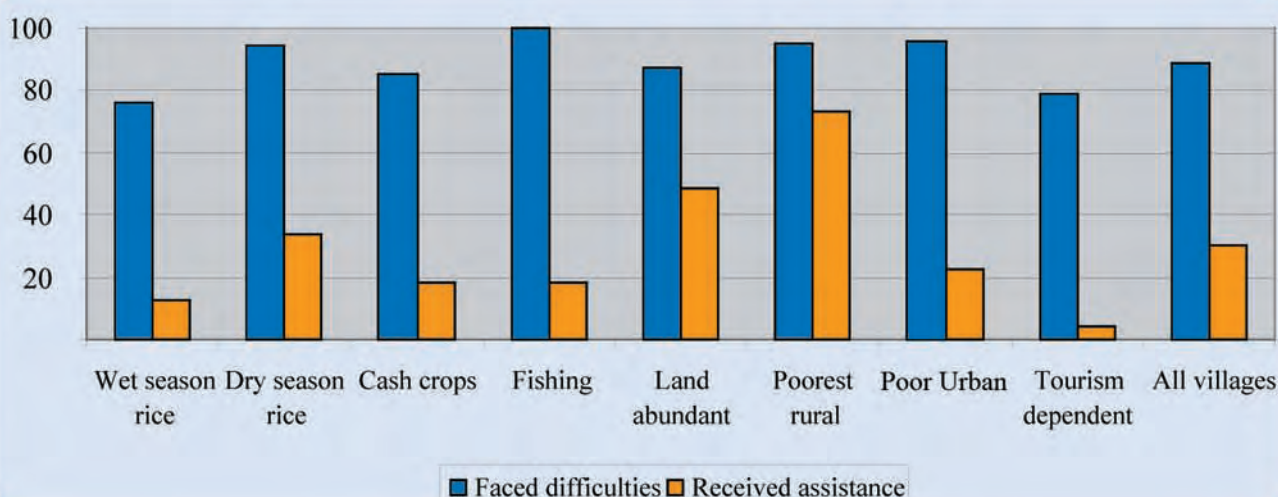


# The Impact of The Economic Downturn on Households and Communities in Cambodia

**Percentage of households facing difficulties and receiving assistance in the past six months (Feb - July 2009)**



**A Survey Conducted by  
the Cambodian Economic Association**

**In Partnership with  
Oxfam and The NGO Forum on Cambodia**

**May 2010  
Phnom Penh, Cambodia**

## **The Impact of the Economic Downturn on Households and Communities in Cambodia**

### **Co-Authors:**

Mr. Chan Sophal

Mr. Ngo Sothath

### **Published by:**

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### **Photography by:**

Ms. Susanne Hasman

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## List of Acronyms

ADB	Asian Development Bank
CDRI	Cambodia Development Resource Institute
CEA	Cambodian Economic Association
CIDS	Cambodia Institute of Development Study
DoP/MoEYS	Department of Planning/ Ministry of Education, Youth and Sport
ED	Economic Downturn
FDI	Foreign Direct Investment
FGD	Focus Group Discussion
GDP	Gross Domestic Product
HHs	Households
ILO	International Labour Organization
IMF	International Monetary Fund
MFIs	Micro Finance Institutions
NGOs	Non-Government Organizations
ODI	Overseas Development Institute
RGC	Royal Government of Cambodia
UNDP	United Nation Development Programme
US	United States
USA	United States of America
USD	United Sates Dollar
WFP	World Food Programme

## **Acknowledgement**

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## **Executive Summary**

The economic downturn that originated in the USA in late 2008 impacted economies around the world as it unfolded. Cambodia, whose major economic bases were shaken due to their heavy reliance on external demand, markets and capital, was no exception. Major sectors affected by the economic downturn in Cambodia included the garment, construction and property markets, tourism, and agriculture for selected commodities such as rubber and cassava. Between September 2008 and May 2009, the decline of garment exports was witnessed by the laying-off of 63,000 workers while the impact on real estate and construction has resulted in the disappearance of about 100,000 jobs (or three out of ten jobs). The decline of tourist arrivals and their spending caused many to be underemployed and limited economic activities in tourism-related businesses such as restaurants, handicrafts and souvenirs.

In light of these adverse impacts on the macro-economic situation, and to add the most value, this study focuses on the impacts of the economic downturn on people and households at the community level. The study surveyed 1,070 households and conducted focus group interviews with women and key informants in 15 villages across Cambodia (14-31 July 2009), 14 of which were surveyed a year earlier to assess the impact of high food prices (June 2008). A new fifteenth village, in Siem Reap, was added to examine the impact on tourism dependent villages. Thus, the study primarily used the survey in 2008 as a baseline, in order to observe the changes made overtime. Changes were observed in household assets, incomes, income sources, the difficulties that households encountered and the responses or coping strategies that households undertook to maintain their livelihoods.

The evidence from the household survey in July 2009 reveals that the economic downturn has had a significant impact on households and people at the community level, especially in poor urban, tourism dependent and cash crop villages. The impacts were confirmed by job losses, reduced remittances, decreased income and the lower price of agricultural commodities such as wet season rice, maize and cassava.

Overall, 89% of the surveyed households faced difficulties in the previous six months, which remains high compared to 2008 when inflation was high. However, the type of difficulties that the households encountered changed and more households in poor urban and cash crop villages experienced hardship. In 2008, high food prices were the major difficulty for household; almost none of the surveyed households experienced the job loss or decreased income. When sickness/ health expenses had been the major difficulty facing by households in 2008, this issues continued to affect households in 2009, job loss/ decreased income and the inability to repay debts become the two foremost difficulties created by the economic downturn. The percentage of households with reduced income was highest in poor urban (61%) and tourism dependent (50%) villages, while the percentage of households reporting difficulties to repay debts was highest in cash crop villages (21%).

The survey found that households were affected through their members losing jobs or their jobs being affected as a result of the economic downturn. Of the surveyed households, 33% reported that household members' jobs had been affected and 3.7% found their members' jobs had been lost in the previous nine months. Jobs of households in poor urban (77%) and tourism dependent (69%) villages were affected the most, while 9% of households in the poorest rural and poor urban villages experienced he greatest job losses.

Farmers of maize and cassava production were hard hit because of falling profits. Although these farmers could still make profit from their crop production, the profits were relatively less compared to the year before. The profit in maize production per hectare in 2009 was \$344 (56%) less than it had been in 2008, while the profit of cassava production declined by \$106 (36%) per hectare. Profits for farmers of wet season rice also fell, by \$68 (32%) per hectare. Only farmers of dry season rice were able to increase their profits compared to 2008.

The majority of households reported that the income they received from various sources decreased compared to a year earlier, especially income from garment work, construction work, self-employed business and selling handicrafts/souvenirs, which was specific to the tourism dependent village. There were relatively fewer households receiving less income from selling paddy, vegetables and livestock, which implies that the impact on households earning income from these sources was less severe, for instance in wet season rice, dry season rice, and land abundant villages. For the fishing village, 74% of households reported their income from fishing had decreased compared to the previous year. However, the decreased income is mainly explained by the decline of fish catch per household.

The households were able to maintain their income from wages and foreign remittances. Income from labour work and foreign remittances remained unchanged, but households received less income from domestic remittances. When inflation was high (22.3%<sup>1</sup>) in July 2008, the poor earned more money from their labour work as the wage increased by about 50% compared to 2007. From 2008 to 2009, daily wages remained more or less unchanged. Daily workers continued to be paid similar wages to those they earned the previous year, except for agricultural jobs. The wage for weeding tended to be about 17% less compared to 2008.

The hard times caused by income loss undermined a household's ability to repay debts, forced households to limit spending on healthcare and other non-food items, and reduced food consumption (either by eating less food or buying less preferred/ less expensive food) which further threatened their already weak nutritional status which caused by high food prices during the past year. Women consumed disproportionately less food since they want to leave more food for their husbands and children. In addition to seeking additional/ alternative jobs and having increased numbers of household members to migrate for work the households coped with their difficult livelihood situation by selling off assets and taking out loans. Talking children out of school was not found to be significant, which suggests the impact on education has yet to come, although this could be explained by the fact that household costs for informal school fees are not common in surveyed villages, or that the finding is insignificant due to the limitation of the survey being conducted during the second half of July 2009, which was the end of the school year.

A greater number of households had members participating in migration – 24% of the surveyed households engaged in migration, which was an increase from 15% in 2008. With the exception of dry season rice villages, migration increased in all other villages; however, increased migration in land abundant villages is on one hand due to prolonged drought and on the other hand explained by employment opportunities available from economic land concessions in nearby provinces. Nevertheless, 62% of migration was reported as a coping mechanism to deal with the household's decreased income, while in 2008 only 33% had reported using migration as a means to cope with livelihood difficulties. The major destination of migration workers was to urban and rural areas in Cambodia comparing to

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<sup>1</sup> National Institute of Statistics (NIS), Ministry of Planning

other locations, which remained unchanged from the 2008 survey. However, the proportion of migration to rural Cambodia remains unchanged and there is decline of migration to urban Cambodia, while migration to rural Thailand doubled. Notably, migration is most common among poor households.

