnamese traders; there is no minimum price set for price of rice

Seventy-six percent of respondents are currently indebted; the average amount of debt is USD 775.85, the highest amount being USD 10,187 and the lowest amount being USD1.25. Fifty-seven percent of respondents owed less than USD 250. However, over 56% of households in the surveyed experienced borrowing to pay for healthcare treatment purpose in the last two years. Loan available to respondents in the study through local banks and registered MFIs commonly charges the interest rate ranging from 24% to 36% per annum while loan from private lenders is charged at 36% to 60% a per annum. At present, there is no regulation to govern the rate of interest charged by MFIs.

Labour migration appears to be a common and crucial coping mechanism among rural households. Remittance from workers in factory, construction, agriculture plantations inside and outside Cambodia plays are very crucial coping mechanism. The remittance is multifaceted use for inputs of rice production, household survival, repaying debts, medical treatment, education and other vital supports for the household function. Arguably, there is a great sign of distress at different folds: a. labour movement wage increase has not reached a desirable level; b. massive number of documented and undocumented workers returned from Thailand due to political instability in this country; c. agriculture workers plantation operated under little or no labour right protection for workers. Migrant workers and their remittances offer vital sources of economic contribution to the households' functioning, coping mechanism in time of shock (agriculture and health) or meeting debt repayment schedule. Therefore, any shock/change occurs to the security of their occupations greatly impact on their own survival and those depending on their remittance.

Table of Content

EXECUTIVE SUMMARY	3
Table of Contents	4
ACKNOWLEDGEMENT	5
ABBREVIATION	5
INTRODUCTION	7
SECTION I: BACKGROUND AND LITERATURE REVIEW.....	8
1.1 Poverty and Health in Cambodia	8
1.2 Healthcare Expenditure and Household Indebtedness	9
SECTION II: RESEARCH METHODOLOGY	11
2.1 Planning process and design of methodology.....	11
2.2 Tools for data collection	12
2.3 Sampling.....	12
2.4 Data Collection.....	12
2.5 Protection of identify of study respondents	13
SECTION III: KEY FINDINGS.....	14
3.1 Socio-economic characteristic of the surveyed household	14
3.2 Rice Production	16
A. Rice Harvest.....	18
B. Cost of Inputs Vs Outputs of rice production	19
C. Support from government and NGOs on farmer in rice production.....	22
3.3 HOUSEHOLD INDEBTEDNESS	24
d. Loan taken to use for healthcare treatment	30
e. Healthcare Utilisation	31
3.4 Impact of debts and the household’s coping mechanism.....	35
PART IV: DISCUSSION AND CONCLUSION.....	36
Reference	41
ANNEXTURE	43

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ABBREVIATION

AEC	Action for Environment and Communities
CC	Commune Council
CCWC	Commune Council in charge of Women and Children
CMA	Cambodia Microfinance Association
COFAP	Cooperation for Alleviation of Poverty
DoAFF	District office of Agriculture, Forestry and Forestry
HC	Health Centre
HEF	Health Equity Fund
IFACD	Independent Farmer’s Association for Community Development
MB	The Messenger Band
MFIs	Micro-Finance Institution
MoH	Ministry of Health
NIS	National Institute of Statistics
OD	Operational District
OOP	Out Of Pocket payment

RH	Referral Hospital
SAC	Social Action for Change
WAC	Womyn's Agenda for Change
WNU	Women's Network for Unity

Note: (n) number – represent a unit of household interview in the survey.

The exchange rate used in this report is USD 1 = 4,000Riel

Kor Yun: Agricultural machinery used for ploughing, loading and transporting goods. It is commonly used in rural setting with difficult road condition.

INTRODUCTION

Social Action for Change collaborated with local farmers’ association, community’s network and none-governmental organization namely the Action for Environment and Communities (AEC), the Messenger Band, Women Network for Unity (WNU) Independent Farmers’ Association for Community Development (IFACD), Phnom Kuk Network under the overall leadership of an independent researcher produced this research report. The research aimed to understand the level of debt due to healthcare costs amongst the surveyed households in rural communities in Prey Veng and Kampong Chhnang provinces and gain insights of the challenges faced by households who are indebted and their coping mechanism particularly with regards to healthcare and agriculture production. It also looks to understand the role and policies governing the operation of MFIs and commercial bank in Cambodia.

“Understanding Debt Situation and Access to Healthcare Services among Rural Households in Cambodia” study is produced as an awareness raising material for farmers associations, communities’ networks and those who work to advocate for the universal access and adequate health services, addressing the issue of rural debt and access to fair market of small scale farmers. This report is also expects to be served as tools to create platform for dialogue between communities and local authorities, and relevant ministries and institutions.

The report is structured into four parts. The first part is an overview of the existing literature on healthcare expenditures and debt situation in Cambodia. The second part explains the methodology employed in the study. The third part covers the key findings from the study which is divided into five sub-sections: socio-economic characteristic of the households; rice production; household indebtedness; impact of debts and the household coping mechanism. The last part presents a discussion and conclusion of the study.

SECTION I: BACKGROUND AND LITERATURE REVIEW

1.1 Poverty and Health in Cambodia

In the 2013 Human Development Index report, Cambodia ranked 138th among 187 countries and UN recognized territories (UNDP 2013). Economic grew at 7.2% in 2013 compared to 6% in 2010 (ADB 2014). Yet poverty remains a prevalent issue particularly in the rural Cambodia. The World Bank report indicates that the population lives below the absolute poverty line declined from 50.1% in 2007 to 22.1% in 2010 (Bank 2014) and the rate dropped further to 19.8% in 2013 (UNDP 2014). Yet, in the last decades, there is a growing disparity in wealth and incomes between the urban and rural, exacerbating the economic inequality among the population in Cambodia. Approximately 80% of the total population (14.68 million) lives in rural area, relying mainly on subsistence agriculture and rice cultivation (NIS 2009).

Prior to 1996, access to healthcare was officially free for Cambodian people. The government subsidized the provision of health services and people regardless of their economic status could access the services. However, service supply was limited and under-the-table charges were common. In the mid-1990s, a health sector reform was initiated which aimed to expand health infrastructure coverage, improve management, and find ways to finance the health service delivery and quality services. In 1996, a Health Financing Charter was adopted and the right to charge a scheduled user fee at public health facilities was approved (MoH 1996). User fee system was introduced by the World Bank as part of the loan conditions for Poverty Reduction Strategy Paper (PRSP), formerly Structural Adjustment Program (SAP), in poor countries in Africa in 1980s or Cambodia in late 1990s. In Cambodia, by 2008, user fees were implemented in almost all government health facility (MoH 2009). Studies that look at the impacts of user fees on quality and utilisation of services indicate that the poor segment of the population has limited access to health services (Akashi, Yamada et al. 2004, Jacob and Price 2004, Annear, Wilkinson et al. 2006) and financial cost remains one of the key barriers preventing poor people to access healthcare (Annear, Wilkinson et al. 2006).

At the national level, total health expenditure for 2012 was 763 million dollar, representing more than 5% of the Gross Domestic Product, or USD 52 per capita per year (MoH 2012). Of this, private out-of-pocket (OOP) expenditure accounted for 61% (or USD31.72 per person per year); government spending represents 15% (or USD 7.8) per capita per year. This OOP spending in Cambodia is among the highest in Asia and is one cause of catastrophic health expenditure. The burden of healthcare costs on individual household can be so great. An Oxfam study in 2000 revealed that cost of healthcare contributed to an emergence of landlessness in Cambodia (Biddulph 2000). Another study conducted by United Nations Development Program (UNDP) found that on average about 20% of household loans is spent on healthcare (UNDP 2004). Healthcare expenditure is an important determinant in explaining poverty at the household level in Cambodia, particularly among poor family in Cambodia. It acts as a cause and consequence of poverty.

Since 2000, initiated by the international NGOs, a subsidized scheme called Health Equity Fund (HEF) was piloted for the poorest population to access healthcare treatment at the state facility. HEF is a third party payment where poor households are paid for healthcare services they use and the associated cost (food, transportation) during hospitalization. HEF remarkably gained ground and scaled up to cover the health centre (HC) and referral hospital (RH) all over Cambodia. In 2007, the Royal Government of Cambodia began allocating state budget for HEF scheme in state facilities.

By 2012, HEF covered 46 RHs (out of 86 RHs) and 313 HCs (out of 1,024 HCs) and provided access to healthcare services for 78% of the eligible poor under the national poverty line (MoH 2012).

1.2 Healthcare Expenditure and Household Indebtedness

One analysis of household financial coping strategies related to healthcare expenditure in developing countries ranges from the use of saving, reduce consumption, borrow from relative and friends, sell assets, and obtain loan (Sauerborn, Adams et al. 1996). A review of household coping strategies related to catastrophic health expenditure demonstrates the association between cost of healthcare and borrowing patterns: households are more likely to take loan to cover the high cost of inpatient care (Leive and Xu 2008). The inability of poor households to have available cash to pay the direct medical cost in Cambodia translated into a decision not to seek care (Khun and Manderson 2008).

The pattern of coping strategy found in Cambodia is determined, to a certain extent, by the nature and cost of the treatment needed. The Cambodian Demographic Health Survey (CDHS) in 2000 revealed that Cambodian household sells productive assets such as land or animals, used savings, or turned to borrowing money to cope with the cost of healthcare (NIS 2000). However, the characteristic of these coping strategies deserves a closer investigation in the context of understanding poverty because, according to a study by VanDamme et al. (2004), even a modest level of health spending could cause indebtedness and lead to poverty in the household. They found that 62% of people who borrowed to pay for dengue treatment of their child still repay debt one year after (VanDamme, Leemput et al. 2004). The availability of cash in the rural household is limited and access to credit is problematic for the poor families (Kassie 2000). Credit is mainly obtained through micro finance institutions (MFIs) or private moneylenders, in which monthly interest charge could be as high as 10% for the later (VanDamme, Meessen et al. 2003). This causes some households to not be able to repay the loan capital and interest without having to sell their productive assets following a health shock (Khun and Manderson 2008).

Resorting to selling productive assets such as land or draft animals to cover healthcare spending or repay loans used for healthcare is common. In fact, a major cause of indebtedness among rural household in Cambodia can be attributed to catastrophic healthcare expenditure (Kassie 2000). A health shock from illness such as dengue fever (which is common and widespread in rural areas) could result in greater financial burden in the household. Patterns emerged from a number of studies of dengue fever treatment repeatedly reveal that households are pushed into borrowing money to meet the direct medical cost (VanDamme, Leemput et al. 2004, Khun and Manderson 2007, Khun and Manderson 2008, Huy, Huy et al. 2009, Julienbeaute and Sirendavong 2010). The burden of dengue treatment alone constitutes 78% of total cost and 63% of direct medical cost, in which household's out-of-pocket (OOP) payment accounts for 65% to 80% of the direct cost of dengue treatment between 2006-2008 (Julienbeaute and Sirendavong 2010). While poor households are faced with a greater need to borrow money more frequently (Huy, Huy et al. 2009), they have more limited access to credit and loans, making them more likely to adopt a wait-and-see behaviour toward treatment (Khun and Manderson 2007, Khun and Manderson 2008). Direct medical cost was reported as a major reason why women decline to seek institutional delivery; the perceived cost was greater than a quarter of the monthly household expenditure (Matsuoka, Aiga et al. 2010).

The connection between healthcare indebtedness and landlessness is a feature of the vulnerability of rural households and a major cause of falling deeper into poverty. A survey in two villages about the economic impact from a health shock points out that failure of the (rice) crop does not cause such severe economic damage to a rural household in Cambodia as does a health shock (Kenjiro 2005). Healthcare expenditure contributes to the household's decision to sell productive assets (NIPH and NIS, 2000); 60% of landless households interviewed reported they used to own land and subsequently sold it to meet the cost of illness (Biddulph 2004). In one study, the cost of medical care was the main reason for 36% of borrowing activities found in a study amongst 240 families (WAC 2004). Household debt acts as a factor forcing households to subsequently sell productive assets including land and draft animal to cover the healthcare cost (Kenjiro 2005, Khun and Manderson 2008).

