# カンボジアの農村部における貧困世帯の予備調査の結果及び考察 ープレイベン州メイサン郡アンコール・ソーコミューンの事例-

# Findings from a Preliminary Survey of Poor Households in Rural Cambodia: A Case of Angkor Sar Commune in Mesang District, Prey Veng

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## Abstract

In a complement to Samreth (2016), this report summarizes and discusses the results from a field interview of 120 randomly selected poor households. The interview was conducted in 2016 at Angkor Sar commune of Mesang district in Prey Veng province, Cambodia. From the interview, we find that although most households have proper access to water sources, more than half of them do not have toilets in their housing compound. A significant share of households does not own agricultural land, and for those who do, the average size is small. The results also indicate the important role of remittances as a source of household income. For expenditure patterns, we find high household expenditures on festivals, funerals and other ceremonies. Regarding households' access to credit, the interview results point out that nearly half of participants borrow money with very high interest rates. The interest rates of borrowing from informal sources are even as high as 10% per month. Furthermore, the interview indicates that a high share of households borrow money from informal sources for using in food consumption. Based on a simple correlation coefficient, we observe that agricultural land holding may help households access a better quality of credit.

Keywords: Cambodia; Rural Poverty; Prey Veng

JEL Classification Codes: O10; O18

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## 1. Introduction

As mentioned in Samreth (2016), financial diaries of the poor households in a country can provide good implications for policymakers in designing policies for poverty reduction. Previous studies such as Ruthven (2002), Rutherford (2003), Collins (2005, 2008) and Collins et al. (2009) provided good insights into financial diaries in countries like India, Bangladesh and South Africa. In Cambodia, a project to record financial diaries of poor households daily has been proposed and has been implemented starting in August 2016. Prior to the implementation of this record, a preliminary survey on the socio-economic condition of randomly selected households was conducted. Samreth (2016) provided a more detailed explanation on how the survey location and poor households were selected. It also illustrates some results from this preliminary survey regarding the structures, characteristics, and migration situation of the surveyed households. Specifically, Samreth (2016) described the average household size, education levels of the household heads, and the situation of the domestic and international migration of the members of randomly selected households. As a complement to Samreth (2016), this report provides further findings and discussions from that survey and illustrates housing conditions, energy and water sources and provides information on toilet coverage and the ownership of agricultural land. Additionally, this study presents and discusses the results on household income (amounts and sources) and expenditure (amounts and purposes). Finally, this report examines how selected households access credit.

The remainder of this report is organized as follows. Section 2 briefly explains the survey procedure in which the information on the survey location, number of households and the survey questionnaire are provided. Section 3 provides and discusses the findings from the survey in which the situation of the selected households ranging from their housing condition to their access to credit are focused. Section 4 is the conclusion.

## 2. A Brief Explanation on Survey Procedure

## 2.1. Location and Household Sample

Motivated by the findings in Samreth (2013), Angkor Sar commune in Mesang district of Prey Veng province was chosen as the survey location. Mesang district consists of eight communes, among which Angkor Sar is the second poorest in terms of total poverty rate (Poor Level 1 and Poor Level 2, Ministry of Planning, 2015).<sup>1</sup> As also explained in Samreth (2016), Poor Level 1 group was considered, from which 120 of the total 557 households were randomly selected for the survey.

## 2.2. Questionnaire

When designing the survey questionnaire, the questionnaires used in various series of the Cambodia Socio-Economic Survey were mainly taken into account. The framework used in Ruthven (2002), Rutherford (2003), Collins (2005, 2008) and Collins et al. (2009) were also our main references. As explained in Samreth (2016), the survey questionnaire covers various parts, from information and structure of the selected poor households to their access to credit.<sup>2</sup>

#### 3. Findings and Discussions

As a complement to Samreth (2016), this current report provides a summary of the findings from the survey regarding housing conditions, energy and water sources, information on toilet coverage, ownership of agricultural land, income and expenditures and the situation of access to credit. Discussion on these findings is also provided.

## **3.1. Housing Condition**

Table 1 illustrates the housing condition of the surveyed households. The average house size is 23.75 m<sup>2</sup>. Considering that the average household size is four persons (Samreth, 2016), this house size is very small. The data in the table also indicates that most houses are constructed using bamboo, thatch and leaves. This is not surprising, since, in rural Cambodia, this kind of house is quite common among poor households. Regarding the house ownership, the survey indicates that about 78% of households live in their own houses, while about 21% of households are living in houses provided rent-free by relatives. Furthermore, the data also indicates that about 25% of self-owned houses were built on land without official property

<sup>&</sup>lt;sup>1</sup> See Samreth (2016) for more detailed information on Mesang district and Prey Veng province and an explanation of Poor Level 1 and Poor Level 2.