The percentage of households taking out loans has increased and the inability of households to repay debts is deteriorating alarmingly. Households who borrow make up 71% of all surveyed households, an increase from 62% a year earlier. Of loans taken out, 70% were entered into between January and July 2009. The highest proportion was in the fishing village (91%), followed by land abundant villages (79%), and cash crop and poorest rural villages (72%). However, the increase was highest in cash crop villages (a 25% increase from 2008), followed by poor urban villages (15% higher than in 2008), and the highest percentage of households reported the alarming fact that the first challenge was to repay debts in cash crop villages (21%), followed by the fishing village (19%) and land abundant villages (15%).

A high proportion of loans were incurred for non-productive purposes, while only 34% of loans were reported as helping households better-off. Out of all loans, 52% reported that the first reason was for business expansion and agriculture production, while their agriculture often is largely dependent on natural factors. The highest proportion of households borrowing for agriculture production was in cash crop villages (50%), and for business expansion in the fishing village (79%). The remaining 48% of the loans were largely for food consumption, health expenses, repaying debts and building houses. The borrowings for food and health expenses were highest in poorest rural, poor urban, and fishing villages.

Despite facing challenges, fewer households reported having received aid from external sources such as the government and NGOs, but that the distribution of aid was better targeted according to the survey. Only 30% of the surveyed households received assistance in the past six months, down from 48% the previous year. The distribution of aid shifted. The decline of aid-recipient households in wet season rice and cash crop villages represents an increase of households receiving aid in land abundant villages. Notably, the percentage of aid-recipient households in poorest rural villages remains highest (73%) and is unchanged from the previous year. Also, the proportion of households in poor urban and fishing villages who received assistance in 2009 was similar to that in 2008, but more households in dry season rice villages received assistance, though these villages were least affected by the economic downturn.

Among aid-recipient households, the common forms of assistance that they received in the past six months were free healthcare service (36%), school meals (26%), micro-credit (14%), and food for work (10%). Aid from the government and NGOs often complement each other. For instance, when NGOs provide school meals and food for work to the poorest rural villages, government aid is provided through a free healthcare service, and when government aid is limited in poor urban villages, the NGOs provide free healthcare services in these communities. Furthermore, despite receiving that aid, the households still largely expressed their preference for assistance such as free healthcare services, micro-credit with low interest rates, free food distribution, and animal feed/raising. Other preferred forms of aid, for instance, are fertilizers (for wet-season rice villages), agricultural inputs and skills (both wet season rice and dry season rice villages), and fishing gear and land (for the fishing village).

The household survey of 15 villages (July 2009) reveals that the economic downturn has had significant impacts on the people and households at the community level. The communities that were hardest hit by the economic downturn include cash crop, poor urban and tourism dependent villages since the major income sources of households in these villages were

exposed to external demand and markets. In these communities, the impacts were strongly confirmed by decreased income due to declining profits from crop production, characterized by a drop in prices, jobs in the garment sector, construction, handicrafts, and self-employed businesses, which were all affected and experienced job losses. In poor urban villages, 25% and 27% of the surveyed households respectively depend on work in the garment and construction sectors, while 68% earn their living from self-employed businesses such as *motodup* driving. In the tourism dependent village, 65% of the households depend on self-employed businesses, 38% make a living by selling handicraft/souvenirs; and another 20% earn income from working as labourers.

Other communities that were also hard hit by the economic downturn were the poorest rural and land abundant villages. Relatively more households in these communities were dependent on jobs in the garment sector, domestic remittances and forest products. Although the households in both dry season rice and wet season rice villagers were also affected as a result of their reliance on income sources such as from garment, construction, and self-employed businesses, they tended to be less impacted by the economic downturn as the price of rice remained fairly high. Dry season rice villages appear even better insulated from the economic downturn in relation to wet season rice villages because dry season rice farmers could earn even greater profit from their rice production than in 2008, while farmers of wet season rice earned less profit.

The livelihoods of the households in the fishing village deteriorated compared to 2008 since they lacked income from other sources. However, their hardship is worsened by the impact of the economic downturn. They are dependent largely on fishing while their fishing output per household continues to decline each year. Thus, the highest proportion of households in this village is in debt and while most borrowing (79%) was incurred for fishing businesses, the households reported theft of fishing gear as one of their primary concerns. Consequently, about 8% of loans in this village were incurred to repay debts and 19% of the households reported lack of money to repay debts as their first difficulties in the previous six months. Furthermore, the fact that the second main reason for borrowing was for food expenses for more than half of loans in this village were incurred for food expenses gives a clear indication of their suffering.

Following the impact by the economic downturn, households experienced decreased income through various routes. To cope with their difficulties, the households started to limit spending on healthcare and other non-food items, and reduced food consumption (either by eating less food or buying less preferred/ less expensive food) which further threatened their nutritional condition. Women consumed disproportionately less food since they wanted to leave more food for their husbands and children. Furthermore, in addition to seeking additional/ alternative jobs and having more household members migrate for work, the households cope with their difficult livelihoods by selling off their assets and taking out loans to repay debts and to buy food. These non-productive purposes for taking loans are likely to force borrowing households into greater debt.



# INTRODUCTION







# **I. Introduction**

## **1.1. Background**

Cambodia has been severely impacted by the unfolding global economic crisis and the impact is likely to have been more severe in the lean period<sup>2</sup> (August–October 2009). The IMF, World Bank and the ADB forecast earlier in 2009 that the economy in 2009 would contract by -1%, -0.5% and +2.5%, respectively. In light of more recent information, these institutions revised their respective forecasts of GDP growth to -2.75%, -2.2% and -1.5%, indicating a more severe decline. Cambodia's vulnerable exports, overwhelmingly reliant on garment markets in the US, have been affected the most. As a result, 63,000 garment workers, 90 percent of whom are female, have lost their jobs between September 2008 and May 2009. Likewise, Cambodia's tourism sector, foreign direct investment (FDI) and construction have experienced significant contraction.<sup>3</sup>

The global financial and economic crisis originating in the USA in 2008 started to reduce Cambodia's exports in the last quarter of the year, reducing growth to 6.5 percent after achieving double digit growth for four consecutive years between 2004 and 2007. The recent impact has proven the vulnerability of the Cambodian economy, which has been heavily reliant on external demand, and foreign markets and capital with a weaker domestic orientation. Even though the Royal Government of Cambodia (RGC) has employed sound macroeconomic management policies, the economy could not escape the global economic downturn. The leading industry, garment manufacturing, exported 27 percent less in the first six months of 2009 compared to the same period last year. Much FDI and construction was put on hold, and fewer tourists travelled to visit Cambodia. Only agriculture is expected to continue growing, by about 5 percent in 'real terms'.<sup>4</sup>

As a result of spending multipliers imminently declining in response to the loss of tens of thousands of jobs in the leading industries of garments and tourism, the drastic fall in the property market and FDI projects, and the catastrophic drop in prices for selected cash crops, the national economy has been facing sluggish domestic demand and consumption. Rural households that depend on farming income and remittances from Phnom Penh have been bearing the greatest impact. Villagers that depend on forest products or growing cassava, and the landless that depend on casual labour are amongst the groups most affected by the economic downturn in Cambodia. A large number of households may have to dispose of productive assets in order to repay their debts, most of which were incurred as a result of the rising farming costs in 2008 when good incomes were expected from the high prices of crops and land. As a result, the well being of children, the poor and near poor, both men and women, has likely deteriorated.

In light of these anecdotes and the adverse macro-economic situation, a survey is needed to generate more evidence at the community level. In order to add the most value, the study is being centred around the likely impact on *people in the communities*. Much of the discussion to date within government and the development community in Cambodia has been focused on

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<sup>2</sup> 'Lean period' means the time interval between the date of this field survey and then upcoming harvest of wet season rice early November.

<sup>3</sup> United Nations Country Team (2009) "The Global Economic Downturn: Opportunity or Crisis?" (Phnom Penh: November 2009)

<sup>4</sup> Economic growth is based on real GDP which assumes constant prices to entirely reflect the volume of production. Even if farmers produce greater volumes, their real purchasing power declines as the value of their produce decreases substantially.

technical economic/financial issues (economic growth, sector growth, garment exports, tourism services, construction, FDI, declining tax base, etc.). There has been little discussion on the ultimate impact on households in the communities and how best to mitigate this impact. The study was designed to complement the other studies, such as those commissioned by ODI, ILO, UNDP Cambodia and the World Bank, which deal mostly with the indicators at the national level and a small number of workers, but have weaker evidence from households and communities.<sup>5</sup> The purpose is to provide insightful findings that can be used for practical recommendations.

## 1.2. Methodology

The current study relied mainly on a survey of 1,070 households representing 4,000 households in 15 communities selected from diverse economic occupations in various parts of the country. The list and criteria for the villages are presented in Table 1.1 below. Fourteen of these communities were surveyed in June 2008 to assess the impact of high food prices at that time. Household data from these villages provides a very good reference point for measuring changes in people's livelihoods. It provides up-to-date evidence to reflect the impact of the economic downturn in rural areas on the well being and livelihoods of people at the grassroots. Focus group discussions (FGDs) with key informants and women were conducted in the 15 communities to complement the household survey and to address issues of particular interest, such as women, children and vulnerability issues.