A large-scale baseline household survey was carried out among 5,323 households in Cambodia through the Domrei Research and Consulting Company in 2011. The study employed a rigorous quantitative design to look at household health related debt, health shock among other themes. The findings reinforce evidence from previous studies regarding the severity of household indebtedness. Seventy-three per cent of the surveyed households experienced a single health shock in the preceding 12 months; 65% did not have any cash savings and over half of surveyed households were currently indebted. Forty-six per cent of loans taken were for medical cost. Strategies used to cover the treatment cost include use of available cash (42%), borrowing money (26%), and selling an asset. Healthcare cost was reported as the cause of the first, second, and third loan taken (Domrei Research & Consulting 2011). In addition, an assessment of the impact of the 2011 flood among 390 households found debt as an emerging and significant problem for poor communities. Prior to the 2011 flood, 63% reported to have existing debts; MFIs represented the principle source of first loan among surveyed households. Consequently, about 48% of households reported they had taken new loans as a direct result of the 2011 flood, predominantly from MFIs. These new loans were reported to have been used for agriculture inputs, food and to repay existing debt (CARE 2012). The evidence from these various study confirm the slippery edge where household could easily fall into debt shall a single shock, be it health shock, crop failure or natural disaster occurs. In this propose study, we aim to investigate deeper how the healthcare treatment and agriculture inputs contributes to the debt situation among rural household.

SECTION II: RESEARCH METHODOLOGY

In order to meet these objectives, both quantitative and qualitative methods were utilised. The following section details methodology employed in this research.

2.1 Planning process and design of methodology

- A. **Research Team:** a research team was formed consisting ten members represents five institutions: Community Legal Service/Women's Network for Unity (WNU), The Messenger Band (MB), Phnom Kuk Network, Independent Farmers Association for Community Development (IFACD) in Prey Veng, Social Action for Change (SAC), a research assistant, and the researcher. Most members have strong and diverse grassroots experience which contributes significantly to their understanding of the rural household situation. The research takes into accounts process which facilitates confidence and knowledge building for the research team, and in this regard, they are actively engaged in the processes and analysis of findings.
- B. **Research location:** Due to existing working collaboration, SAC chose Kampong Chhnang and Prey Veng provinces as study sites. In Kampong Chhnang, SAC collaborated with AEC and Phnom Kuk Network¹ and in Prey Veng, COFAP and IFACD facilitate in the field data gathering. Table 1 detailed the location of the six villages where data was collected.

Table 1: Location of villages covered in the study

Province	District	Commune	Village
Kampong Chhnang	Boribo	Pich Changva	Tang Tropeang
		Tropeang Chhann	Sanlang
Prey Veng	Ba Phnom	Beoun Preah	Ang Krorng
		Beoung Preah	Ta Chey
	Svay Antor	Damrei Purn	Banteay Sreh
		Damrei Purn	Tropeang Pring
Total	3	4	6

- C. **Research Training:** The research team received one-day training on the overall aspect of the research and key tools used in the training. The questionnaire was thoroughly discussed to understand the logic of each question. Following the training, the questionnaire was field-

¹ Phnom Kuk Network is a grassroots network which focuses on community advocacy on land rights, forestry and access to natural resources. The network is actively working on these issues in Kampong Chhnang and Pursat provinces where Phnom Kuk (literally *Prison Mountain*) locates.

tested amongst ten (10) households in two villages in Kampong Speu province. After the test, there was minor modification to the questionnaire.

2.2 Tools for data collection

The data collection happened at two stages. In stage I, a questionnaire consists eighty (80) structured questions was developed (see Annex I). The questions are pre-coded, with multiple choices and short answers. The development of the questionnaires took into account the tools used in previous researches such as that of the baseline survey of Damrei Consulting Firm² to ensure there is no overlapping of inquiry already answered through previous studies. In stage II, a qualitative data was collected through in-depth interview with families and stakeholders. Guide questions were developed following a one-day workshop of the presentation on the preliminary results of stage I. The team collectively analysed and formulated questions to explore the trend of the results. Please refer to Annex II for guide questions used in interview with stakeholders and household.

2.3 Sampling

In stage I, the research employed a purposeful sampling technique to gather data. In each village, the selection process is carried out as follow:

Stage I: Rapid Assessment

- a. The researcher obtained the statistic of the total population in each village from village chief.
- b. At least 10% of the household in the village population is selected for the rapid assessment.
- c. The household is selected based on convenient: they are available and agree to meet for interview.

Stage II: In-depth interview: A cross tabulation was performed in SPSS database to identify household for in-depth interview. At least, three households were selected from each village if they are: a) currently in-debt; b) experienced in-debt due to borrowing to pay for healthcare treatment.

A total of 133 households were surveyed in stage-I. Twenty-two households who participated in the stage I were in-depth interviewed in stage II. In addition, the research team interviewed local authorities (village leader, commune chief, CCWC), official of Department of Agriculture, Forestry and Fishery in each district, health authorities, representatives of Bank/MFIs, informal credit providers and saving group and local informants. Please refer to Annex III for list of stakeholders.

2.4 Data Collection

- **Secondary data collection:** A desk review was carried out to gather the existing literature on healthcare expenditures, and rural debt. The review of existing studies helps in the process of formulation of research questions.

² Domrei Research and Consulting, 2011. SKY 2008 Baseline Study.

- **Primary data collection:** Stage I of the rapid assessment took place in Kampong Chhnang and Prey Veng provinces in February 2014, respectively. Stage II of the in-depth interview (with household & stakeholders) took place in Kampong Chhnang in the end of April and in Prey Veng in early May 2014.

Table 2: Number of household by village

Province	Village	HH surveyed	HH in-depth interview
Kampong Chhnang	Tang Tropeang	17	2
	Sanlang	30	3
Prey Veng	Ang Krorng	28	4
	Ta Chey	28	5
	Banteay Sreh	19	3
	Tropeang Pring	11	5
Total	6	133	22

- **Computing the data:** The data obtained through the questionnaires is computed into the database using the SPSS software program. There are a total of 311 variables created to store the information. All data in the questionnaires are computed, cleaned and analysed statistically. The research assistants are in charge of computing the data with direct supervision from the researcher. Data from in-depth interviews are typed based on individual interview.

2.5 Protection of identify of study respondents

All respondents gave verbal consent for the rapid assessment through questionnaire and written consent to the in-depth interviews. All names of respondents used in this report are made up in order to protect the real identity of the study participants. Refer to Annex IV for consent form.

SECTION III: KEY FINDINGS

This section reports key findings from the rapid assessment and household in-depth interviews. It is divided into four sub-sections: socio-economic characteristics of the surveyed household; rice production; household indebtedness; and impact of debt and the household's coping mechanism.

3.1 Socio-economic characteristic of the surveyed household

a. Characteristics of Respondents

The research interviewed a total of 133 households through household survey; 22 households who were part of the survey were in-depth interviewed). Among the 133 households, 106 respondents are women and 27 are men. In figure 1, it classified respondents by age group. The mean age of respondents is 46.9 years old with the youngest respondent is 17 and the oldest respondent is 85 years old. The respondents in the 35-50 years old age group and over 50 years old represent the highest proportion of respondent in the study, 35% and 38% respectively.

Figure 1: Age of Respondents

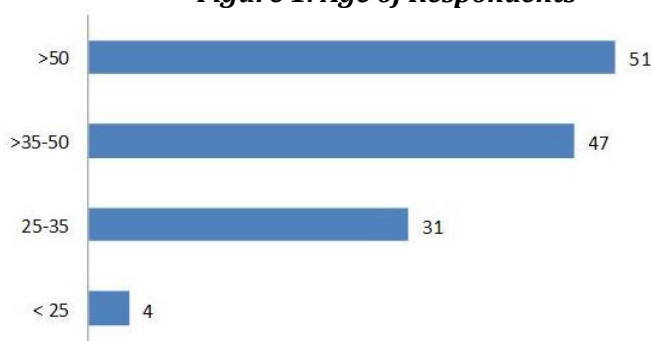


Table 3: Total number of family members

Sixty-two per cent (n=83) of surveyed respondent have between 5-10 members in their family. Notably, only one household has over 10 members in the family. Table 3 details the percentage of surveyed population by family member.

Family members	# HH	Percentage
< 5 persons	49	36.8%
5 - 10 persons	83	62.4%
> 10 persons	1	0.8%
Total	133	100%

b. Possession of House and Land

Ninety-seven per cent of the surveyed household (n=129) have residential land in the village where their houses situated and 3% (n=4) did not. The finding reveals that for those households who currently do not have residential land, they are living with relatives or children. There are 5% of

household (n=7) who own two plots of residential land and only one household who own three plots of residential land.

Figure 2: Possession of residential land

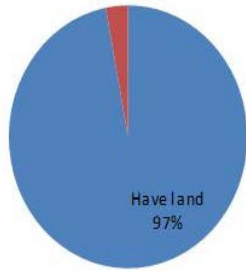


Figure 3: Types of house of respondents

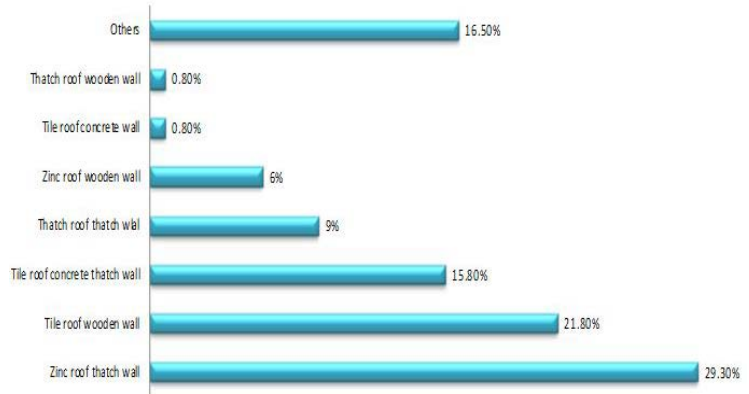
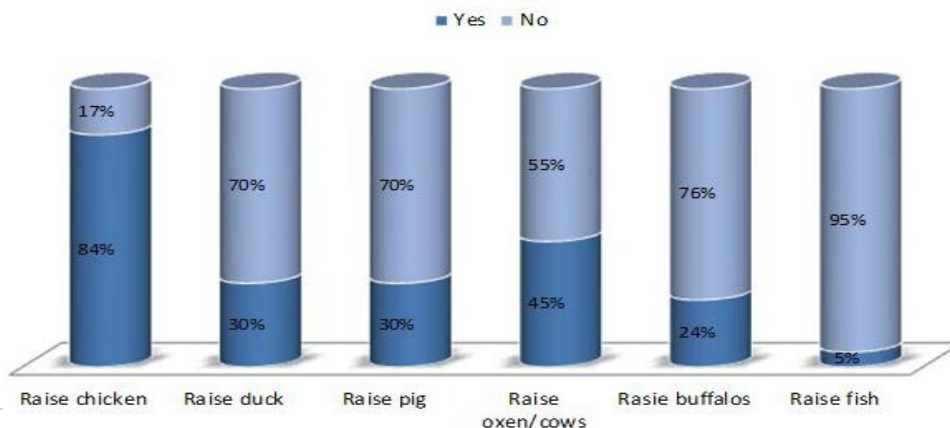


Figure 3 classified the respondents' houses by types. As the bar chart shows, the house with zinc roof and thatch wall accounts for 29.3% (n=39); house with tile roof and wooden wall represents 22% (n=29); and the houses with tile roof and concrete wall represents 16% (n=21) of the surveyed households. According to the general observation, there are many newly built houses in villages especially in Prey Veng. However, there are few family members living in those houses except the elders and children; many adults have migrated to Phnom Penh, other part of Cambodia or Thailand for work.

c. Source of Family Income

Ninety-six per cent (n=127) of family surveyed do rice farming as the main source of income; the remaining household who did not farm is due to no or possession of small plot of farm land. Besides rice farming, animal raising, seasonal migration works in construction, factory or plantation inside Cambodia, along the border with Thailand or inside Thailand constitute a vital source of additional income for the family. With regards to animal raising, as shown in figure 4, 84% (n=112) of surveyed households raise chicken; 45% raise oxen/cows; duck, pig and buffalos accounts for 30% or less.

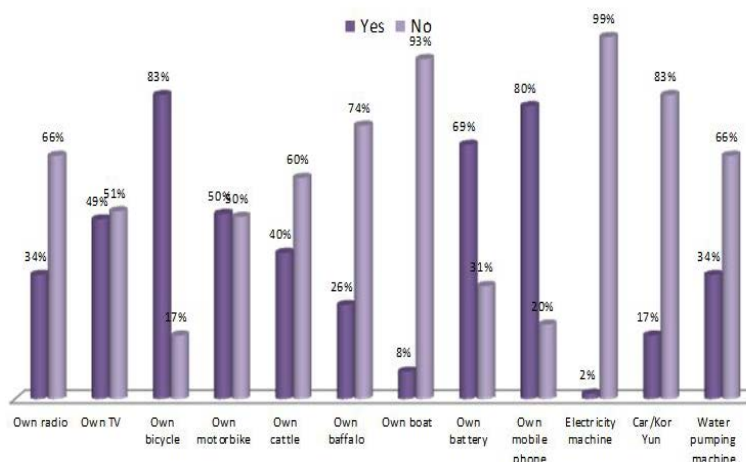
Figure 4: Animal raising in surveyed households



d. Family’s Assets and Saving

Figure 5 summarizes the asset list the surveyed household possesses at the point of the assessment. The common assets owned by majority of surveyed household include bicycle (83%); mobile phone (80%); battery (69%); motorbike (50%); television (49%). The remaining list of asset such as radio, cattle, boat, *Kor Yun*, or water pumping machine are generally owned by less than 40% of the surveyed household.