<sup>&</sup>lt;sup>2</sup> The questionnaire used for the survey can be provided upon request.

rights issued by authorities.

Type of house	Number of households	% of households
Bamboo, thatch/leaves	87	72.50%
Wood	23	19.17%
Zinc	9	7.50%
Other	1	0.83%
Ownership	Number of households	% of households
Self-owned houses	93	77.50%
Relative's house without rental fee	25	20.83%
Other's house without rental fee	1	0.83%
Other	1	0.83%
Average house size	23.7:	$5 \text{ m}^2$

#### Table 1: Housing condition

Source: Author's survey

## 3.2. Energy Sources, Water Sources and Toilet Coverage

Table 2 summarizes the survey findings on lighting and water sources. The data in this table indicates that almost all households use battery or kerosene lamps for lighting. We also find that very few poor households in our sample have access to electricity provided by a private company or public entity. This low access may be due to insufficient electricity infrastructure in the surveyed rural commune and the high costs of electricity. For water sources, Table 2 shows that most households have access to water based on tubed/piped wells. This indicates that even very poor households have good access to proper water sources for consumption. Being able to access clean water is very important and can have a great impact on health improvement.

Table 3 illustrates the toilet coverage among poor households in our sample. From the data in this table, we find that less than half of the households have access to proper toilet facilities, while most households have access to proper water sources. This needs to be improved, since better toilet coverage can improve sanitation and public hygiene, leading to better health.

Main sources for lighting	Number of households	% of households
Battery	87	72.50%
Kerosene lamp	11	9.17%
Electricity from a private company	7	5.83%
Electricity from a public entity	6	5.00%
Solar panel	5	4.17%
Candle	1	0.83%
Other	1	0.83%
None	2	1.67%
Total	120	100%
Main sources of water	Number of households	% of households
Tubed/piped well	117	97.50%
Pond, river or stream	1	0.83%
Other	2	1.67%
Total	120	100%
Source: Author's gurren		

## **Table 2:** Lighting and water sources

Source: Author's survey

Table 3:	Toilet coverage
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Туре	Number of households	% of households
Pour flush (or flush) connected to sewerage	28	23.33%
Pour flush (or flush) to septic tank or pit	22	18.33%
Other	5	4.17%
None	65	54.17%
Total	120	100%

Source: Author's survey

## 3.3. Agricultural Land

Table 4 shows the situation of the agricultural land possessed by the surveyed poor households. The data in this table indicates that about one third of total households have no agricultural land. Furthermore, for households possessing the land, about one quarter of them have no official certificate of ownership issued by authorities. The data also shows that the average size of agricultural land owned is about 0.4 hectare. Given these results, it is evident that the surveyed poor households do not have sufficient land for agricultural activities. Samreth (2016) indicated that a large share of households have members migrating to other parts of Cambodia (especially, Phnom Penh) and to foreign countries (especially, Thailand).

While various factors lead to this high incidence of migration, the lack of land for agricultural activities can be considered as an important one. During our interview, we also heard voices from the interviewees illustrating this situation, as cited below.

"...Please help to create jobs here. No land for cultivation..." (Voice of a 29-year-old woman)

Agricultural land	Number of households	% of households
Households possessing land	81	67.50%
- Owned use	77	95.06% (of households possessing land)
- Renting out	4	4.94% (of households possessing land)
Households possessing land with property right issued by authorities	60	74.07% (of households possessing land)
Average land size		0.38 hectare
Households without agricultural land	39	32.50%
Total	120	

Table 4:	Agricultural	land
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Source: Author's survey

# 3.4. Past Month's Income

Table 5 shows the amount of average income from the previous month at the time of our interview. The data in this table shows that the average monthly income per household is around 822,996 Riel including borrowing and 415,163 Riel excluding borrowing. This indicates a high level of borrowing among poor households in our sample. Daily per capita income (excluding borrowing) is slightly lower than the rural poverty line in 2013, which was around 3,500 Riel per person per day. This is not surprising since poor households were chosen for this survey.