**Table 1.1 Villages selected for the study**

	Criteria	Site (village)	Province	HH questionnaires	Key Informants	Women group
1	Wet season rice surplus	Nikum Krave village, Chroy Sdao commune, Thmar Korl district	Battambang	66	1	1
2	Wet season rice surplus	Ta Ngok Sre village, Phnov Ti Pi commune, Sithor Kandal district	Prey Veng	76	1	1
3	Dry season rice surplus	Ponley Choeung village, Ponley commune, Angkor Borey district	Takeo	69	1	1
4	Dry season rice surplus	Ponley village, Babaong commune, Peam Ro district	Prey Veng	91	1	1
5	Maize production	Kbal Tumnop village, Ou Sampor commune, Malai district	Banteay Mean Chey	75	1	1
6	Cassava production	Spean village, Dar commune, Memut district	Kampong Cham	70	1	1
7	Soybean production	Sampor village, Ta Ong commune, Chamkar Leu district	Kampong Cham	71	1	1
8	Fishing	Kampong Preah village, Chnok Trou commune, Boribo district	Kampong Chhnang	70	1	1
9	Land abundant	Tumnop Trakuon village, Kdol Taken commune, Bavel district	Battambang	66	1	1
10	Land	Kang Meas village, Thnaot	Kampong	76	1	1

<sup>5</sup> At least four institutions have separately commissioned a study on this subject in the past seven months: ILO (to CIDS), ODI (to CDRI), World Bank (to CDRI) and UNDP Cambodia (to Chan Sophal and the UNDP IFA team).

	abundant	Chum commune, Baray district	Thom			
11	Poorest areas in poorest provinces	Anha Ses village, Toap Moan commune, Thpong district	Kampong Speu	62	1	1
12	Poorest areas in poorest provinces	Sambu village, Popok commune, Stoung district	Kampong Thom	71	1	1
13	Poor urban	Damnak Thom village, Sangkat Stoeung Meanchey, Khan Meanchey	Phnom Penh	70	1	1
14	Poor urban	Village 6, Sangkat Khmuonh, Khan Sen Sok	Phnom Penh	63	1	1
15	Tourism dependent	Rohal village, Siem Reap district	Siem Reap	74	1	1

Building on the household data available from the survey in the same villages in June 2008, the analysis attempts to observe livelihood changes between 2008 and 2009. The household data in 2008 survey was collected in June, which was well before the start of the global economic downturn in September 2009. Thus, it serves as baseline to compare with the household data in the same communities a year later in July 2009 that could illustrate changes attributive to the consequences of the economic downturn.

In an attempt to illustrate livelihood changes that are subject to the economic downturn, chapter II presents overall indicators through observing the types of difficulties that the households encountered in the past six months and examining the kind of strategies that they employed to cope with those difficulty circumstances. Then, chapter III, IV, V, and VI analyse the alteration of the household wellbeing in employment, income, production, consumption, food stock, and assets. Furthermore, chapter VII identifies the implication that the economic downturn may likely have had on the social aspects such as health and children's education. To view the intervention by external actors, chapter VIII describes the magnitude of external assistance intervened by the government, NGOs, and other stakeholders in the surveyed villages.



# OVERALL INDICATORS OF IMPACT ON THE COMMUNITIES



✓ DIFFICULTIES FACED BY HOUSEHOLDS IN THE PAST SIX MONTHS .....	6
✓ COPING STRATEGIES UNDERTAKEN BY HOUSHEHOLDS IN THE PAST THREE MONTHS .....	8
✓ OUTSTANDING LOANS .....	11
✓ MIGRATION .....	16



## II. Overall Indicators of Impact on the Communities

This chapter is meant to provide overall picture of what had happened to the households and the communities during the time of the economic downturn. With availability of household data obtained from a similar survey conducted a year earlier (June 2008, by CDRI), this chapter aims to compare this data with the current survey conducted in July 2009 to assess the changes during the period and that are attributive to the impact of the economic downturn. Thus, this chapter observes the difficulties that the households encountered in the past six months (February-July 2009) in section 2.1, the livelihood coping strategies that the households had undertaken in the past three month (May-July 2009) in section 2.2, and the pattern and trend of borrowings and migration among households in surveyed villages in section 2.3 and 2.4.

### 2.1. Difficulties faced by households in the past six months [February-July 2009]

Overall, the surveyed households across villages were found to have faced difficulties over the past six months, as reported in July 2009. When asked ‘has your family encountered any difficulties over the past six months?’ 89% of the respondents surveyed in July 2009 answered ‘yes’. Compared to a similar survey conducted in June 2008, the percentage of households facing difficulties in the previous six months had increased in three categories of villages: cash crop, fishing, and poor urban villages. The statistics indicate that proportionally more of the households in the poor urban villages had experienced increasing difficulty in their lives in the previous six months. An additional 13.5% of the households in these villages perceived some degree of difficulty in July 2009, compared to June 2008 (82%). Further, there was an increase of 10.2% in the fishing village households and about 6% more in cash-crop villages that found their livelihoods difficult.

In the other categories of villages, relatively fewer households encountered difficulty in July 2009 compared to June 2008. The percentage of households in the wet season rice villages who reported facing difficulties declined from 91% in June 2008 to 76.1% in July 2009, suggesting the situation had become less serious. There was also a small improvement in the dry season rice, land abundant, and poorest rural villages, where about 4 to 6% fewer reported having difficulties. However, the percentage of households facing difficulties in these villages remained very high. As a result of high food prices in June 2008, the highest proportion of surveyed households in the poorest rural villages (94.7%) and dry season rice villages (93.8%) experienced difficulty. In July 2009, the villages that had most households facing difficulties were the fishing village (100%), followed by poor urban villages (95.5%).

In June 2008, community households believed high food prices were their major difficulty, followed by sickness/health expenses and lack of money to repay debt. In the household survey of July 2009, communities reported different difficulties. Sickness/ health expenses and job loss/decreased income were the two major difficulties across villages and were stated respectively as the first and second priorities in terms of the challenges, followed by inability to repay debt, lack of food and high food prices.

In July 2009, one-third (32.1%) of the households who have faced difficulties in the past three months regarded **sickness/ health expenses** as their primary difficulty, an increase of 6.5% compared to June 2008. A further 18% saw it as their second challenge. The proportion of households facing this difficulty is comparable across villages.



**Table 2.1: Percentage of households reporting difficulties they encountered in the last six months**

No	Types of Difficulties	June 2008			July 2009			Change 2009/08		
		1st Diff.	2nd Diff.	3rd Diff.	1st Diff.	2nd Diff.	3rd Diff.	1st Diff.	2nd Diff.	3rd Diff.
1	Job loss/ decreased income	0.6	1.2	1.9	<b>27.8</b>	<b>19.6</b>	11.5	<b>27.2</b>	<b>18.5</b>	9.5
2	Sickness/ health expenses	<b>25.6</b>	<b>19.7</b>	16.7	<b>32.1</b>	<b>17.9</b>	16.8	6.5	(1.7)	0.1
3	High food prices	<b>53.0</b>	<b>35.2</b>	10.4	7.3	15.1	14.5	<b>(45.7)</b>	<b>(20.2)</b>	4.1
4	Lack of money to pay debt	6.5	13.6	27.3	<b>12.3</b>	<b>22.6</b>	21.8	<b>5.8</b>	<b>9.0</b>	(5.5)
5	Not safe/robbery	0.0	0.2	1.9	0.0	0.7	2.7	0.0	0.5	0.7
6	Lack of money to pay house rental	0.9	0.6	0.3	0.1	0.7	1.9	(0.8)	0.1	1.6
7	Bad weather	1.6	1.7	5.0	2.3	5.7	5.7	0.8	3.9	0.7

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009) and Survey of 991 households by CDRI in 14 target villages (June, 2008)

*Note:* in each time of both surveys, the respondents were asked whether they encountered difficulties in their livelihoods in the past six months. Then, all respondents providing a 'yes answer' were asked to report their three main difficulties during that six-month period.

The proportion of households who regarded **job loss/decreased income** as their first difficulty increased substantially, from 0.6% in June 2008, to 27.8% in July 2009. A further 19.6% and 11.5% of households who reported difficulties respectively viewed job loss/decreased income as the second and third difficulties in their households. The proportion of households who lost jobs or earned less was highest in poor urban and tourism dependent villages. Households reporting difficulties in both types of village had the highest proportion of people – 60% and 50% respectively – who had either lost jobs or whose incomes had fallen.

According to group discussions, a decline in household income led to villagers being unable to repay their debts. While some were forced sell assets such as land, or had goods confiscated by creditors, others managed to borrow money from other sources to repay debts. The household survey confirms that the number of community households experiencing problems in **repaying debts** nearly doubled. Respectively, 12.3% and 22.6% of households reported having difficulty finding money to repay debts as their first and second challenges in July 2009, an increase from the 6.5% and 13.6% reported in June 2008. A greater proportion of households in cash crop (21.4%) and fishing (18.6%) villages said they lacked money to repay their outstanding loans.