Figure 5: Family Assets



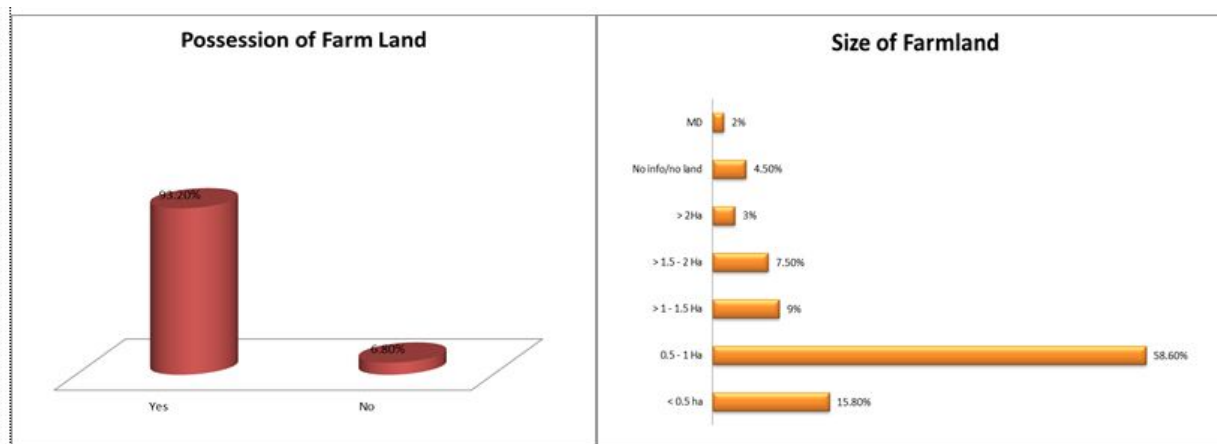
Regarding family’s saving, as a mechanism to cope with shock incidence, about one third (36%, n=48) of respondents in the survey reported they have some kind of saving. Some respondents especially those from villages in Kampong Chhnang engaged in community saving group which save small amount of money on monthly or quarterly basis. The amount of saving varies with the smallest amount being 4,000R (1USD) and the largest saving being 4,000,000R (USD 1,000). The researcher encounters difficulties in obtaining precise amount of saving each household has for reason of private information. We explore further as to whether the surveyed households are able to provide loan to needy family shall they have saving. Only 7.5% (n=10) of respondent reported they are able to provide small loan if they are approached.

Respondents in this study are mainly rice farmers who depend on incomes from rice harvests and remittance from migrant works to supplement the day-to-day expenditures and any incidence of shock the family faces. A small proportion of households among the study population operate small business such as grocery stores, collecting and selling firewood, wage labourer, or cake/food selling in the village.

3.2 Rice Production

According to survey result, see figure 6, 93% of the respondents currently own plot of farm land and 6.8% do not own any farm land. Fifty-nine per cent of respondents who own farm land have the plot between the sizes of half-hectare to one hectare. Nearly 16% of respondent have farm land less than half a hectare. Only four households in the survey own more than two hectare of farm land. With the great majority own small plot of land for rice farming, it has a strong impact on the ability of the families to get sufficient rice to feed themselves, as will be later discussed.

Figure 6: Possession of farm land



Ninety-four per cent of households surveyed grew rice in the last rice growing season. This corresponds to the proportion of family who currently own plot of farm land. Among the respondents who grew rice in the last rice growing season, 34.6% (n=46) reported that they keep all rice paddy for family consumption; however, 60% (n=80) reported they kept some amount of rice paddy for family consumption and sell some. For respondents who reported to sell their rice paddy in their last harvests, the price they could get range from 700R to 1,400R per kilogram, depends on the types of rice. Notably, the price of local rice seeds is generally cheaper than the type of rice promoted by the Cambodian government for the purpose of rice export such as Rumdul rice.

Box I: Ten types of rice promoted by RGC

Short term: Sen Pidor, Chulsa, IR 66

Medium term: Pkar Rumdul, Pkar Romeat, Pkar Chan Sensor, Pkar Rumdeng

Long term: Reang Chey, Kha 4, Kha 6

Source: (Chan 2011)

With the government's vision focuses on exported-oriented paddy and milled rice, the RGC identified and published a list of 10 types of rice seeds it encourages farmers to produce. These types of rice are popular on the international market and can be produced between three to six months to harvest the rice yield. (See box 1 for types of rice promoted by government). According to interviews with key informants, these types of rice are promoted for farmers to produce; however, given the limited funding from the DoAFF to carry out the agriculture's promotion works (discuss in subsequent section) the extent of the awareness remains not wide enough h farmers. Some farmers interviewed in the study appears to recall few types of rice such as Rumdul or Kha 4, Kha 6 that they shifted to grow more while others do not aware at all. The potential loss of traditional seeds over the newly introduce seeds were raised during interview district staff of DoAFF in which it was commented that the traditional rice seeds are vulnerable to weather conditions, low rice yield. The Cambodian government encourages farmers to grow the ten types of rice seeds along with agricultural techniques promoted by MAFF/DoAFF.

A. Rice Harvest

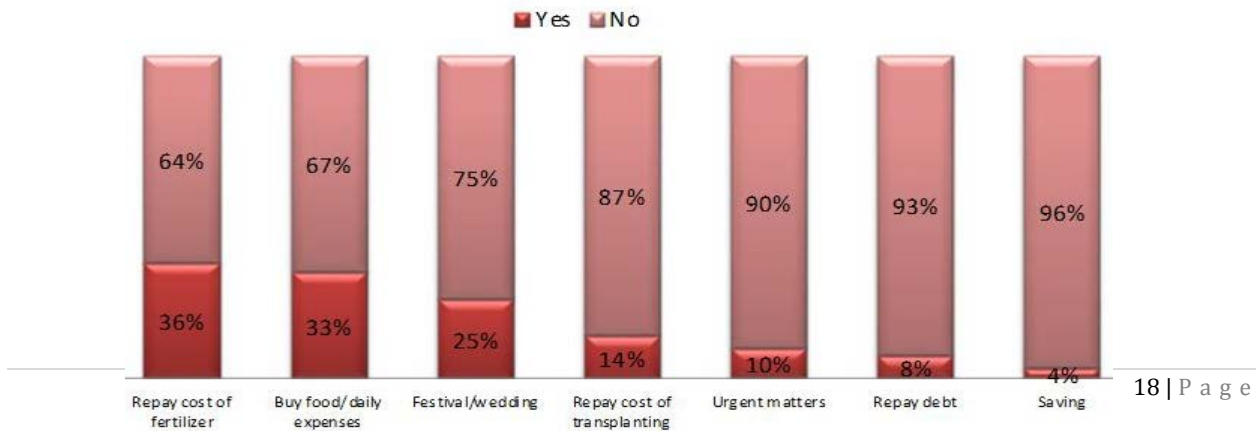
Only, 42% (n=56) of respondents reported that the rice yield they harvest is sufficient to feed the family throughout the year; 53% (n=70) reported it is not. Among households reported that the rice paddy is not sufficient, 18% (n=24) confirmed they could consume the rice for up to six months; 16.6% reported it lasts between 7-9 months. When the rice paddy is consumed, family reported they depend on incomes from wage labour on the rice field or construction site or remittance from family members to buy white rice to eat.

We have 0.5Ha of rice field in which we grow rainy season rice. In 2013, we collected approximately 50-60 buckets, roughly 1,100Kg, of rice paddy. I decided to keep all the harvest for family consumption. Yet, this amount is not enough until we harvest again. There is a rice shortage for 2-3 months in my family and I depend on my daughter's remittance for her factory work to buy rice and food. She usually sends USD 50 a month if she is not sick. Interview with Sokha, May 8th 2014. Prey Veng.

While keeping rice harvest for consumption is vital for self-sufficiency, the situation in each household does not always allow this. A significant number of household in the survey and in in-depth interviews reported they are forced to sell a considerable portion of their rice harvest in order to repay the cost of agricultural inputs, such as chemical fertilizer, harvest machinery fees, or labour cost. This is reported by 36% (n=48) of respondents as the purpose of the utilization of money from rice selling (see figure 7). Some 33% (n=44) of respondents reported they spent the money on food/daily expenses and 8% said they use the money to repay existing debt. Buying chemical fertilizer on credits means an increase of approximately USD 5-10 per sack compared to buy with cash. It is observed that respondents from surveyed villages in Kampong Chhnang tend to keep the rice paddy for household consumption rather than selling compared to Prey Veng. It is repeatedly reported that, in the four villages in Prey Veng province and surrounding villages, there are two broad types of buyers of rice paddy. Firstly, it is the Vietnamese buyers who have the local Khmer middleman facilitate the purchase. Usually, the Vietnamese buyers will come during harvest season to check the quality of rice paddy (size of grain, humidity) before decide about the purchase.

"We are farmers. So when the buyers say that the price (of rice paddy) is 700R or 800R (per kilogram), we sell because we do not know where we can bargain to get higher price, with who? Even though we do not wish to sell at this price, we force ourselves to sell because we already promised the (fertilizer) seller that we would repay them," said the husband of Sinurn, May 5th 2014, Prey Veng.

Figure 7: Use of Money from rice selling after harvest season



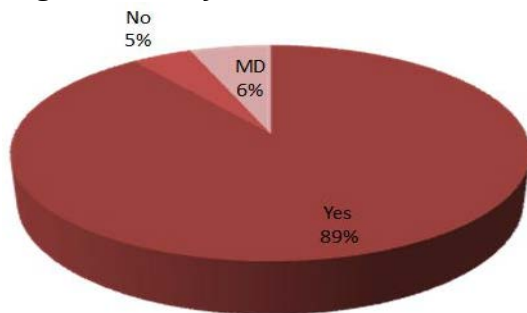
The Vietnamese buyers generally offer the price higher than that offered by Khmer rice traders. The local Khmer middleman who facilitates the process takes commission for each kilogram of rice bought by the Vietnamese, as expressed by local informant below. Contrary to the Vietnamese buyers, Khmer rice traders buy the rice paddy from local farmers at lower price even for the same type of rice. Therefore, farmers prefer to sell rice to Vietnamese buyers when possible. This is reaffirmed by farmers who experienced selling rice paddy in the last harvest season.

“This year, I observe that farmers grow rice more than previous year because there are people from other regions buying the rice produced in this community. They said it tastes nice. However, usually we have the middlemen who come to buy rice directly from farmers. The (Vietnamese) boss leaves the money with middlemen to buy rice and they take profit from this transaction. For instance, if the middleman buy rice paddy at 830R/Kg, they sell to Vietnamese traders at 850R/Kg. The local trader buys the rice paddy at cheaper price than the Vietnamese one, often to mill the rice and sell locally.” (Interview Village Chief, Prey Veng, 14th February 2014).

B. Cost of Inputs Vs Outputs of rice production

In this section, the presentation of the findings of agricultural inputs of rice production focuses on the use of chemical fertilizer, rice seeds and other cost associated with hiring labour/machinery to work on the rice field. This will be discussed in comparison to the output of rice paddy collected at harvest. In all the villages where the survey took place, majority of respondents reported they have used chemical fertilizer in their last year rice growing. As shown in figure 8, 89% (n=113) of respondents confirmed they used chemical fertilizer in last year’s rice growing season. The survey could not precisely detect the amount of chemical fertilizer used in each plot of rice field reported by the farmers in order for the research to determine the appropriate usage of chemical fertilizer because farmers depend on recall memories when reporting the quantity. Nevertheless, data indicated the trend of the amount and price of chemical fertilizer has increased in the last five years in the surveyed villages, as reported by 74% of respondents (see below). According to respondents, the breakdown unit of the increased cost (see table in Annex V) reveals that the cost increased between 11,000-20,000R (USD 2.75-5) per sack (of 50 kg), claimed by 36% of respondents while the increased unit of USD 5.25 – more than USD 10 was also remarkable.