Table	5:	Income	amount
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Income in Khmer Riel (4,000 Riel = \$US1)	Including borrowing	Excluding borrowing
Average monthly income per household	822,996 Riel	415,163 Riel
Average monthly income per capita	205,749 Riel	103,791 Riel
Average daily income per capita	6,858 Riel	3,460 Riel
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Source: Author's survey

Table 6 illustrates the main income sources. It is apparent that the poor families in the survey depend on various income sources to live. The share of agricultural goods related to income is very low. This reflects the fact that the poor in our sample do not possess sufficient land for agricultural production. We also find that remittances play a very important role as a source of income. Specifically, about 61% of surveyed households report that they receive remittances from their family members and, although it is not shown in the table, in average the remittance amount accounts for about 71% of their total monthly income (household's income) amount, excluding borrowing.<sup>3</sup>

Main income source	Number of households	% of households
Remittances	73	60.83%
Regular work	47	39.17%
Casual work	29	24.17%
Borrowing	22	18.33%
Livestock selling	15	12.50%
Self-owned business (non-agriculture)	6	5.00%
Other (begging, from children)	6	5.00%
Rice selling	4	3.33%
Non-rice agri. product selling	3	2.50%
Property renting (land, etc.)	3	2.50%
From lending (principal repayment back)	1	0.83%

 Table 6: Main income sources

Source: Author's survey

#### 3.5. Past Month's Expenditure

Table 7 indicates the amount of average expenditure of the previous month. When calculating expenditure, if households consume their own agricultural produce, such as rice and vegetables, we also include that into their expenditure by using market prices of those produce for the calculation. Table 7 shows that the average monthly expenditure per household is around 961,830 Riel including debt repayment and 913,207 Riel excluding debt repayment. This indicates an average monthly debt repayment burden of around 50,000 Riel per household. The table also indicates that the daily expenditure per capita (excluding debt

<sup>&</sup>lt;sup>3</sup> If borrowing is included, the remittance share in households' monthly income is around 62%.

repayment) is around 7,610 Riel. Compared to the income information in Table 5, we can see that the average monthly expenditure of households exceeds their average monthly income. However, this should not be surprising since there is a possibility that households may also use their savings for expenditures.

Expenditure in Khmer Riel (4,000 Riel = \$US1)	Including debt repayment	Excluding debt repayment
Average monthly expenditure per household	961,830 Riel	913,207 Riel
Average monthly expenditure per capita	240,458 Riel	228,302 Riel
Average daily expenditure per capita	8,015 Riel	7,610 Riel

Table 7: Expenditure amount

Source: Author's survey

Table 8 illustrates the share of main expenditures reported by the surveyed households. The data in the table shows that the expenditures on food and other necessities have a high share. The data also indicates the high share of expenditure on festivals, funerals and other ceremonies. Debt repayment also accounts for a high share of expenditures of the surveyed households. It is worth noting that the expenditures for medical services are high, although the Poor Level 1 households generally can access public hospitals with a discounted cost.

**Table 8:** Average share of main income sources among relevant households

Main expenditure	Including debt repayment	Excluding debt repayment
Food (rice, fish, beef, ingredients, etc.)	34.68%	36.18%
Festivals, funerals, other ceremonies	24.88%	25.82%
Debt repayment	18.61%	29.45%
Medical services (costs paid to hospitals, clinics, medicine, etc.)	14.49%	15.43%
Clothing	11.30%	12.32%
Education	11.17%	11.90%

Source: Author's survey

# 3.6. Access to Credit

Table 9 shows the access to credit of surveyed households. From the data in this table, we

find that nearly half of the total surveyed households report that they borrow money from formal sources (microfinance institutions, MFIs) and informal sources (village's money lenders, relatives, etc.). Most households borrowing from formal sources informed us that they pay a monthly interest rate of about 3%.<sup>4</sup> From our interview, we also obtained information that most households borrowing money from informal sources pay a monthly interest rate of about 10%. In Cambodia, this kind of informal financial transaction is very common. These results illustrate the high incidence of borrowing with very high interest rates among poor households. Furthermore, among the households who borrow, the data shows a negative relationship between agricultural land holding and access to informal borrowing sources.<sup>5</sup> This may imply that agricultural landholding helps improve the quality of access to credit.

Borrowing	Number of households	% of households
From formal sources only	32	26.67%
From informal sources only	13	10.83%
From both formal and informal sources	8	6.67%
Total	53	44.17%

Table 9: Access to credit

Source: Author's survey

In our interview, we also asked the households about their reasons for borrowing. The results are summarized in Table 10 and Table 11. Table 10 illustrates the purposes of borrowing from formal sources. From the data in this table, we find that the purposes are very diverse. In addition to borrowing for non-investment purposes (consumption, etc.), borrowing for business investment is also apparent. This reflects the fact that there is a relatively strict criteria regarding how the loan will be used.