Another major difficulty that households encountered - during February-July 2009 period - was **lack of food**. Households who regarded lack of food as their primary difficulty accounted for 9.5%; a further 7.3% regarded it as the second difficulty for their households. Importantly, about 26% of households in the poorest rural villages reported lack of food as their first difficulty. While 2008 was characterized by rising food prices, 53% and 35% of households reporting difficulties perceived **high food prices** as their first and second difficulties, and another 10.4% saw it as their third difficulty. In 2009, although the economic downturn resulted in cheap prices of domestically produced commodities, the households still found high food prices a problem in their everyday lives.

Other difficulties that were raised as challenges for the village households included shortage of money and bad weather. Although these challenges were minimal, they were not insignificant; indeed, for a few villages they were of critical importance. For example, bad weather was a real issue for farmers in land abundant and cash crop villages. None of the surveyed communities mentioned the difficulty of the affordability of keeping children in



school, but this was obviously the case for households in poor urban communities. Conversely, lack of safety and robberies were rarely reported as challenges in communities other than the fishing village.

## **2.2. Coping strategies undertaken by households in the past three months [May–July 2009]**

When facing with difficulties in their everyday livelihoods, people tend to have various coping mechanisms. Since May 2009, it has been observed that common strategies that were applied more often and by a large number of households were those related to food consumption, such as reliance on less preferred / less expensive food and actual reduction of food consumed. The less frequent coping mechanisms were related to debt. These included borrowing food / reliance on help from friends or relatives, buying food on credit, and taking out loans. Seeking new ways of earning income, such as seeking alternative/additional jobs, migration and increasing fishing activities were also employed less often than measures related to food consumption. A much smaller proportion of households took these measures compared to resorting to debt-related measures. It is rare for people to sell their assets to manage their difficulties.

### **2.2.1 Coping strategies related to food consumption**

Measures related to **food consumption** were the most common of the everyday coping methods, and were undertaken by a large proportion of households across villages. About 75% of the respondents relied on less preferred / less expensive food from mid-April 2009 and more than half of them reported that they had reduced daily food consumption. A larger proportion of households in the poorest rural villages were undertaking this measure: 85% of them were eating less preferred / less expensive food compared to 60% of households in dry season rice villages.

Of food consumption related measures, reducing daily food consumption appears as the second choice for villagers. About 50–60% of the village households reportedly did this. However, more households in the wet season rice and dry season rice villages managed to maintain the same level of consumption, with only one-third of them reducing their food consumption. In the poorest rural villages, about 66% of the households reduced their daily consumption. Another way to reduce food consumption is to restrict food consumption by adults to leave more for young children. This strategy is applied by 32% of the surveyed households, compared to 53.4% of households in the poorest rural villages.

A more disturbing finding from a gender perspective is that 38.6% of the households surveyed in July 2009 reported that they coped with their daily food consumption by mothers / older sisters consuming less to leave food for other family members: 64.7% and 51.1% of the surveyed households in poorest rural and poor urban villages respectively confirmed doing this. A comparison of the same 14 villages shows the proportion of households whose female members decided to eat less increased from 32.1% in June 2008 to 42.8% in July 2009. This raises a concern with regard to nutrition.

The focus group discussions with women confirmed that when responding to the difficulty of reduced income, a household's immediate response was to spend less on food or to eat less food. Women said that the reduction in food consumption was not shared equally between men and women. When there was less food, women ate less so that more food would be left for their husband and/or children. The women's group explained that men deserved to eat more food because they were physically stronger, did the hard work on the farm, and earned income for their family.

## 2.2.2 Coping strategies related to food debt

When incomes fell, families sometimes did not have the cash to pay for food. A common response was to **buy food on credit**. A majority of surveyed households, 66.2%, confirmed that they had bought food on credit since mid-April 2009, an increase from 57.5% in June 2008. The proportion of households engaged in buying food on credit was 80.4% in wet season rice villages and 81.2% in the poorest rural villages, while the proportion was highest in the fishing village (93%). Women bore the burden, as they were the ones to engage directly with cooking and food, managing this in spite of a lack of money. Although they commented that they sometimes felt ashamed to buy things on credit, they said they had no choice. Women explained that men were either ignorant of the problems, or if they were aware of them, had never experienced or had to manage these problems themselves.

**Table 2.2: Percentage of households using coping strategies during the past three months [May –July 2009]**

No	Coping strategies used by households since April 2009	Wet season rice	Dry season rice	Cash crops	Fish-ing	Land abundant	Poor est rural	Poor ur-ban	Tour-ism depen-dent	Total
<b>Food consumption related</b>										
1	Rely on less preferred / expensive food	80	60	80	79	75	<b>85</b>	72	74	<b>76</b>
2	Reduce daily food consumption	36	34	59	59	57	<b>66</b>	55	53	<b>52</b>
3	Restrict food consumption for adults to leave more for young children	23	32	37	24	22	53	40	8	32
4	Mothers / older sisters eat less to leave food for other family members	31	41	41	16	32	65	51	4	39
<b>Debt-related</b>										
5	Borrow food, or rely on help from friends or relatives	41	20	46	76	38	66	32	42	43
6	Purchase food on credit	<b>80</b>	67	65	<b>93</b>	60	<b>81</b>	43	42	<b>66</b>
7	Take out loans	75	61	73	<b>96</b>	75	78	41	46	<b>68</b>
<b>Income-generating activities</b>										
8	Seek alternative or additional jobs	31	17	<b>59</b>	10	<b>47</b>	<b>51</b>	23	34	<b>37</b>
9	More family members migrate to find work and/or food	<b>20</b>	6	<b>17</b>	7	<b>31</b>	<b>19</b>	2	0	<b>14</b>
10	Increase fishing activities	17	26	4	<b>90</b>	33	19	0.8	1.4	20
11	Increase forest clearing activities	-	1.3	1.4	1.4	17	27	0	0	6
<b>Household assets</b>										
12	Sell domestic assets (furniture...)	2.8	3.1	6.5	7	3.5	1.5	0.8	6.8	3.8
13	Sell productive assets (farm implements, sewing machines...)	4.9	3.8	3.7	4.3	2.1	3.0	0.8	2.7	3.2
14	Sell land	0.7	3.1	1.9	0	5.7	0	0	1.4	1.8
15	Sell jewellery	7.7	11	<b>16</b>	<b>19</b>	10	3.0	<b>13</b>	11	<b>11</b>
<b>Others</b>										
16	Consume seed stocks held for the following season	4.9	7.5	3.7	0	<b>18</b>	<b>31</b>	0.8	4.1	<b>9.1</b>
17	Decrease expenditure on fertilizers, pesticides, animal feed, etc.	15	11	7.9	1.4	6.4	3.8	0	0	6.5
18	Reduce expenditure on healthcare	28	36	34	37	36	<b>53</b>	33	11	<b>35</b>

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009)

The survey in July 2009 reveals that 68% of the respondents reported that their households had **taken out loans** as a way to cope with their livelihoods. The proportion of households taking out loans was highest in the fishing village (95.7%), followed by the poorest rural villages (78.2%) and land abundant villages (75.2%). While loans were usually taken out to expand businesses and to deal with family affairs such as sickness, some households were reported to be borrowing to repay old debts. In any case, the burden of obtaining loans was largely the responsibility of women.

Women explained that they were the ones in the frontline when taking out loans. Although both moneylenders and micro-credit institutions require husband and wife to agree with each other when taking out loans, men often encouraged women to negotiate with creditors on new loans or non-performing loans. While it is believed that women have better communication skills, it was further explained that men are culturally regarded as the household head or breadwinner. Taking out a loan indicates that a household has a financial deficit, which implies that the household head is incapable of fulfilling his obligation to earn a living. Therefore, negotiation over loans could result in loss of face for men. The other reason given is that men are not trusted by creditors since they might use the loan for non-productive purposes such as gambling, drinking alcohol and so on, and will be either unable to repay a loan or unaccountable for the debt.