Figure 8: Use of Chemical Fertilizer in rice growing



“Nowadays, if we do not use chemical fertilizer, we cannot catch up with others because everyone is using it. Farmers cannot stop using natural fertilizer but they must use chemical fertilizer. Therefore, even though they do not have money, they would be willing to buy on credit from the Chinese-Cambodian seller. However, without sufficient water even one puts a lot of fertilizer, the yield is still not good.” Interview Village Chief, Prey Veng, 15th February 2014.



Types of pesticides sell on a market store in Ponley town in Boribo district.

Photo by: Socheata Sim / April 28th 2014

Figure 9: Trend of chemical fertilizer cost in last 5 years

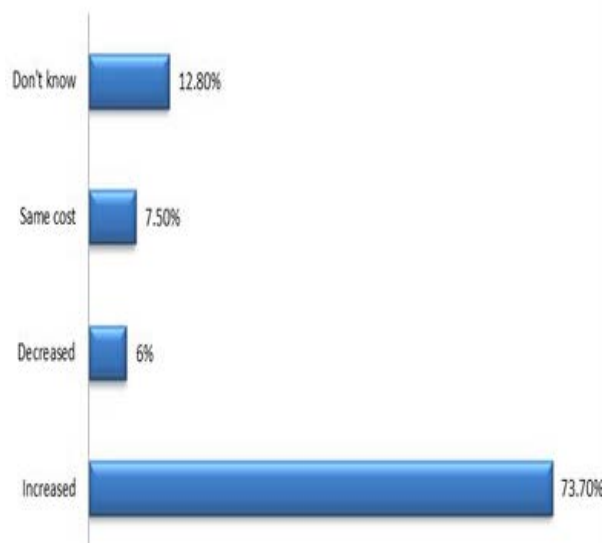


Table 4: Break-down of increase cost of chemical fertilizer

Amount of increment	Frequency	Percent
< 10,000R (USD 2.5)	9	6.8
11,000 – 20,000 R (USD 2.75 – 5)	48	36.1%
21,000 – 30,000R (USD 5.25 – 7.5)	14	10.5
31,000 – 40,000R (USD 7.75 – 10)	16	12%
> 40,000 (> USD10)	14	10.5%
Don't know/MD	32	24.1%
Total	133	100%

"...Currently, I use 8 sacks of chemical fertilizer on my (2Ha) field compared to only 5 sacks seven years ago. I use lesser amount of chemical fertilizers because I put some cow dung. The cost of the fertilizer has increased significantly from year to year. For instance, a sack of chemical fertilizer used to cost 70,000R to 90,000R now costs 110,000R to 130,000R. This is the price bought with cash in hand. If I buy it on credit, the interest rate is 4% a month of the total cost..."
 Interview with Sophy, May 9th 2014, Prey Veng.

Notably, the respondents also observed that the price of chemical fertilizer this year appeared to remain at the same cost as the year before for some types of fertilizer. However, they confirmed the cost did increase significantly in the last five years. When exploring the way farmers purchase chemical fertilizer for their rice farming, it varies. As table 5 demonstrated, only one third of all respondents (37.6%) reported they bought chemical fertilizer by pay cash on hand; nearly half of respondents (44.4%) reported they buy on credit and pay after rice is harvested. This last option is a condition by which rice farmers find themselves in a situation whereby they have to sell their rice harvest to repay debt owed on agricultural input cost. This compulsory selling of rice means that farmers would be willing to accept the price of rice that traders offer as there is not much opportune time for them.

Table 5: Means of purchasing chemical fertilizer during farming season

Means of purchasing	Yes (%)	No (%)	MD
Owe and pay after harvest	59 (44.4%)	65 (48.9%)	9 (6.8%)
Pay by cash immediately	50 (37.6%)	73 (54.9%)	10 (7.5%)
Pay some and owe some	12 (9%)	112 (84.2%)	9 (6.8%)
Borrow money to buy	---	124 (93.2%)	9 (6.8%)

Three types of chemical fertilizer commonly mentioned by farmers in the study.

Photos by the Research team, March 2014



Moving from one interview to another, the research team continue to hear farmers stressed on the increasing price of agricultural inputs especially chemical fertilizer, cost of hiring human labour or machinery to plough, harvest, or separate rice grain and other associated cost such as transporting rice paddy from field to their homes. During field work, whenever possible, the researchers collected detailed cost of each unit price of inputs that farmers spent and the rice yield they collected and made the calculation with the family about input cost and the output of rice paddy.

The equation is always heavier on investment of inputs compared to outputs, particularly in time when the price of rice paddy is not guaranteed by the state during the harvest season. Yet, farmers reported to continue this traditional task they have been doing for generations for a very simple reason: "As farmer, you are growing rice no matter what rice yield you get." Box II provides an example of the calculation of input and output unit price of rice growing. The following quotation is the comment from a village chief under the study.

Box II: The expenses on the dry rice growing (2013) for rainy season rice growing in a 0.50Ha of rice field	
Unit of expenditure on inputs	Amount (Riel)
Chemical fertilizer – 2 sacks (American 150,000R; URE – 130,000R)	280,000R
Labour wage for transplanting (the cost is cheaper at the time) – one day is 12,000R/person/day + two meals	600,000R
Transportation cost for the family to go to the farm – on Kor Yun with uncle – 20l x 4300R	86,000R
Hire the machine to harvest***	250,000R
Cost of diesel to pump the water into the field = 3 containers (30l x 130,000R)	390,000R.
Cost of pesticide, weeding pest	300,000R
Total cost of inputs spent:	2,106,000R
Total amount of rice paddy sold (2 tons)	1,400,000R.
And 500 Kilograms of rice paddy kept as rice seeds and consumption	
*** The cost is 350,000R per hectare) because the owner of the machine asked to stay at the huts during the harvest season. The owner is from Battambang province.	
(Interview with Sina, Kampong Chhnang, April 29 th 2014)	

"There is no balance between cost of rice sell after harvest season and the inputs we invested in. I notice some farmers stop growing rice and migrate to find works in Phnom Penh or elsewhere. Simply because rice farming makes them owed a lot of money; they have to buy fertilizer and pesticide and hire machinery for ploughing and transplanting. Ploughing costs 180,000R per hectare and harvesting of 1Ha of rice field costs between 300,000R-350,000Riel. But the price of rice is from 700R/Kg up to 930R/Kg depends on different type of rice." Interview village Chief, Prey Veng, 15th February 2014

C. Support from government and NGOs on farmer in rice production

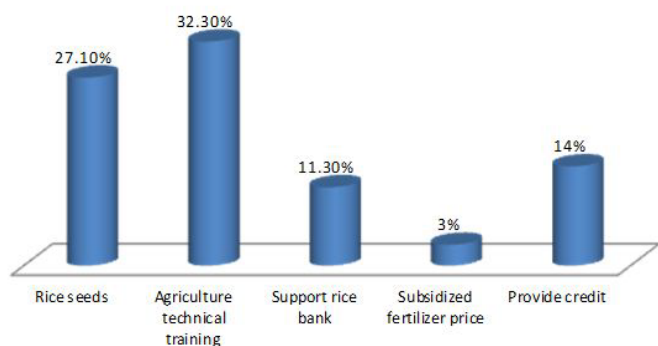
The *Policy Paper on The Promotion on Paddy Production and Rice Export* outlines the government commitment to realize the exportation of paddy rice at 1 million tons by 2015(Council of Ministers 2010). The policy document indicated a range of supports provided by national level government

body to farmers/rice producers and rice traders in order to enhance production. This includes the finance support/subsidy of seven million USD channeled from the National Bank of Cambodia to Rural Development Bank (RDB), eighteen million USD Agriculture Development Support Fund (ADSF) and provide support to the Rice Miller Association by the end of 2010/early 2011 (Council of Ministers 2010). While it is not the aim of this research to assess the adequacy of the government actual support to rice producers such as those covered in this study, the survey includes a range of questions to understand the types of support that small farmers receives from sub-national and local government bodies, and development actors.

Respondents in both provinces appeared to have very little awareness about the support/training provided by the government from sub-national level (province and district). There is only one respondent who confirmed to be aware that the District Office of Agriculture, Forestry and Fishery (DoAFF) provided technical agricultural training to farmers. Based on interviews with key informants from DoAFF, there are very limited activities that the district office provides in training or awareness raising to community as there is great challenges around lack of human and financial resources to support the activities. For instance, there is only one staff works in the DoAFF in Boribo district in charge of all the training and awareness raising activities. In two districts where key informants from DoAFF were interviewed, it indicates that they heavily depended on development partners program on specific agriculture programs. In Ba Phnom district, a PADEE project supported by the Royal Government of Cambodia through loan from IFAD involves the organization of farmers groups at village and commune level. The groups set up saving group, specific agriculture trainings and activities plan and capital support are provided for livelihood improvement in a three-year period. (Key Informant Interview, Prey Veng May 7th 2014.)

In the six villages where the survey took place, respondents reported they are aware of the support from development NGOs working in the areas. The findings revealed that NGOs that work in the areas largely provided agricultural technical training regarding system of rice intensification (SRI), vegetable planting, animal raising, livestock to community. This is indicated by 32% (n=42) of respondents. Other support includes provision of rice seeds (27%), provide credit at low (2% a month) or no interest rate, community rice bank (11.3%).

Figure 9: Support from NGOs to farmers



The presence of development NGOs is considered important because when they have program relevant to agriculture, they often collaborated with staff from DoAFF or NGOs with agriculture expertise. They raise awareness and provide technical training to rice producers. In some villages where this study took place, there are demonstrative farm, vegetable garden and chicken raising to improve the livelihood of poor families.

3.3 HOUSEHOLD INDEBTEDNESS

According to survey result, at the point of the assessment, 76% (n=101) of respondents are indebted. The average amount of debt is 3,103,413.50R (USD 775.85). While this average appears considerably high, it should be noted that the smallest debt amounts to only 5,000R (USD 1.25) while the largest debt is 40,750,000R (USD 10,187.5). Figure 10 indicates that amongst households reported to be indebted, the number of creditor/lenders they owe ranges from one to eight. Largely, 44% of indebted households owed to one creditor/lender and 18% owed to two creditor/lenders. Notably, nearly 13% (n=17) of surveyed households owed between 3-5 creditors/lenders for their current debts. Only one household currently owed eight different lenders, among which five are MFIs/banks and three are local lenders.

Figure 10: Level of debts and number of creditor/lenders

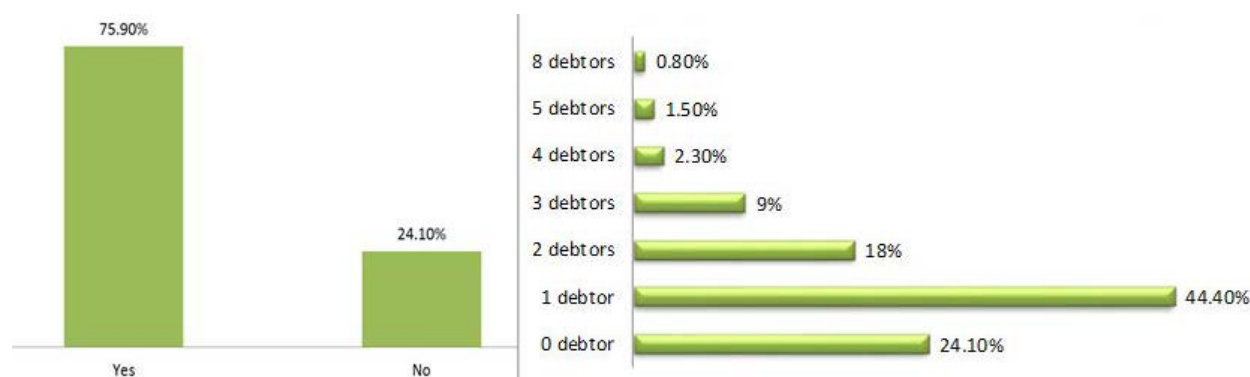


Table 6 provides the categorical amount of debt among surveyed households. Fifty-seven per cent of respondents reported to have debt amounting to less than a million Riel (<USD 250). Roughly 10% of respondents have a debt between one to two million Riel (USD 250-500) while 12% have a debt amount to more than six million Riel (>USD 1,500). Regarding the creditors/lenders, the findings illustrated that 32.3% of loan is from MFIs, 23.3% are from moneylenders, 17.3% are from relatives, and roughly 10% of credits are taken from ACLEDA Bank. Surveyed households took loans from MFIs namely Amret, AMK, VisionFund, CBIRD, Prasac, Thorneakear Phum, and Kredit (see Annex V for list of MFIs by province). Besides the formal credit provider, there are informal credit providers operate in the community, NGO's revolving fund and saving scheme, and local moneylenders.