Table 11 summarizes the interview results on the purposes of borrowing from informal sources. While the interest rate for borrowing from informal sources is very high, as indicated above, the data in the table shows that the highest share of the households (among households borrowing from informal sources) reported that they borrow for food consumption.

<sup>&</sup>lt;sup>4</sup> Our interview was conducted in 2016. In April 2017 the Cambodian government imposed a cap on annual interest rate for MFIs' loans to 18% (or about 1.4% as a monthly rate).

<sup>&</sup>lt;sup>5</sup> The correlation coefficient between agricultural land holding and borrowing from informal sources is about -0.36.

Purpose	Number of Households	% of households borrowing from formal sources
Healthcare (emergency)	8	20.00%
House reform/repairing	6	15.00%
Consumption (food)	6	15.00%
Purchasing motorcycle/other vehicles	4	10.00%
Capital for starting business	4	10.00%
Healthcare expenditure (not emergency)	3	7.50%
Purchasing fertilizer	3	7.50%
Purchasing other livestock	2	5.00%
Buying machine	2	5.00%
Marriage of family member (man)	1	2.50%
Purchasing cattle/buffalo/horse	1	2.50%

Table 10: Purposes of borrowing from formal sources

Source: Author's survey

Purpose	Number of households	% of households borrowing from formal sources
Consumption (food)	8	38.10%
House reform/repairing	7	33.33%
Health care (emergency)	3	14.29%
Healthcare expenditure (not emergency)	1	4.76%
Purchasing cattle/buffalo/horse	1	4.76%
Capital for starting business	1	4.76%

Table 11: Purposes of borrowing from informal sources

Source: Author's survey

# 4. Conclusion

As a complement to Samreth (2016), this report summarizes and discusses results from a field interview in 2016 at Angkor Sar commune of Mesang district in Prey Veng province, Cambodia. Samreth (2016) illustrated the level of education of interviewed household heads and discussed the migration situation of the interviewed households. This report provides additional information on housing condition, energy and water sources, toilet coverage, agricultural land ownership, household income and expenditure and households' access to

credit. A remarkable result of this study was that, while most households have proper access to water sources, more than half of them do not have toilets in their housing compound. Among those who reported that they possess agricultural land, the average size is very small. From the interview, we also find that the households depend on various income sources, and one important income source is remittances. Regarding expenditures, we observe that expenditures on festivals, funerals and other ceremonies are high. Furthermore, nearly half of the interviewed households borrow money and a significant share of them borrows from informal sources for food consumption. Although a more sophisticated analysis may be needed, we also find found that agricultural land holding may help them to access a better quality of credit.

# References

- Collins, D., 2005, "Financial Instruments of the Poor: Initial Findings from the South African Financial Diaries Study," *Development Southern Africa* **22**, pp. 717-728.
- Collins, D., 2008, "Debt and household finance: evidence from the Financial Diaries Daryl," *Development Southern Africa* **25**, pp. 469-479.
- Collins, D., Morduch, J., Rutherford, S., and Ruthven, O., 2009, *Portfolios of the Poor: How the World's Poor Live on \$2 a Day*, Princeton University Press.
- Ministry of Planning, 2015, *IDPoor Information System Cambodia 2015*, Royal Government of Cambodia.
- Rutherford, S., 2003, "Money Talks: Conversations with Poor Household in Bangladesh about Managing Money," *Journal of Microfinance* 5, pp. 44-75.
- Ruthven, O., 2002, "Money Mosaics: Financial Choice and Strategy in a West Delhi Squatter Settlement," *Journal of International Development* 14, pp. 249-271.
- Samreth, S., 2013, "Kanbojia no Hinkon ni Kansuru Kenkyu," Sogo Kenkyu Kiko Kenkyu Project Kenkyu Seika Houkokusyo, KP24A12-01. Available at: <u>http://sucra.saitama-u.ac.jp/modules/xoonips/detail.php?id=KP24A12-01</u>

(Accessed on July 20, 2016)

Samreth, S., 2016, "A Preliminary Survey on the Poor Households in Angkor Sar Commune, Mesang District, Prey Veng Province, Cambodia: Household Information," *Saitama University Review* (Faculty of Liberal Arts) 52 (1), pp. 111-120.