**Table 2.3: Percentage of households undertaking livelihood coping strategies in 2008 and 2009**

No	Livelihood coping strategies undertaken by households in the last three months	June 2008	July 2009	Change 2009/08
<b>Food Consumption related</b>				
1	Rely on less preferred / less expensive food	62.8	75.6	12.8
2	Reduce daily food consumption	44.1	51.8	7.7
3	Restrict food consumption for adults to leave more for young children	37.4	32.0	(5.5)
4	Mothers / older sisters eat less to leave food for other family members	32.1	38.6	6.5
<b>Debt-related</b>				
5	Borrow food, or rely on help from friends or relatives	39.7	42.7	3.1
6	Purchase food on credit	57.5	66.2	8.7
7	Take out loan	0	68.0	0
<b>Income-generating activities</b>				
8	Seek alternative or additional jobs	30.1	37.0	6.9
9	More family members migrate for work	7.1	14.2	7.1
10	Increase fishing activities	17.3	19.7	2.5
11	Increase forest clearing activities		6.2	6.2
<b>Household assets</b>				
12	Sell domestic assets (furniture...)	0.8	3.8	3.0
13	Sell productive assets (farm implements, sewing machines, motorbikes...)	0.6	3.2	2.6
14	Sell land	1.3	1.8	0.5
15	Sell jewellery	3.3	11.2	7.9
<b>Others</b>				
16	Consume seed stocks held for next season	4.1	9.1	4.9
17	Decrease expenditure on fertilizers, pesticides, animal feed, etc.	5.0	6.5	1.5
18	Reduce expenditure on healthcare	18.9	34.6	15.7

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009) and Survey of 991 households by CDRI in 14 target villages (June, 2008)

### **2.2.3 Coping strategies related to income generating activities**

As with debt-related measures, increasing **income-generating activities** were less often employed by households than food-consumption related ones, but the proportion of households engaged in this mode of coping was relatively small compared with those purchasing food on credit or taking out loans. This does not, however, imply that people were lazy or preferred taking out loans to increasing income-generating activities; an alternative explanation is that income-generating opportunities are limited. Examples of such activities are seeking alternative/additional jobs, migration for work, increasing fishing activities, and increasing forest clearing activities. The proportion of households in cash crop, land abundant, and poorest rural villages that undertook these measures was higher than in other villages, especially in terms of seeking alternative/additional jobs and migration for work. Increasing fishing activities was largely undertaken by households in the fishing village – 90% of them had done so, either more often or even every day.

### **2.2.4 Coping strategies related to household assets and others.**

A very small proportion of villagers sold domestic assets (such as furniture), productive assets (farm implements, sewing machines, and motorbikes...), land or jewellery. However, this happened only occasionally. Almost none of the surveyed households reported selling their assets during May-July 2009, especially domestic assets, productive assets and land. Again, this does not just simply mean that people are not willing to sell their assets, but could indicate either that households do not own the assets or that their assets are not marketable. More than 10% of surveyed households, however, confirmed that they had sometimes sold jewellery in the previous three months. Such cases are more apparent in fishing, cash crop and poor urban villages, in which 16%, 12%, and 11% respectively of respondent households sold jewellery during May-July 2009.

Other measures included consuming seed stock kept for the next farming season, reducing expenditure on agriculture inputs such as fertilizers and pesticides and reducing spending on healthcare. Approximately one-third of the respondents across the villages (just 10% in tourism dependent villages) reported that their households had reduced **spending on health** in the past three months. More than 20% have sometimes done this. People occasionally consumed seed stock (9% of the surveyed households). However, the pattern of consuming seed stock was more prevalent in the poorest rural and land abundant villages. About 30% and almost 20% of respondent households respectively consumed seed stocks in the past three months.

## **2.3. Outstanding loans**

In Cambodia 18 micro finance institutions<sup>6</sup> (MFIs) and one commercial bank (ACLEDA Bank) are registered, providing microfinance to about 1 million clients throughout the country. Many of these MFIs are found active in the surveyed villages. The national picture shows that by June 2009 the total loan portfolio stood at US\$426 million, a decrease of 4.2% (US\$19 million) over the second quarter of 2009. While the average disbursed loan size is US\$411 per client, the decrease of loan portfolios represents a decline of 46,201 clients. In contrast, the number of clients in Quarter 3, 2009, has increased by 116 over the second quarter of 2009, reflecting, on average, that smaller loans have been taken out.

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<sup>6</sup> AMK, AMRET, CBIRD, CHC, CREDIT, EAP, FF, FUDF, GCMF, HKL, IPR, MAXIMA, PRASAC, SATHAPANA, SEILANITHIH, TFMF, TPC, and VFC. Full names of these MFIs can be referred to annexed Table 2.11.

Correspondingly, the evidence of increasing number of borrowers is confirmed in the surveyed villages. As of July 2009 (the time of the field survey), 71% of the surveyed households in 15 villages reported having outstanding loans. The figure represents a 9% increase compared to the figure in June 2008. The percentage of households engaged in loans is largely found in the fishing village – 91% of the surveyed village in this village is in debt, followed by land abundant villages where 79% of the surveyed households reported outstanding loans.

**Table 2.4: Percentage of households taking out loans** (% of households within village)

	Borrowing Households (%)		
	June 2008	July 2009	Change 2009/08
<b>Wet season rice villages</b>	<b>71</b>	<b>66</b>	<b>-5</b>
Nikum Krao (Thmar Korl)	67	61	-6
Ta Ngok Sre (Sithor Kandal)	75	71	-4
<b>Dry season rice villages</b>	<b>58</b>	<b>61</b>	<b>3</b>
Ponley (Peam Ro)	71	60	-11
Ponley Choeung (Angkor Borey)	46	64	18
<b>Cash crops villages</b>	<b>47</b>	<b>72</b>	<b>25</b>
Kbal Tumnop (Malai)	78	83	5
Sampor (Chamkar Leu)	48	77	29
Spean (Memut)	21	56	35
<b>Fishing village</b>	<b>83</b>	<b>91</b>	<b>8</b>
Kompong Preah (Boribo)	83	91	8
<b>Land abundant villages</b>	<b>81</b>	<b>79</b>	<b>-2</b>
Tomnop Takuon (Bavel)	82	89	7
Kang Meas (Baray)	80	69	-11
<b>Poorest rural villages</b>	<b>65</b>	<b>72</b>	<b>7</b>
Sambour (Stoung)	62	70	8
Anha Ses (Thporng)	68	74	6
<b>Poor urban villages</b>	<b>47</b>	<b>62</b>	<b>15</b>
Damnak Thom (Stoeung Mean Chey)	48	51	3
Phoum 6 (Khan Sensok)	47	73	26
<b>Tourism dependent village</b>	<b>...</b>	<b>45</b>	<b>...</b>
Rorhal (Siem Reap)	...	45	...
<b>Total</b>	<b>62</b>	<b>71</b>	<b>9</b>

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009) and Survey of 991 households by CDRI in 14 target villages (June, 2008)

In the wet season rice villages, the proportion of households borrowing declined by 5% in July 2009 compared to June 2008. In all other types of villages there was an increase in the number of households borrowing. The increase was highest in the villages characterized by cash crop farming (25%). In Sampor village (soybean production) the percentage of borrowing households increased from 48% in June 2008 to 77% in July 2009. On the other hand, the borrowing households in Spean village (cassava production) rose substantially, from just 21% in 2008 to 56% in July 2009.

Table 2.5 indicates that 70% of the loans are new loans that were taken out during the first half of 2009. A further 15% were taken out during the second half of 2008. However, it is worth noting that not all loans taken out during 2009 were necessarily new since for some

loans, though the borrowers wish to extend the loan period, they are required to settle their current debt before they are entitled to the new loan cycle. The evidence from group discussions with village key informants confirmed that when a loan period ends (especially for loans from self-help groups), the borrowing households have to settle the old debt before they qualify to take out new loans. Indebted households may therefore take out new loans from other sources to pay off any outstanding debt.

**Table 2.5: Date of loans that were taken out** (% of total number of loans in the village)

	Category of village	Before Jan 2008	Jan–Jun 2008	Jul–Dec 2008	Jan–Jul 2009	Total
1	Wet season rice	9	8	6	77	100
2	Dry season rice	9	11	12	67	100
3	Cash crops	5	8	18	69	100
4	Fishing	5	5	21	70	100
5	Land abundant	8	6	15	71	100
6	Poorest rural	6	4	9	81	100
7	Poor urban	11	13	15	61	100
8	Tourism dependent	5	15	18	62	100
	Total loans	7	8	15	70	100

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009)

Table 2.6 indicates that most loans were for US\$250 or less. Two-thirds (64%) of the loans reported by the surveyed households did not exceed US\$250; 34% of the loans were for \$100 or less while another 30% ranged from \$100 to \$250 per loan. Notably, 74% of the loans entered into by surveyed households in the poorest rural villages were worth \$100 or less while 58% of the loans in the fishing village range between \$100 and \$250 per loan. Villagers in the cash crop villages took out the largest loans, although slightly fewer households (47%) borrowed. The average loan size in this relatively better off village was \$1,462, compared with \$127 in the poorest villages. The poor urban tended to take out bigger loans as well; more than 40% of the households with outstanding loans borrowed more than \$500 each.

**Table 2.6: Loan size by communities**

No	Category of village	Average loan size (\$)	Loan size (% of loans within village)				Total
			>\$0 to \$100	>\$100 to \$250	>\$250 to \$500	>\$500	
1	Wet season rice	610	14.5	46.6	26.7	12.2	100
2	Dry season rice	365	45.7	24.8	17.1	12.4	100
3	Cash crops	1,462	18.0	23.4	19.8	38.7	100
4	Fishing	339	27.1	57.9	14.0	0.9	100
5	Land abundant	529	35.6	37.4	15.3	11.7	100
6	Poorest rural	127	74.0	22.8	2.4	0.8	100
7	Poor urban	1,049	36.0	9.9	12.6	41.4	100
8	Tourism dependent	626	28.2	10.3	25.6	35.9	100
			34.0	30.3	16.3	19.3	100

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009)

Table 2.7 shows that for loans of less than \$100, a household tends to borrow from sources such as relatives, friends, self-help groups and moneylenders. If the loan size is between \$100 and \$250, more households tend to borrow the money from ACLEDA and micro-finance institutions such as PRASAC, AMRET, AMK, HKL and CREDIT. Of the loans that the



surveyed households borrowed from PRASAC and AMRET, 52% and 51% respectively ranged between \$100 and \$250. For AMK and HKL, 60% and 67% respectively of their lending to the interviewed households was valued at between \$100 and \$250 per loan.