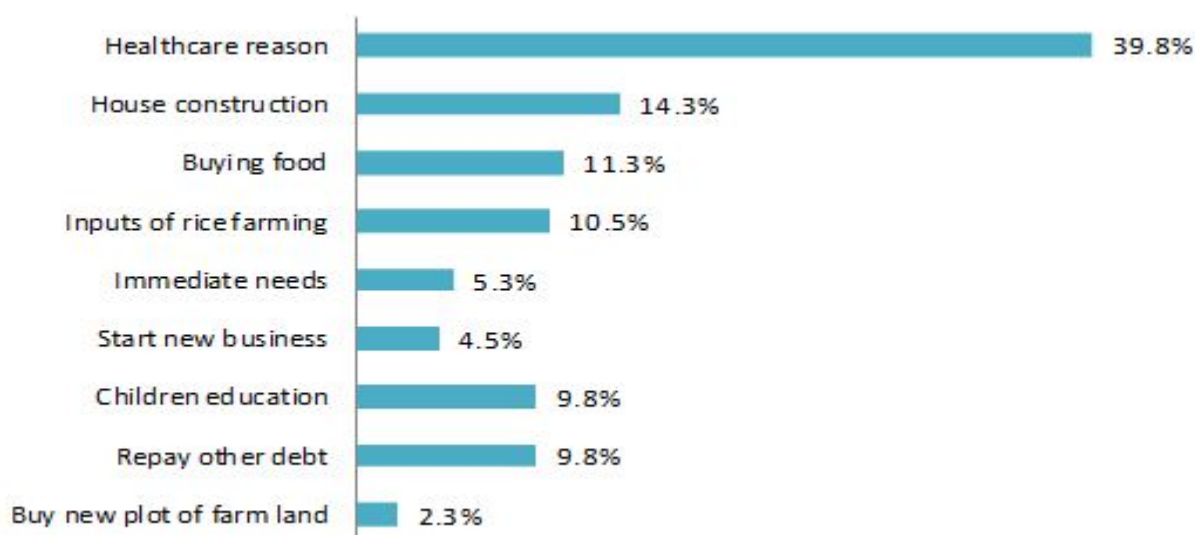
Table 6: Size of debt per household

Size of Debt	# of HH	Percentage
0 – 1,000,000R (<i>0 – 250 \$</i>)	76	57.1%
> 1,000,000 – 2,000,000 R (<i>> 250 – 500 \$</i>)	14	10.5%
> 2,000,000 – 3,000,000R (<i>> 500 – 750 \$</i>)	7	5.3%
>3,000,000 – 4,000,000R (<i>>750 – 1,000\$</i>)	11	8.3%
> 4,000,000 – 6,000,000R (<i>>1,000 – 1,500\$</i>)	9	6.8%

> 6,000,000R (>1,500\$)	16	12%
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In term of the use of loan, figure 11 indicated a large proportion of loan were reported by the surveyed household to be utilized for healthcare reason (40%), followed by house construction (14.3%), purchase of food (11.3%), and buy inputs for rice farming (10.5%). Nearly 10% (n=13) of households surveyed reported that they used loans to repay existing debts. Among the ten items reported by the respondents to have been used the loan for, only two items, start new business and buy new plot of farm land that appear to be for productive purpose. Other loan utilization is primarily for survival/unproductive purposes (buy food, healthcare treatment) and buying fix assets. This finding presents a critical point for consideration especially because healthcare reason represents the highest and single most important cost for household taking loan. This reconfirms the national figures whereby out-of-pocket expenditures born by the households are burdens for the people in access to healthcare services and could present a barrier once they do not have access to finance. Moreover, it is also an important consideration regarding the ability of borrowers to repay loan and interest rates back to creditors for such unproductive purpose use of loan.

Figure 11: Use of Loan by surveyed households



Type of loan utilized by surveyed households

Finding from this study demonstrates that there are three types of loan that households in the study utilize. These are a. loan provide by formal registered lending entities such as local bank (ACLEDA) and MFIs; b. loan provides by informal lending sources such as local money lender or unregistered creditor; c. loan from saving scheme/NGO program. There are some other loan types such as from relatives/family which usually charge no interest and serve more as social support to the needy family.

a. Formal lending creditors

The Cambodia Microfinance Association (CMA) indicates that until 2013, there are 37 registered-MFIs and 5 NGOs rural credit operators currently members of CMA; they operate throughout Cambodia (CMA 2014). All the MFIs operate in the study location are members of CMA. There are two types of loan that surveyed household generally take from available lending institutions: individual loan (required collateral) and group loan (not require collateral). A quick survey onto the websites of ACLEDA, Prasac, Amret, AMK, VisionFund indicates that monthly interest rate of individual or group loans, small business or agriculture loan fall between 2%-3% per month (except VisionFund which charges from 1.75% monthly interest for agriculture loans. This translates into 24%-36% a year. However, the larger the loan size, the cheaper the interest but this requires high value of collateral from the family. For purpose of business or agriculture investment, the profit generation or rice yield must be very high in order for a family to afford this level of interest rate. Box III indicates various interest rate of large amount of individual loan from 5 different sources of finance that one respondent took. As the case of this family illustrates, family in the surveyed villages resorts to take new loans in order to cover medical bills, buy fixed assets or meet repayment deadline of other loans.

Box II: Multi-loans as a mechanism to meet repayment deadline

This family has seven members; two daughters are working in the garment factories and three children are still at school. They own a plot of 2 hectares farmland where the family grows rice. Currently, the family has a debt of twenty million Riels (USD 5,000). This amount is owed to five different debtors: three MFIs (Amret, AMK, and CBIRD) and ACLEDA, and from *Teacher Credit Association*.

“In 2013 alone, I took three loans: the first loan was USD 3,000 from ACLEDA, charged at 1.7% monthly interest; I put residential land title as collateral. The second loan is from Amret, amounting to 3,000,000R (USD750) and for that I put the farm land title as collateral. The third loan is taken from CBIRD, amount of 1,500,000R (USD375)”

The loan mentioned above was reported to have been used on healthcare purpose (delivery baby), house construction, paying for agricultural inputs of rice growing and repay existing debts. In the last two years, this family reported to have had two children having dengue fever at the same time which caused a heavy burden of healthcare cost on the family.

(Interview with Pisey on 15th February 2014, Prey Veng)

b. Informal lending entity

It is found through this study that there are two types of informal lending entities operate in surveyed villages. The first type is the normal private money lenders who charge the interest rate of 3%-5% a month. This type of lending operates based on trust and mutual agreement between lender and borrower; through the interviews, some families reported they take loan without putting collateral because the lender knows them well. However, key informants interviewed stressed that now they require collateral and contractual agreement arranged and recognised by local authority (village or commune chief) (see quotation below) due to experience of late or no repayment. The second type is a more structured lending practice but not registered. They require

borrowing contract with recognition from authority as the process of MFIs. An example is a group called *Teacher Credit Association* which gives loans to borrowers in Ba Phnom district. Their loans could be as small as 50,000R (USD12.5) to biggest of 4,000,000R (USD1,000) and charged at 3% a month.

"For our client, if the amount is large (4,000,000R), we ask them to have contract, where they give thumbprint and put collateral such as house or land title. It depends on negotiation and trust we have on the borrowers. If we do not trust them, they must put collateral. Our lending contract is acknowledged by village or commune authority." Local Informant, May 6th 2014, Prey Veng.

Left: Informal lender in district town for informal loan. Collateral required.

Right: Advertisement flyer of new loan, given to village chief. No address of the institution provided in the flyer.

Photos by Sim Socheata, May 2014.



According to a local informant, villagers commonly take loan from private lenders at 3% to 5% monthly interest rate to pay the loan borrowed from local bank and/or MFIs at the repayment date. This practice is very common to ensure on-time repayment and eligibility for next round of loan.

"When it is time for loan repayment to Angka³, indebted families are very busy to seek loans from any source and they are willing to pay higher interest rate. Only this way, they could be a good, on-time borrower and get to borrow the next amount." Local informant, 17th February 2014. Prey Veng.

In three separate interviews with representatives from ACLEDA and Amret, they all confirmed that the return rate of their loans were well over 99% among borrowed households in 2013. For instance, according to its branch manager, Amret in Prey Veng has a 99.7% loan return rate in 2013. It is important to hear comments and observation from local informants of how indebted families manage to repay the MFIs/bank loan on time because this experience is hardly covered in the report of successful loan transaction by lending institutions. For some households, it is the

³ Villagers call MFIs and/or ACLEDA as *Angka*.

consequence of late repayment resulting in their ineligibility for next loan from the MFIs; for others, it is a matter of grace and shame upon the family if they are seen as indebted family; for many borrowers in this study, it is a matter of being able to manage their productive assets such as land, house, or draft animals.

Since last February 2014, the family has a debt amount to seven million Riel. They are able to pay back one million Riel to the private money lender in the village. This loan is definite meaning the borrower has to repay the capital and interest on time. The family does not want to be publicly known as owing the money and not able to repay therefore bringing the shame upon the family. So they make sure that when it is the due date for repayment they have money to pay. So he must seek loan from other sources/lenders no matter if it is for few days for a month, the family has to pay the full 3% month interest rate... Interview with Sophal, 6th May 2014, Prey Veng.

"One couple came to me for loan. They told me their farm land title is currently with Amret. They wish to borrow 800,000R from me and promised to return in a month; if not, they would sell the farm land to me. The wife was the one who borrowed (put her name on my list) and the husband is the witness. I agreed to give them the money because I know the couple well; thus, they did not put anything as collateral. One month later, they could not find money to repay me so they said they would sell the farm land. It was agreed at the price of 1,650,000R (USD 412.5) for a 15 acre farm land. I gave the remaining amount of the farm land price and went with the husband to Amret's office in Prey Veng, paid and got the land title. Now the land is mine." Local informant, 17th February 2014, Prey Veng.

The operation of the MFIs in the community depends quite heavily on the collaboration from local authorities in all locations. In many communities, local authority (i.e. members of the commune councilors or village chief) plays a role in the MFI's committee to facilitate the smooth implementation of loan and repayment. This includes the recognition of ownership of assets or property that borrowing family put as collateral or confirming if they have had the existing loans from other agency. Few informants from local authority confirmed that often staff/credit agents inform local authority about their operation and seek collaboration and support.

Questions are raised around the motivation and actual benefits obtained by local authority through this engagement and collaboration process. ACLEDA staff confirmed in the interview straightforwardly that no benefit provided from ACLEDA to authority; Amret echoed the same opinion. While it is the role of local authority to oversight all the activities happening under its jurisdiction, it is quite time consuming for them to engage with MFIs loan operation without gaining any benefits. This indeed raises the question as to whether there is really no financial incentives involves that motivate the local authority in MFIs operation especially provided that in a commune there could be more than five MFIs operates. Local authority also needs to step in when there are potential conflict arise in the lending-borrowing transaction, as explained in the second excerpt below.

"I am the treasurer of Amret's Lending Committee in charges of seven lending groups in seven villages. My role is to ensure that members repay the loans back to the institution on time. When

I first went to the meeting of the committee, I thought I was appointed by the commune council but in fact it was the invitation from Amret for me to sit on its committee." Interview key informant, Prey Veng. 17th February 2014.

"In 2012, Prasac withdrew its operation from the fishery community in my commune. There were 12 families who took loan from Prasac. When Prasac's staff came to collect capital and interest repayment, some families were able to repay but some families were not. At one point, the 12 families wished to hold a strike to ask Prasac to halt the pressure of repayment and they threatened not to repay the loan. They called to inform me and requested to hold strike. But I was worried so I advised the 12 families not to rush and leave the matter for authority to mediate..." Interview key Informant, Kampong Chhnang. 30th April 2014. (See detailed case in Box IV at the end of this section).

Claimed as the fundamental rules of a free market economy, there is no specific legal framework that regulated on the cap of the interest rate of loan provided by MFIs in Cambodia. Article 1 of Prakas on Liberalization of Interest Rate states, "Banks and Financial Institutions have the right to determine interest rates on deposits and interest rates on loans both in the local currency and in foreign currencies according to each institution's ability and interest rate policy."(NBC 2009) It is left to the market to decide and competition is believed to drive down the interest rate of the loan. However, it is required that banks and MFIs send the average interest rate applied to deposit and loans to NBC every month. In the interest of borrowers, NBC requires all MFIs to calculate the interest rate based on the depreciated amount of loan principle once the repayment is started. A senior official from the National Bank of Cambodia (NBC) asserted that NBC is of the opinion that all MFIs operate shall ensure that they keep their borrowers informed about all information especially on the interest rate, what customers are paying for, what is a fine of late repayment and why. In this regards, the NCB hopes to ensure that the consumption protection are available and practiced by MFIs.