**Table 2.7: Loan size by sources**

Sources of Loans <sup>7</sup>	Loan size (% of loans within source)				
	>\$0 to \$100	>\$100 to \$250	>\$250 to \$500	>\$500	Total
Relatives	46.2	24.6	17.5	11.7	100
Friends	63.0	15.2	10.9	10.9	100
Moneylender	37.1	24.2	16.8	21.9	100
ACLEDA	4.4	40.4	22.8	32.4	100
PRASAC	12.5	52.1	16.7	18.8	100
AMRET	28.9	51.1	17.8	2.2	100
AMK	25.7	60.0	14.3	0.0	100
HKL	0.0	66.7	0.0	33.3	100
CREDIT	11.5	38.5	17.3	32.7	100
Self-help group	62.5	29.2	4.2	4.2	100
Others	45.8	21.3	12.3	20.6	100

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009)

Table 2.8 shows that households across the surveyed villages have access to credit from many sources, including relatives and friends, moneylenders, ACLEDA, microfinance institutions (MFIs) and self-help groups. Relatives and friends provide 72% of the loans in the poorest rural villages, but in the fishing village fewer households could depend on loans from relatives and friends. They are more dependent on access to loans from ACLEDA and other MFIs. ACLEDA and other microfinance institutions provided 28% and 46% respectively of the loans in the fishing village.

**Table 2.8: Sources of loans by type of village**

Categories of village	Source of loan (% of loans within villages)					
	Relatives and friends	Money-lender	ACLEDA	MFIs	Others	Total
Wet season rice	22	44	7	26	1	100
Dry season rice	41	41	4	14	0	100
Cash crops	29	35	23	10	3	100
Fishing	13	13	28	46	0	100
Land abundant	33	31	11	21	4	100
Poorest rural	72	9	12	2	6	100
Poor urban	49	38	6	7	0	100
Tourism dependent	33	8	3	46	10	100
Interest rate per month (Average)	3.9%	6.9%	2.8%	3.0%	3.2%	

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009)

The wet season rice, dry season rice, cash crop, and poor urban villages are among the villages that have a high proportion of households with access to credit from relatives and friends and moneylenders.

<sup>7</sup> The informal sources include relatives, friends, moneylenders, and self-help group; the rest are formal ones.

The interest rate is highest for loans from informal sources such as moneylenders, relatives and friends. Table 2.8 also shows that the interest rate is highest for loans from moneylenders. On average, the households pay an interest rate of 6.9% per month for loans from this source. Although households have access to loans from relatives and friends, they have to pay a relatively high interest rate (3.9% per month), compared to ACLEDA, MFIs, and self-help groups. The households reported that the interest rate for loans from MFIs (3.0% per month) is higher than for those from ACLEDA (2.8% per month).

The surveyed households were asked to provide two main reasons for taking out each loan. Of the borrowings, 23% and 29% respectively cited agricultural production and business expansion as their first reason for seeking loans. In the cash crop villages, half of the loans were to assist with agricultural production. In the fishing village, 79% of the loans were to expand businesses, mainly to buy fishing gear, which does not last long. They also reported that they had to buy more gear all the time in order to catch the same amount of fish.

**Table 2.9: Main reasons for taking out loans**

<b>1st reason for taking out a loan (% of loans with village)</b>								
	Category of village	Food expense	Health expense	Repay old debt(s)	Agric. Production	Business expansion	Build house	Others
1	Wet season rice	5	15	6	24	17	11	22
2	Dry season rice	12	13	8	29	9	9	19
3	Cash crops	6	7	8	<b>50</b>	14	4	11
4	Fishing	4	5	8	0	<b>79</b>	2	2
5	Land abundant	6	20	7	31	11	11	15
6	Poorest rural	30	35	3	6	11	2	14
7	Poor urban	21	21	6	0	24	14	14
8	Tourism dependent	8	10	8	0	41	15	18
	<b>Total</b>	<b>9</b>	<b>13</b>	<b>7</b>	<b>23</b>	<b>29</b>	<b>7</b>	<b>12</b>
<b>2nd reason for taking out a loan (% of loans with village)</b>								
	Category of village	Food expense	Health expense	Repay old debt(s)	Agric. Production	Business expansion	Build house	Others
1	Wet season rice	17	26	14	20	0	3	20
2	Dry season rice	32	16	0	19	13	3	16
3	Cash crops	44	16	20	7	5	2	5
4	Fishing	53	13	7	4	9	9	4
5	Land abundant	43	15	11	15	13	0	4
6	Poorest rural	46	32	2	2	7	0	9
7	Poor urban	38	12	15	0	8	4	23
8	Tourism dependent	55	18	0	0	27	0	0
	<b>Total</b>	<b>44</b>	<b>17</b>	<b>10</b>	<b>8</b>	<b>9</b>	<b>4</b>	<b>8</b>

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009)

Note: the borrowing households were asked to provide two main reasons of borrowing for each loan.

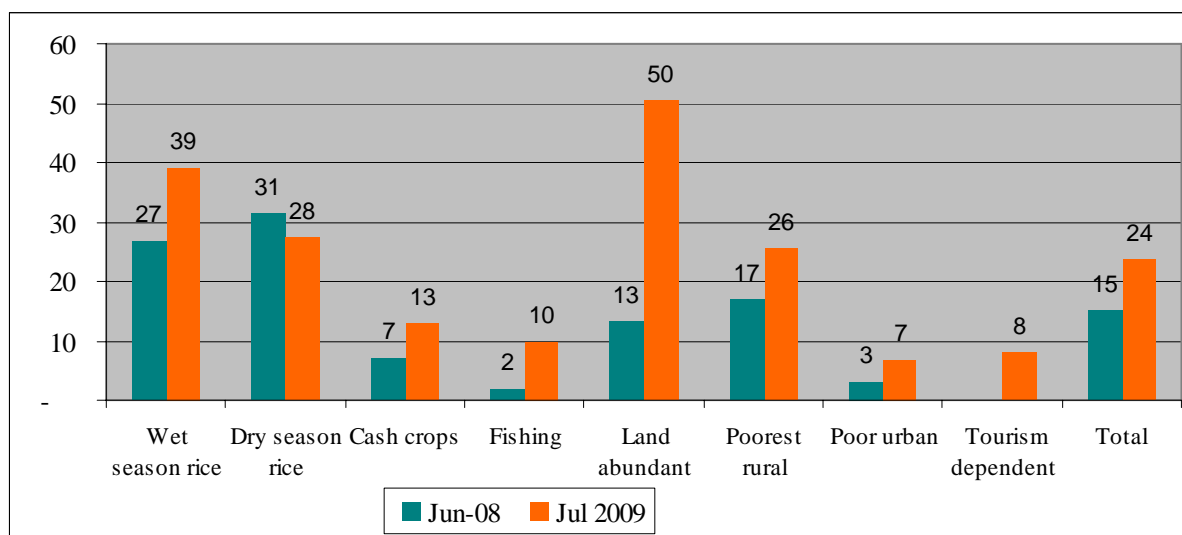
Other significant reasons for people borrowing are to supply household consumption needs, and to repay old debt for non-performing loans, rather than for productive purposes. Table 2.9 illustrates that 9% of the loans were reported as a primary means of coping with food expenses, while for 44% it was the second reason. In contrast, 13% and 17% of the loans respectively were cited as the first and second reasons for managing health expenses. The borrowing households also took out loans to repay old debts, with 7% and 10% of the loans respectively referred to as the first and second reasons for this purpose.



## 2.4. Migration

Since labour is one of the main assets of the poor, they sometimes migrate for work when facing difficulty in their daily livelihoods. The household survey in 15 villages (July 2009) indicates that 24% of the surveyed households have had at least one of their members migrate for work. This figure is 9% higher than in June 2008. Compared to June 2008, migration has increased in all villages, except dry season rice villages.

**Figure 2.1: Percentage of households whose members migrate (% within village)**



Source: Survey of 1070 households by CEA in 15 target villages (July, 2009) and Survey of 991 households by CDRI in 14 target villages (June, 2008)

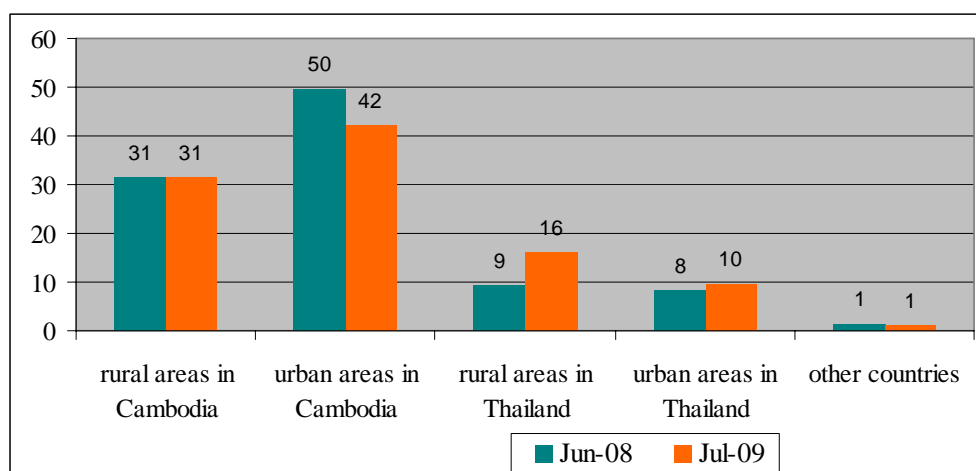
**Land abundant villages** have the largest share of members who migrated in 2009, followed by wet season rice, dry season rice and poorest rural villages. Half the respondents reported that household members had temporarily migrated in July 2009, almost four times higher than in June 2008. For example, more than 100 villagers from Kang Meas village (Baray district, Kampong Thom) had migrated to work in a Chinese rubber plantation in Santuk district (Kampong Thom) since early 2009. Some people had migrated to work in Chamkar Leu district (Kampong Cham). In Tumnup Takuon, another land abundant village, key informants said many more people had migrated for work in 2009 compared to 2008, most of them going to work in Malay district (Banteay Meanchey), harvesting maize, while a few had crossed the border to work in Thailand. The problems that had led to this increase in migration were said by key informants to be livelihood difficulties resulting from decreased income and drought.

Although only 10% of the surveyed households in the fishing village had migrated by July 2009, this marked a fivefold increase from June 2008. None of the migrants from this village left to work outside Cambodia: 55% of them migrated to towns; the other 45% left to work in rural areas.

Five main **migration destinations** are observed: rural or urban areas in Cambodia; rural or urban areas in Thailand; and other countries. In 2008, the most common destination for migration for work was urban areas in Cambodia, which absorbed about half the migrants from surveyed villages, followed by rural areas in Cambodia, which absorbed 30% of migrants. In July 2009, the proportion of migrants working in rural areas of Cambodia remained unchanged from 2008, but the percentage of migrants from surveyed villages working in urban areas of Cambodia declined by 8%. The decline may likely be explained by fewer job

opportunities available in urban areas due to the impact of the economic downturn, especially in the garment, construction and tourism sectors.

**Figure 2.2: Migration destinations** (as % of households whose members migrate)



*Source: Survey of 1070 households by CEA in 15 target villages (July, 2009) and Survey of 991 households by CDRI in 14 target villages (June, 2008)*

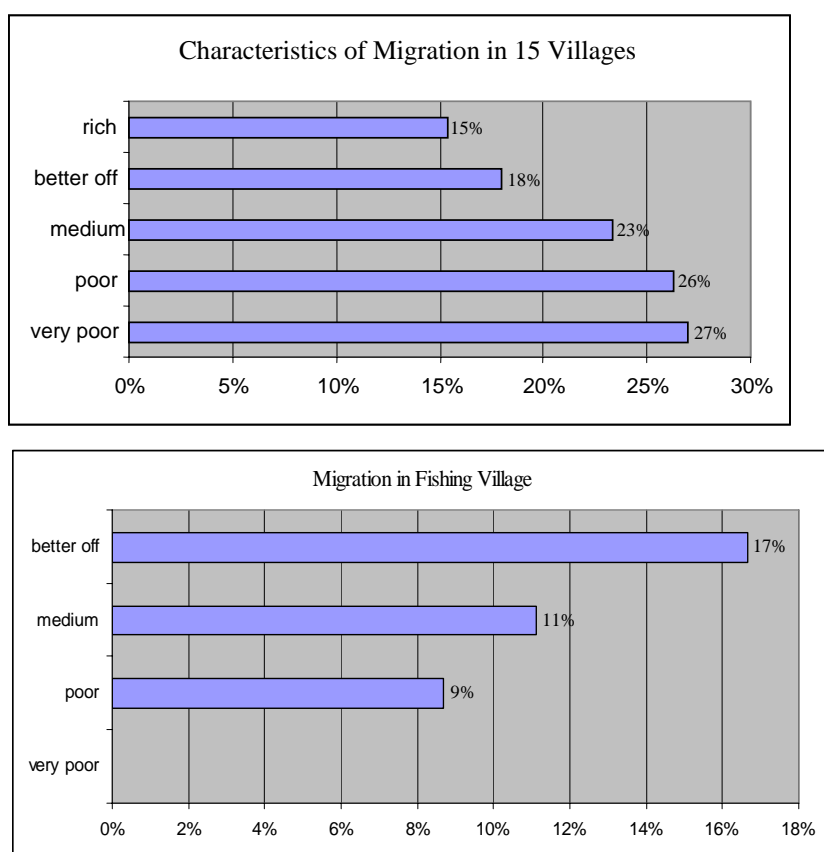
The percentage of migrants crossing the border to work in rural areas of Thailand increased from 9% in June 2008 to 16% in July 2009. Villages whose households migrate across the Cambodia-Thailand border are located near the border. These villages include Tumnap Takuon (land abundant), Kbal Tumnap (cash crop), Nikum Krau (wet season rice), and Sambour (poorest rural). Among these four villages, 36% of migrants had left to work in rural Thailand by July 2009, which is double that of June 2008 (17%). But the proportion of migrants from these villages working in urban Cambodia significantly reduced from 36% in June 2008 to 21% in July 2009.

When asked about the **reasons for migration**, 30% of migrants said it was habitual or for seasonal work or time they started to earn some money, while 62% migrated to cope with decreased income. Cash crop and wet season rice farming villages reported the highest percentage of migration was to deal with livelihood difficulties, implying that both types of village might have been hard hit. This was confirmed by 90% of migrants in Kbal Tumnap village in maize-producing Malay and 86% of migrants in Spean village in Memot district (Kampong Cham), which produces cassava. Also, 68% and 65% respectively of migrants in Nikum Krau and Ta Ngak Srae (wet season villages) reported they were migrating to cope with their decreased livelihoods.

Migrants are mainly aged between 16 and 28 years old, with 47% of them female. Interestingly, relatively more women from female-headed households migrate. While 57% of migrants from male-headed households are male, 57% of migrants from female-headed households are women.

Based on the observation of the enumerators at the time of interview, 8% of the surveyed households were very poor, 31% poor, 47% medium, 12% better-off, and 1% was rich. Migration characteristics are examined against these livelihood levels. There is proportionally more migration among poor households: 27% and 26% respectively of very poor and poor households engage in some migration. Fewer better-off and rich households engage with migration: just 15% of rich and 18% of better-off households.

**Figure 2.3: Households whose members migrate as % of households within income groups**



*Source: Survey of 1070 households by CEA in 15 target villages (July, 2009)*

The relationship between migration and livelihood levels appear to be opposite in the fishing village. None of the very poor and only 9% of the poor had engaged with migration at the time of survey in July 2009. A higher proportion of households with medium (11%) and better-off livelihoods (18%) were involved in migration.

Overall, the proportion of households engaged in migration in July 2009 (24%) was 9% higher than in June 2008. Migration was highest among households in land abundant and wet season rice villages. The majority (62%) of them reportedly migrated in order to cope with the household's decreased income, with the highest proportion coming from cash crop and wet season rice farming villages. The proportion of migrants working in urban Cambodia fell from June 2008, while the proportion of workers migrating to rural areas in Thailand doubled from June 2008.



# IMPACT ON EMPLOYMENT, WAGE AND INCOME



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### III. Impact on Employment, Wage and Income

This chapter examines the impact of the economic downturn (ED) on wages and income in the studied villages. Section 3.1 scrutinizes how households in each village were affected, how many lost jobs, and whether men and women experienced it differently. Section 3.2 summarizes the pay wage earners received per day according to activities in 2009 and compares that to the figures of a year earlier with an attempt to capture the impact of the ED on wages. Section 3.3 describes the income generating activities engaged in by households and summarizes how villagers perceived changes in their earnings compared to a year earlier.

#### 3.1. Impact on employment

##### *Households with members whose jobs were affected by the ED since October 2008*

Table 3.1 shows the percentage of households affected by or that lost jobs due to the economic downturn since October 2008 in the surveyed villages. About 33% of total households reported that their jobs had been affected by the crisis. Households in poor urban and **tourism dependent villages were the most affected, with 77% and 69% respectively reporting** negative impacts of the crisis on their employment. In contrast, less than 30% of households in the fishing, poorest rural, land abundant, cash crop and wet season rice villages reported being affected by the crisis.