The Rural Development Bank (RDB), established in 1998 with the banking license to operate as a specialized bank, receives fund from RGC's national budget, AFD, loan from ADB, loans from International Fund for Agriculture Development (RDB 2014). As mentioned in earlier, a considerable investment of government financial subsidy (eight million USD) for enhance paddy and milled rice export goes toward RDB. While RDB is partnered⁴ with a number of MFIs and farmer association, there appears no special consideration for small scale farmers or community based farmer network to access to the credit/loans, compared to the more structure trading body such as the Rice Miller Association.

⁴ Based on information from RDB website, current partners of RDB includes Angkor Kasekam Roongroeng, Baitang, Aid Framer Association (BMC), CBIRD (Cambodia Business Integrated in Rural Development Agency - BB), Cambodian Entrepreneur Building, CHC (Micro Finance Institute), EAP, Farmer Union Development Funds, Hatha Kasekar, Intean Polroth Rong Rerng, LTD, Khmer Rural Development Association (BB), MAXIMA Mikroheranhvato, Co. Ltd, Federation of Cambodia Rice Millers Associations, Kristan Piseth Akphiwat Setakech Co., LTD, SAMIC Microfinance, Social Development in Rural, Seilanithih Ltd.

c. NGOs-led Saving Scheme

In Boribo district, AEC facilitated community saving group in two communes. The group collects saving, interest rate, and repayment from its members and borrowers on a quarterly basis. Loan is primarily for members with a 2% monthly interest. The AEC's saving model aims to mobilise community to get organised and to use part of the saving as source to support campaign actions. While the saving scheme is at its first year inception, respondents in this study reported to have utilized loan from this scheme. On the other hand, in the two villages in Svay Antor district, Prey Veng province, COFAP runs a revolving fund along with its other programs. Loan is given to members in the program for livelihood purpose without interest. The loan cycle is between 10 to 12 months. The maximum amount of loan per family is one million Riel. The PADEE project in Ba Phnom district supports the farmer-led saving scheme where loan from this scheme could be taken to support the agriculture related activities by its members.

d. Loan taken to use for healthcare treatment

An important element in the survey is to investigate how much of the loan taken by respondents in the surveyed population are used for the purpose of paying for healthcare cost. Findings from this study shows that, 56.4% (n=75) of households interviewed experienced borrowing money to paying for healthcare cost in the last two years. Among this proportion, 23% of respondents took the loan in the last 6-12 months; 19.5% took the loan between 19-24 months period and 15% of respondents took loan in the last six months.

Since February, 2014, my two children got dengue fever. First, my son got high fever and I asked a doctor in Tropeang Thom village to come and treat him at home. Two days after doctor injected serum and medicines, he did not get better so I inquired a blood test. The result confirmed he has dengue fever. It was already at a severe condition, unfortunately, because he was bleeding from his anus by then. I was very concerned. I brought him to a private doctor in Svay Antor and he was treated for four days. Again they had blood test and prescribed medicines. The doctor put the serum and injected medicines. I spent about 330,000R. The cost of the food and other necessity was 170,000R so in total I spent 500,000R (USD 125). After my son got better, the daughter got the dengue. Again, I invited the same doctor from Tropeang Thom village to treat her and she recovered. That cost 270,000R (USD 67.5) for a one-week treatment.

I used all the remittance of 8,000 Baht that my husband sent from Thailand. It was fortunate that he sent the money home just before both children got sick otherwise I would go into borrowing money for the treatments. (Interview with Chann, 8th May 2014, Prey Veng.)

Healthcare expenditure is reported by the surveyed households as a one of the three major expenditures incurred in their household. Food expenses represents the first and highest expenditures in a family (83%, n=110), followed by healthcare expenditures, (60%, n=80), and social function such as festival/wedding ceremony, (36%, n=48) (see Annex V). Once again, the respondents reconfirmed healthcare cost as an important unit of expenditure they have to cover.

Healthcare expenditure repeatedly presents itself as the necessity in the household yet cost a high amount of money. The finding of over 56% of respondents who experienced taken loan for covering for healthcare purpose alone is critical and reaffirm the high level of out-of-pocket expenditure that

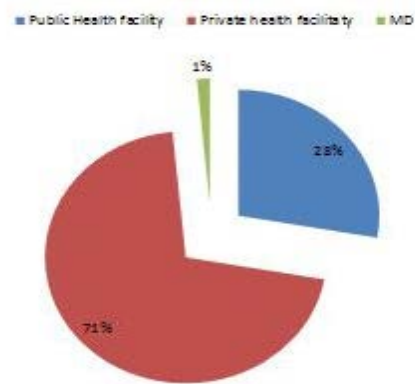
the rural household, especially the poor and the poorest households, are paying for drive them into further poverty because loans is charged at high interest rate for survival and unproductive use.

e. Healthcare Utilisation

The result in the survey is not different from previous studies regarding the healthcare utilisation. Two thirds of all respondents interviewed through the survey prefer to use private health facility while 28% prefer to use public health facility when they or their family members are ill. Often, family waits and sees the development of the illness and resort to treatment by private doctor before going to the next (higher) level of treatment. The delay in seeking care results in possibly higher cost of healthcare expenditure or severity of illness. As the respondent below reveals:

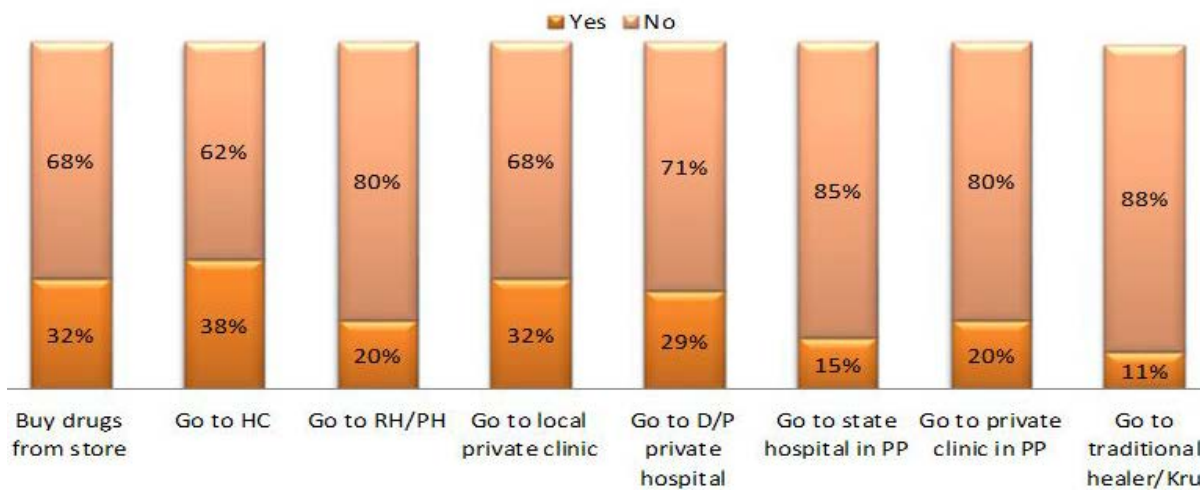
Recently, my son got sick with respiratory infection problem. I first took him to a private doctor in the village. But he did not get better so I brought him to a private clinic at Ponley town (about 6 kilometre from the village). I spent about 600,000R during the treatment in this last two months on medication. I borrowed 200,000R from my mother and used my own saving to cover the cost. My son is still not yet fully recovered and I need to bring him to the doctor again. (Interview with Thavry, 28th April 2014, Kampong Chhnang)

Figure 12: Health Service Utilization



As figure 13 demonstrated, the proportion of respondents reported to go to health centre when they are sick are the highest (38%), follow by buy drugs from the store and go to local private clinic (32% respectively). Yet, the healthcare seeking behaviour of surveyed households still remains low in all options.

Figure 13: Healthcare Seeking Behaviour



The graph on the right presents five major challenges identified by respondents with regards to healthcare service utilization. Lack of sufficient money to cover healthcare expenditure was reported as the most challenging factor (61%), cost of healthcare (59%), and time loss for caring for sick person and the high cost of service (55% respectively). The findings on key challenges reconfirmed previous study about key factors preventing poor people from seeking healthcare, finance, cost of service and economic loss. See (Annear, Wilkinson et al. 2006).

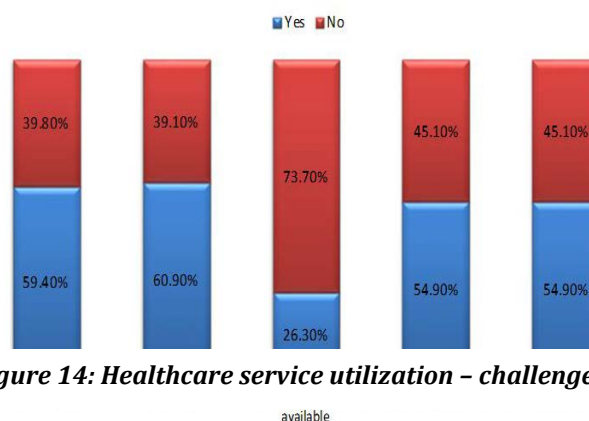


Figure 14: Healthcare service utilization - challenges

Regarding the option for treatment during ill-health of family members, respondents in this study confirmed that they frequently seek healthcare services from private compared to public health facility, 71% and 28% respectively (see table 7 below). The functioning of public health facilities in the study areas remains a concern due to a number of reasons; one of the main reasons is the lack of sufficient financial resources to support the functioning of health centre, as pointed out in key informant interviews. Besides distances⁵ from the home/village to health centre, the research teams observed that health staff and HC's operation generally occurs during the morning⁶.

Table 7: Public Vs Private Use of health facility

Frequently Use health facility	Frequency	Percentage
Public health facility	37	28%
Private health facility	94	70.7%
MD*	2	1.3%
Total	133	100%

*MS - missing data

In term of free access to healthcare service, our study found that 24% (n=32) reported they used to get free service and 76% (n=101) do not. For those who experienced receiving free healthcare they got it through Health Equity Fund card (18.8%), paid for the cost by NGOs/charity (10%) and exemption from health facility remain low (3%). In the villages in this study in Kampong Chhnang province, RHAC is implementing the HEF program where poor and poorest household who are the HEF card holders could utilise healthcare services at HC and RH when needed. More HEF coverage

⁵ Distance does not appear to be the main issues in all study villages given close proximity to HCs.

⁶ The researchers conducted an interview with director of one HC in the afternoon and he had to come to lock to door to access the main section of HC. During the whole of nearly two hours interview, there was nobody appeared at the site.

is expected to expand as emphasized by the directors of HCs and director of OD interviewed in Kampong Chhnang and Prey Veng provinces. This is expected to provide greater access to healthcare services for the poorest (I&II) households. Yet, it is envisioned that greater awareness raising about what is HEF and how could HEF card holder family utilise the services is needed to ensure barriers to utilization and any challenges are further addressed.

3.4 Impact of debts and the household's coping mechanism

The coping mechanism that the households in this study employed with regards to debt and other health shock are those found to be commonly used in other settings. It is found that surveyed households resort to taking new loans from formal and informal source to cope with health and debt repayment, selling rice and/or draft animals and migrate to seek alternative incomes.

Labour migration, both seasonal and permanent, is a vital coping mechanism for debt among households in the study villages. The destination for internal migration includes factory work in Phnom Penh, Kampong Chhnang province, construction and plantation work mostly in Economic Land Concession (ELC) in Krakor/Pursat, Kampong Cham, Mondulkiri, Phnom Penh or areas along Cambodia-Thai border. The in-depth interviews in Prey Veng province indicates a phenomenon of increasing trend of migration to work in construction, electronic, food and iron factories in Thailand. Some families the research team spoke to went there as documented workers while others used the informal way to reach the destination. An excerpt below reveals the mechanism by which family sees migration as a way to cope with household debt.

"I have not borrowed money yet. However, I may go into another loan if my father's (health) situation is not better. I am going to sell some more rice paddies but if it is not enough, I have no choice but to borrow more money from my relative. The interest rate is lower than from the organization (refer to MFI) and because I do not have any property left that I could put as mortgage.... My daughters' remittance was used to pay for the interest rate, spending on my father's health condition and on our daily living, mostly on food. Because the remittance is not that much therefore I could not pay off the (existing) debt yet." Interview Pisey, 6th May, 2014. Prey Veng.

Besides factory and construction, for villagers in study area in Boribo district/Kampong Chhnang, they could work as workers on the cassava plantation in Pheapimex ELCs. This opportunity presented to people who seek seasonal or permanent work in the plantation. While there is next to no labour right protection, health and/or other welfare protection for workers, the immediate daily wage is an option that workers aspire to. Many households the research team spoke to experienced working there or having relatives currently work on the plantation. An excerpt below indicates the wage and condition on the plantation:

"In my family, my father, two sisters, one brother and one brother in law work in the cassava plantation. Only my mother stays at home; she sometimes visited my father and siblings at the plantation to bring dry food for them... I also used to work in the plantation last year when I finished rice farming. I earned 20,000R and 1Kg of rice for one day work. The rice is given every

5 days but the wage is paid ten days after the calendar month...I went by Tele Thorng to the plantation. I had to leave home at 4am in the morning and we arrived at the plantation at 6.30 am. I walked from my house to the main road to catch the Tele Thorng with other workers. It costs 30,000R per month for this transportation. The work started at 7 till 11am and resume again at 1 to 5pm. I reached my home at 7pm in the evening. I had lunch with my sister who stayed at the hut inside the plantation. For others who does not have relative, they packed food from home..." Interview, 30th April 2014, Kampong Chhnang.

The current working condition in the cassava plantation raises the question and concern about protection. Local authority at village and commune level in study location in Boribo/Kampong Chhnang expressed their grave concern over their inability to provide any intervention when labour and/or other disputes arising to workers coming from their villages under their jurisdiction. Problems identified by the local authority regarding work in cassava plantation includes late repayment of wage to work, high work quota allocation, or workers got personal affairs resulting in unwanted pregnancy. Even in the capacity of the local authority, they could not make any labour inspection or visit the plantation without permission from the company, making this operation quite independent from the legal enforcement. According to a commune chief interviewed,

"... When the company recruits workers, they announced through the media or by mean of word-to-mouth. People from our village go to work in the plantation without informing the local authority. Only when there is requirement such as confirmation of residential or identity that we learned about their work... or when they faced problem. For instance, in mid-2012 they sought our intervention regarding late payment of their wage. But we cannot help because the plantation located in another district that is outside our jurisdiction..." Interview Commune Chief, Feb 7th, 2014, Kampong Chhnang.

It is a possible claim that employment generated through the cassava plantation provides vital source of income for people living in surrounding the plantation. This cannot be overlooked the rising disputes over loss of land and access to common resource resulting from the government's granting of ECL to company such as Pheapimex. In addition to losing the access, there are grave concerns over the labour right conditions and health impact on workers, which is current not in the discussion/consideration regarding labour in agriculture plantation. A separate study into this question will be an interesting option to explore the detail condition and benefits generated by the plantation on local people.

The increasing visibility of economic improvement at household level could be claimed thanks to remittance from workers in Thailand. The newly constructed houses in villages in Prey Veng are especially seen as a sign of prosperity that one could not overlook. This change is generally taken as the so-called economic prosperity amid the household debt that masked this prosperity in the before and during the period of working. With the recent deportation of documented and undocumented Cambodian workers from Thailand, the adverse impacts on economic and livelihood of family and those dependent on remittance would be considerable.

Box III: Triple Debt to cover Medical Treatment

On a half hectare of farm land, Sinurn's family collected one ton of rice paddy in last rice growing season. Her family decided to sell 500kg of rice paddy as they needed money to cover the basic needs, healthcare, and other festival obligation. The cost was 750Kg per kilogram; they got a total of 375,000R. Her family grows rice only once a year because there is no sufficient water in dry season. Sinurn said they do not have money to dig the pump well for dry rice growing. They used local rice seeds such as Kro Sang Teab. Last year, they used 3-4 sacks of chemical fertilizer of two types: American and Philippines brand; they put it three times. The chemical fertilizer was bought on credit at 150,000R per sack. They hired someone to spray the pesticide. The cost of spraying on 1hectare of rice field is 30,000R (including the cost of the pest).

"Our daughter is working in the garment factory. She sends the remittance home quite often after keeping some money for her own expenses. Usually, if she is not sick, she sends about USD20, USD30 or USD50 home. But if she is sick, she will not send any money as she needs to cover her medical bill, utility. The price of rented room also increases. She spends USD20 a month on rent."

Sinurn is having severe stomachache, severe stomach ulcer which cause her to have back pain. She recently went for a series of medical treatment in Prey Veng town and Phnom Penh which cost the family a considerable amount of debt. Since February 2014, she went for the treatment three times. First, she went to have X-ray of her stomach condition at a clinic in nearby town called "Li Pi clinic". After X-ray, the doctor confirmed her illness is severe beyond their capacity to treat. They gave her some medicines to take and advised her to come to Phnom Penh for treatment. She spent 300,000R on the medication (three times, at each time costs about 100,000R). Second, she went twice to a doctor at *Sneh* town. She spent 200,000R for treatment there. The third treatment she sought was from the public hospital in *Steng Meanchey* (she didn't remember the name). She consulted with the doctors who, in her opinion, are young and appeared inexperienced. She stayed at the hospital for three days and spent 200,000R on medicines only. Sinurn complained that whenever she goes for healthcare treatment in a new place, the documents and test she did at the previous one is disregarded. The health staff almost always requests her to take new test on the same subject and it costs her more money. They said they do not believe on the previous results.

"After seeking treatment at three places and my illness is not improving, my daughter who works in the factory told me to go to a private clinic she and other workers often go to, at Bek Chan. The doctor there asked me to have an ultra-sound at the stomach and at the back. Even though I brought the recently X-ray result to show them, they said, 'we need to do it again in our clinic so that we can trust the results.' They injected medicine and put the serum injection for me three times a day and it went for three days. I spent \$100 on the treatment."

Sinurn asserted that the treatment at a clinic in *Bek Chan* made her feel better. The medical treatment cost her 100USD in which she borrowed USD 50 (200,000R) from her mother-in-law (at no interest). In March, 2014, her family sold a motorbike for 100 \$ (bought at 250\$) in order to get the money to pay for her treatment. In addition, her family owed a private money lender USD 500; they put a land title of the residential land as collateral for this loan. The interest rate is charged at 3% a month for an 18 months period.

"This loan (from private money lender is better than loan from the Angkar (MFIs) because if I prefer not to repay the capital every month, I could choose to just pay the interest rate. The lender is more understanding because if we are late for 3-4 days to repay the interest, we can inform them. And when we repaid all the loan, we could get our collateral back in 3-4 days. I used to take loan from Amret, 200,000R, as a group loan. I used it to buy the chemical fertilizer for my rice field. We guarantee for each other and no need to put any collateral. I already repaid that loan."

My youngest daughter has been working in the garment factory in Phnom Penh for the last 3-4 years. My son-in-law also works as construction workers in Phnom Penh but he and his wife live separately from my daughter. He usually goes to seek work after the rice growing season. My husband sometimes works as a construction worker. But recently, he has not been well and since I got sick, he could not do work as he needs to take care of me. We spend a lot of money on my medical treatment. We depends solely on the remittance my daughter send and our rice harvest. I tried to raise pigs but it was not going well. So my hope to repay the debt we owe will certainly on the remittance from my daughter.

(Interview with Sinurn, 05th May 2014, Prey Veng)

Box IV: Labour Migration as Solution to Debt Repayment

Ms. Sophy lives with her husband and two daughters in Banteay Sreh village in Prey Veng province. She has 3 plots of farmland, approximately 2 Ha in total. She grows two kinds of rice: Rumdul rice for sale and Krosang Teab rice for family consumption. Her family used to have sufficient rice to eat throughout the year as they have big size of farm land. Only six years ago that her family had to buy about 100 kg of rice to eat due to rice shortage.

Ms. Sophy said she uses 8 sacks of chemical fertilizer for all her paddy fields.

The main source of her family income is from rice growing and animal raising. She had got 4 tons of paddies after harvesting in 2013 for her rainy season rice growing. She sold all the paddy of the Rumdul type for a total of 7 million Riel. She sold it two times based on the harvest times with 1,300R/kg and 1,310R/kg respectively. After harvesting, her husband often migrates to Phnom Penh, Kampong Cham or Thailand to work for additional income.

Ms. Sophy borrowed 500,000R from Amret in July 2013 to cover for her daughter's dengue fever medical treatment. The treatment cost 215,000 Riel in total and she was able to pay only 200,000 Riel; she still owes 15,000 Riel to the doctor. Besides paying for medical treatment, the remaining loan was used to buy chemical fertilizer and daily food expenses. Her family has to pay off this debt to AMRET in July 2014; they have not been able to repay loan capital, only pay the interest rate every month.

In addition to the existing debt, her family took two more loans. The first time, she borrowed three million Riel from a private money lender in Svay Antor town to repay her sister's debt. But this amount, the lender did not require collateral at all as they knew her family well. This debt was charged at 3% monthly interest. She already paid off this debt because her family sold three buffalos for 8,900,000 Riel. The money left over from repaid debt, she kept as saving.

Recently, Sophy took a loan of one million Riel in order to prepare for the departure to find work in Thailand. She said that her husband and she have decided to work as construction workers in Thailand. They have a relative who is currently working in Thailand and will help facilitating the process to go to there. The couple will have to pay 2,000 Baht per person for the Mer Kjol (Broker) to help in taking them into Thailand. And they will pay 20,000 Baht for work permit. She has to repay this amount as they start working. To her knowledge, she might earn 250 Baht and her husband might earn 300 Baht per day.

"When I go to work in Thailand, I will leave the farm land for my younger sister to look after. The 0.5Ha of rice field, she will farm and get the harvest for herself. The other two, she will farm for my family in which I will pay for all the cost of inputs and labour wage. When the harvest is collected, the rice paddy will be sold to repay those costs."

Since February 2014, her children have had fever. But she did not send them to the Health Center or hospital; just bought drug from the village store and invited the doctor to treat at home. Her older daughter was still unwell and in another week, her husband and she will depart to Thailand, leaving both daughters at home. The older daughter who already quitted lower secondary school will stay at home and herd the buffalos; the younger one is still at school.

(Interview on 9th May 2014, Prey Veng)

Box V: MFI took legal pursuit against no repayment

In a fishery community along Tonle Sap Lake experienced a lawsuit pursuit by an Prasac regarding no repayment.

"In 2012, Prasac withdraw its operation from the fishery community in my commune. There were 12 families who took loan from Prasac. When the staff came to collect capital and interest repayment, some families were able to repay but some families were not. At one point, the 12 families wish to hold a strike to ask Prasac to halt the pressure of repayment and they threatened not to repay the loan. They called to inform me and requested to hold strike. But I was worried so I advised the 12 families not to rush and leave the matter for authority to mediate.

I requested Prasac staff to come and questioned them about the situation. I asked them if there were any possible delay in paying the interest rate. I advised them for non-confrontational and non-violent negotiation and Prasac staff complied with it along with their own tactic to address the matter. But it was not successful. The 12 families yet refused to pay.

Later on, Prasac staff came to consult with me regarding the possible action. I advised them to file the complaint to the court because there was similar experience happened. I am aware that, when the court decides on the matter, it would be more favorable to the families concerned because they would rule the decision to repay the loan based on the capacity of the families to earn income and the repayment schedule would be less in amount. Prasac filed the lawsuit against the 6 families¹ in 2013. However, till date, the court has not process the case yet.

"In fact, those families who are indebted to Prasac are very worried about their condition. I remembered in 2013, there was one time that Prasac went to the community. The six families who did not yet pay back were scared and they fled in hiding. They were scared they would be arrested. In my opinion, some of them are able to repay this debt but they did not want to do it."

Prasac and Amret withdrew their operation from the fishery community because they faced difficulties in collecting the capital and interest repayment. Usually, the MFIs find it hard to operate their loan with the fishing community due to high risk of repayment.

In a family, they owed Prasac between 1 to 2 million Riel; they also take loan from other MFIs. These fisher folks do not have house or village land for they are living on the fishing boat. When they would like to take loan, there is a form to declare their property (the floating house, boat, machine, and other fishing equipment) and they need the commune chief to certify on that form about their property.

"As local authority, I am worried when people in my commune are indebted. If they know how to make family planning and wisely use the loan to make business, the family would not be trapped in debt. I often give advice to families who are already indebted and apply for another loan from new MFIs against taking another loan. I particularly stress on the hardship when they have to repay the capital and interest of all loans they owe.

Those households who use the loan for different purpose, very small percentage of them who are better off compared to before they take loan. Maybe about 5% of all borrowers improved their livelihood. Many families take a lot of loan and got deeper in debt because they take loan from one MFI to repay another."

(Key Informant Interview. April 30th 2014. Kampong Chhnang)

PART IV: DISCUSSION AND CONCLUSION

This study draws on perspectives from small-scale farmers in six villages in Kampong Chhnang and Prey Veng provinces. With small size of farm land as a mean for livelihood option, farmers see themselves increasingly investing more and more in the agriculture inputs cost for rice production yet the returns of the rice yield is not at an equivalent. Finding from this study indicates that both cost and amount of chemical fertilizer used in the rice field has increased; in addition, other associated cost such as agriculture labour and machinery needed for rice farming increased in price. The imbalance between values of input and (rice) output means that for subsistent farmers, growing rice puts them in the losing end because apart from time, manpower and money invest in agriculture inputs, there is a potential risk of loss if weather conditions (sufficient rainfall, flood) and access to water is not favorable to them.

While the government puts out precise policy on the promotion of paddy and milled rice export, there appears no policy to guarantee the minimum price of rice or control price of inputs such chemical fertilizers. It is a grave concern especially amongst rural farmers and farmer networks this study covers that if there is no clear state mechanism on price control (rice or chemical fertilizer) and just be left to the market to determine, as current practice, farmers especially those with small plots of land will lose the livelihoods because they could not afford the high inputs cost with low output of rice while there is no subsidy from the government provide for small farmers.

While at the national level, Cambodia has witnessed a dramatic increase of agricultural land being converted into cash-crop plantation for agri-business purposes. The Cambodian government, until 2013, has approved more than two million hectares of land as land concession (ADHOC, 2013), some of which lasts up to 90 years. The land concessions are mainly for cash-crop plantation such as cassava, rubber, palm oil, sugarcane, corn, for exports or logging concession. The great move of the Cambodian government in economic land concession (ELC) has caused much contagion on land disputes in rural and urban areas, causing farmers to be landless and losing access to common resources, increase internal migration and labour export to domestic and construction works outside Cambodia. The Cambodian government proposed a draft law on "Land Use and Land Management," which basically allows the company to have power and control over the farmers' productivities through contract farming. If this law passes and gets implemented, it is highly likely that more farmers will lose the control over their small farm land and becomes labourers as a result given that farming is getting more and more expensive.

The government promotion of policy to export paddy and milled rice is another step toward the promotion of agriculture liberalisation into the world market. As of December 2013, Cambodia exported 378,856 tons of rice compared to 105,259 tons in 2010 (Cambodia Rice Export Association 2014). This puts the aim of achieving a million tons by 2015 not feasible and greater efforts are needed in improving agricultural sector. With 80% of the population depends of subsistent rice farming for family consumption, the push for export of rice must seriously take into account and be balanced with the country food sovereignty. Currently, Cambodian small-holder farmers own small plot of farmland which means their capacity to produce sufficient rice for household consumption is not enough.

At the time when Cambodian government highly promoted the exportation of milled rice, the incentive support outlined in the policy seems to be far from reality for small farmers. As farmers begin shifting from traditional/local seeds to the seeds favorable by international market, there is another risk that they take. Cambodia does not offer minimum rice price guaranteed to rice producers. Based on experiences of farmers in this study, price of rice paddy slightly declines during harvest period and rise during rice shortage period (i.e. before harvest time). If there is no price guarantee, small farmers are losing out because they are in a weaker bargaining position and trap in the need to make repayment of all inputs cost they owe.

The increasing cost of rice farming inputs means that there is a higher demand for cash available to farmers. Finding in this study demonstrates that each household commonly depends on three sources of cash for their rice growing: remittance from migrant labourers insides and outsides Cambodia, available loan, and purchase the inputs on credit. These three options are utilized by farmers as coping mechanisms at one point or another throughout the rice growing season. Yet, as found in this study, 76% of surveyed households are currently indebted and 56% experienced indebtedness due to healthcare treatment. This picture reveals how crucial the role availability of cash is to rural economy; however, at present, cash/loan is available at an interest of over 24%-36% a year for formal lending institution or 36-60% a year from an informal lender. This interest rate is very high for any borrower to be able to generate revenues large enough to cover the interest rate and make a profit in rural Cambodia.

In the 2009 new Civil Code of Cambodia, it is stated that interest rate should not exceed 5% a year, unless otherwise agrees by both parties. Besides this code, there is no specific regulation that governs the cap/ceiling of interest rate charged by MFIs in Cambodia. It is claimed that, the free market competition among MFIs will drive down the interest rate. Notably, there is a slight drop of interest rate in Cambodia due to mushroomed number of MFIs; but it is still a very high rate at 24%-36% a year. Interestingly, what is not commonly discussed is the responsibility that should be shared by the lenders in the borrowing-lending relationship. As a matter of fact, every MFI has its agent to assess the feasibility of business plan/use of loan prior to awarding the requested loan to borrowers. Therefore, when the loan is defaulted, at current practice, the borrowers have to bear the sole responsibility of repaying all capital and interest rate. Half of the responsibility of repayment should in fact be shared by the MFI/lender and poor household/borrower should never bear the brunt of the high interest-rate-loan alone.

On the contrary, what is seen now in a commune is the outnumbered MFIs compete to offer loan to households at similar rate. As found in the post 2011 flood assessment (CARE 2012), a critical number of new loan are taken to repay the existing loan. This is recycling payment is found in this study where household take loan from private money lender to repay the MFIs at the end of the loan period and repeat the whole cycle again. This cycle create a condition by which households are unable to get themselves out of indebtedness, most particularly if the loan has been used for healthcare treatment purpose, as reported by nearly 50% of respondents in the study.

Labour migration appears to be a common and crucial coping mechanism among rural households. Remittance from workers in factory, construction, agriculture plantations inside and outside Cambodia plays an important role in the making of rural economy. This remittance is multifaceted use for inputs of rice production, household survival, repaying debts, medical treatment, education and other vital supports for the household function. Arguably, there is a great sign of distress at different folds: a. labour movement wage increase has not reached a desirable level; b. massive number of documented and undocumented workers returned from Thailand due to policy instability in this country; c. agriculture workers plantation operated under little or no labour right protection for workers.

The results of this research presents a high proportion of indebtedness experienced by households in the study areas; over half of the study population are indebted because they borrowed to pay for healthcare cost. Debt incurred to cover healthcare treatment is seriously a problem because it is a crucial pushing factor that traps a poor family in the cycle of poverty. Most of the households reported that they use the private health facility because of the remaining poor services and quality occurs at the state health facilities. To the households in this survey, it seems that there is no difference between them using the state healthcare services or the private one as they have to pay money regardless of which facilities they seek treatment. However, with private healthcare providers, the service is faster and timely but the cost is higher.

The mushrooming of MFIs across Cambodia means that there are greater accesses to credit and loan for rural population. Yet, it is found that the interest rate of the loans remain high, at 24%-36% per annum. With the interest rate high, the numbers of family who takes loans to use for the healthcare services is trapped deeply into debt and poverty cycles resulting in them resorting to take loan from one MFI to pay another loan and revolves around cycling loan for debt repayment. At time, it is inevitably crucial that the Royal Government of Cambodia takes into consideration the measures and regulation to ensure that there are sufficient protection for small holder farmers both in their rice production and access to credit and low and affordable interest rate.

Reference

- ADB (2014). ADB Outlook 2014, Asian Development Bank.
- Akashi, H., et al. (2004). "User fees at a public hospital in Cambodia: Effects on hospital performance and providers attitudes. ." Social Science and medicine **58**: 553-564.
- Annear, P., et al. (2006). Study of Financial Access to health services for the poor in Cambodia. Phase I: Scope, design and data analysis. Phnom Penh. Research Report for the Ministry of Health Cambodia, World Health Organization, AusAID, RMIT University.
- Bank, W. (2014). Poverty has fallen yet many Cambodians are still at risk of slipping back into poverty.
- Biddulph, R. (2000). Making the poor more visible: Landlessness and development research report. Cambodia Land Study Project. Oxfam. Phnom Penh, Oxfam.
- Biddulph, R. (2004). Poverty and Social Impact Assessment of Social Land Concession in Cambodia: Landlessness Assessment. Cambodia, Oxfam Great Britain.
- Cambodia Rice Export Association (2014). "The Report on Cambodia Rice Export Status 12 months of 2013.". Retrieved 27 June 2014, from <http://www.riceassociation.com/#market>
- CARE (2012). Drowning in Debt: The Impact of the 2011 Cambodia Floods on Household Debt . A survey of poor household in three affected provinces, The Access to Finance Consortium: CARE, Catholic Relief Services, Oxfam and Pact.
- Chan, S. (2011). Ten Types of Important Rice Seeds.
- CMA (2014). "Cambodia Microfinance Association: Members." Retrieved 24 April 2014, from <http://cma-network.org/drupal/Members>.
- Council of Ministers (2010). Policy Document on Promotion of Paddy Rice Production and Export of Milled Rice.
- Domrei Research & Consulting (2011). SKY 2008 Baseline Study. Phnom Penh, Domrei Research and Consulting.
- Huy, R., et al. (2009). "Cost of dengue and othe febrile illnesses to households in rural Cambodia: a prospective community-based case-control study." MBC Public Health **9**: 155.
- Jacob, B. and N. Price (2004). "The impact of the introduction of user fees at a district hospital in Cambodia. ." Health Policy and Planning **19**: 310-321.
- Julienbeaute and Sirendavong (2010). "Cost of disease burden of dengue in Cambodia." MBC Public Health **10**: 521.
- Kassie, A. (2000). Credit and landlessness: impact of credit access on landlessness in Cheung Prey and Battambang districts, Cambodia. Phnom Penh, Center for Advances Studies.
- Kenjiro, Y. (2005). "Why illness causes more serious economic damage than crop failure in rural Cambodia." Development and Change **36**: 759.

- Khun, S. and L. Manderson (2007). "Health seeking and access to care for children in suspected dengue in Cambodia: An ethnographic study." MBC Public Health **7**: 262.
- Khun, S. and L. Manderson (2008). "Poverty, user fees and ability to pay for health care for children with suspected dengue in rural Cambodia." International Journal for Equity in Health **7**: 10.
- Leive, A. and K. Xu (2008). "Coping with out-of-pocket health payments: empirical evidence from 15 African countries." Bulletin of the World Health Organization **86**: 849.
- Matsuoka, S., et al. (2010). "Perceived barriers to utilization of maternal health services in rural Cambodia." Health Policy **95**: 255-263.
- MoH (1996). National Charter on Health Financing in the Kingdom of Cambodia.
- MoH (2009). Annual Health Financing Report, Ministry of Health.
- MoH (2012). Annual Health Financing Report 2012, Ministry of Health.
- NBC (2009). Prakas on Liberalization of Interest Rate Setting. Phnom Penh, Cambodia, National Bank of Cambodia
- NIS (2009). General Population Census of Cambodia 2008. Final Census Results Figure at a Glance.
- NIS, N. (2000). Cambodia Demographic and Health Survey.
- RDB (2014). "History of Rural Development Bank." Retrieved 10 July 2014, from <http://www.rdb.com.kh/data/bank%20history.htm>
- Sauerborn, R., et al. (1996). "Household strategies to cope with the economic costs of illness." Social Science and medicine **43**: 291.
- UNDP (2004). Macroeconomic and Poverty Reduction in Cambodia. UNDP.
- UNDP (2013). "Cambodia Country Profile." Retrieved 24 April 2014, from <http://hdr.undp.org/en/countries/profiles/KHM>.
- UNDP (2014). "Cambodia." Retrieved 23 April 2014, from <http://www.kh.undp.org/content/cambodia/en/home.html>.
- VanDamme, W., et al. (2004). "Out-of-pocket health expenditure and debt in poor households: evidence from Cambodia."
- VanDamme, W., et al. (2003). "Catastrophic health expenditure." The Lancet **362**: 996-997.
- WAC (2004). Debt bondage. Phnom Penh, Womyn's Agenda for Change (WAC) and Oxfam Great Britain.

ANNEXTURE

- Annex I: Questionnaire for rapid assessment
- Annex II: Guide questions for stakeholder interview
Guide questions for household interview
Guide questions for health centre staff
Guide question for Office of Agriculture
Guide question for MFIs/Bank
- Annex III: List of stakeholder interview
- Annex IV: Consent form
- Annex V: Additional Graphs, Tables, Case study
- Annex VI: Term of Reference