**Table 3.1: Percentage of households whose members' jobs were affected or lost due to the ED since October 2008**

		Wet season rice	Dry season rice	Cash crops	Fish- ing	Land abun- dant	Poor- est rural	Poor urban	Tour- ism depen- dent	Total
Jobs affected by ED	yes	28.5	32.0	27.4	15.7	26.9	23.8	76.9	68.9	33.0
	no	71.5	68.0	72.6	84.3	73.1	76.2	23.1	31.1	67.0
No. of male members	1	85.7	85.3	66.9	84.1	76.5	88.2	87.4	81.2	78.4
	2	5.4	14.7	20.3	15.9	16.7	11.8	7.7	18.8	15.2
	3	8.9	0.0	12.8	0.0	6.9	0.0	3.3	0.0	6.1
	4	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.3
No. of female members	1	87.1	76.0	76.8	45.7	71.9	89.5	79.6	78.1	75.2
	2	12.9	24.0	18.0	54.3	20.2	10.5	15.0	19.3	21.3
	3	0.0	0.0	2.6	0.0	7.9	0.0	3.4	2.6	2.4
	4	0.0	0.0	2.6	0.0	0.0	0.0	2.0	0.0	1.0
Lost job due to ED	yes	7.3	2.4	1.5	1.4	3.4	8.6	9.2	5.5	3.7
	no	92.7	97.6	98.5	98.6	96.6	91.4	90.8	94.5	96.3
No. of male members	1	84.2	0.0	100.0	0.0	50.0	100.0	91.3	100.0	75.3
	2	15.8	100.0	0.0	100.0	50.0	0.0	0.0	0.0	22.5
	3	0.0	0.0	0.0	0.0	0.0	0.0	8.7	0.0	2.2
No. of female members	1	72.7	100.0	50.0	0.0	82.4	71.4	33.3	100.0	73.3
	2	27.3	0.0	50.0	0.0	17.6	28.6	66.7	0.0	26.7

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009)

##### *Males whose jobs were affected by the economic downturn*

Over the last nine months, the global financial crisis affected the jobs of one male household member in 78%, and two male members in 15% of the total households surveyed. The economic downturn affected the jobs of even more male members in cash crop, wet season

rice, land abundant and poor urban villages. Thirteen percent of households in cash crop villages, 9% in wet season rice, and 7% in land abundant villages and 3.3% of households in poor urban villages reported the jobs of three male household members were affected.

***Females whose jobs were affected by the economic downturn***

Female household members were also affected by the economic downturn. During the last nine months, 75% of the surveyed households reported that the jobs of one female member in their households had been affected, and 21% of them reported that there were at least two female household members whose jobs had been affected by the economic downturn. The jobs of three or more female household members were affected in 8% of households in land abundant villages, 6% in cash crop and 5% in poor urban villages.

***HHs whose members lost jobs because of the economic downturn***

Although their jobs have been affected, only 4% of the total households surveyed reported that they or their household members had lost jobs due to the economic downturn in the last nine months. No villages reported significant loss of jobs. The highest percentages of job losses were reported by poorest rural and poor urban villages, with about 9% of households in each village reporting a job loss.

***Males who lost jobs because of the economic downturn***

Many male household members lost their jobs as a result of the ED over the last 9 months. Of all surveyed households who reported job losses of household members, 75% reported that one male member in their households had lost his job and 22% reported that two male members had lost their jobs. Of these, 100% of households in cash crop, poorest rural, and tourism dependent villages had one male household member who had lost his job, while 100% of households in dry season rice and fishing villages reported job losses of two male household members.

***Females who lost jobs because of the economic downturn***

Of all surveyed households who reported a household member's loss of job, 73% reported that one female member in their household had lost her job and 27% reported two female members had lost their jobs. Of these, 100% of households in dry season and 100% in tourism dependent villages reported the loss of one female household member's job, while 67% in poorest rural and 50% in cash crop villages reported the loss of two female household members' jobs.

In sum, the survey revealed that about one-third of all surveyed households were affected by the ED, and among the studied villages, poor urban and tourism dependent are the most hit. The survey found that about 9% of households in the poorest rural and poor urban villages had lost jobs. These figures are higher than the average, suggesting that the poor have suffered the most from the crisis. The study indicated that both males and females were affected and lost jobs due to the crisis, and the extent of their suffering was more or less the same.

### **3.2. Impact on wages**

***Average wage for day labour in 2009***

In the dry season of 2009, villagers received an average of 9,000 riels per day for transplanting paddy. They could earn a little more, an average of 10,000 riels per day, for either harvesting paddy, weeding, transplanting other crops, or clearing bushes/trees. Construction work pays a little more than other labour work. An unskilled construction worker earns an average of 12,000 riels per day, while a skilled construction worker can earn an average of 19,000 riels per day.



**Table 3.2: Median wage for a day's labour in 2009 by village**

	Wet season rice	Dry season rice	Cash crops	Fish- ing	Land abund- ant	Poor- est rural	Poor urban	Tour- ism depen- dent	Total
<b>Wage in dry season reported by workers (riels per day)</b>									
Transplanting paddy	9,000	10,000	n/a	n/a	9,000	7,500	n/a	n/a	9,000
Harvesting paddy	10,000	10,000	10,000	n/a	10,000	5,000	15,000	n/a	10,000
Weeding	11,000	10,000	10,000	n/a	10,000	5,000	n/a	n/a	10,000
Transplanting other crops	12,000	n/a	10,000	10,000	10,000	5,000	n/a	n/a	10,000
Clearing bushes/trees	10,000	n/a	10,000	10,000	10,000	5,000	n/a	n/a	10,000
Unskilled construction work	12,500	11,000	n/a	n/a	20,000	10,000	15,000	9,000	12,000
Skilled construction work	15,000	20,000	n/a	n/a	n/a	20,000	20,000	12,000	19,000
<b>Wage in wet season reported by workers (riels per day)</b>									
Transplanting paddy	10,000	10,000	10,000	n/a	10,000	5,000	13,000	10,000	10,000
Harvesting paddy	12,000	10,000	10,000	n/a	10,000	10,000	n/a	8,000	10,000
Weeding	9,000	n/a	10,000	n/a	10,000	5,000	n/a	n/a	10,000
Transplanting other crops	10,000	n/a	10,000	10,000	10,000	7,000	n/a	10,000	10,000
Clearing bushes/trees	n/a	n/a	10,000	15,000	10,000	5,000	n/a	8,000	10,000
Unskilled construction work	10,000	8,000	10,000	5,000	10,000	11,000	13,208	11,000	12,000
Skilled construction work	14,000	20,500	n/a	n/a	40,000	19,934	20,000	n/a	20,000
<b>Wage in dry season reported by employers (riels per day)</b>									
Transplanting paddy	10,000	10,000	n/a	5,000	10,000	10,000	n/a	n/a	10,000
Harvesting paddy	10,000	10,000	8,600	5,000	10,000	5,000	6,000	n/a	10,000
Weeding	12,000	10,000	10,000	7,500	n/a	n/a	n/a	n/a	10,000
Transplanting other crops	11,406	n/a	10,000	n/a	n/a	n/a	n/a	n/a	10,000
Clearing bushes/trees	n/a	n/a	n/a	n/a	n/a	5,000	30,000	n/a	15,000
Unskilled construction work	n/a	10,000	n/a	n/a	n/a	n/a	n/a	n/a	10,000
Skilled construction work	n/a	20,000	n/a	n/a	10,000	28,000	n/a	n/a	16,817
<b>Wage in wet season reported by employers (riels per day)</b>									
Transplanting paddy	10,000	10,000	10,000	n/a	10,000	6,180	8,000	10,000	10,000
Harvesting paddy	12,000	n/a	10,000	n/a	10,000	n/a	n/a	10,000	10,000
Weeding	10,000	n/a	10,000	n/a	n/a	5,000	n/a	n/a	10,000
Transplanting other crops	n/a	n/a	10,000	n/a	n/a	10,000	n/a	n/a	10,000
Clearing bushes/trees	n/a	n/a	10,000	n/a	11,000	15,000	30,000	n/a	10,000
Unskilled construction work	n/a	10,000	n/a	n/a	n/a	n/a	12,000	n/a	10,000
Skilled construction work	n/a	20,000	n/a	n/a	n/a	28,000	n/a	n/a	20,000

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009)

During the same year in the wet season, wages for some labour work increases while some remains the same as in the dry season. During the wet season 2009, villagers could earn an average of 10,000 riels for transplanting paddy, harvesting paddy, weeding, transplanting other crops or clearing bushes/trees. Workers could earn the same amount for unskilled construction work for both seasons while skilled construction work pays an average of 20,000 riels per day in the wet season.

Generally, in 2009, particularly in the dry season, the average daily labour wage has been higher than that of the previous year. Compared to 2008, the wage a villager received for transplanting paddy in the dry season increased by 50%, while in the wet season it increased by 100%. In the dry season, the wage for harvesting paddy increased by 43%; the wage for clearing bushes/trees rose by 25%; and the wage for construction work increased by 50%. Wages for construction work in the wet season also rose by 50% compared to last year. However, generally, the average daily labour wage has decreased, by 9% for the dry season and by 17% for the wet season.

There are few differences in the average daily wage received among villages, the main one being that the average daily wage poorest rural villagers receive for agriculture-related labour is lower than in other villages. Another notable difference is that the average daily wage villagers from land abundant villages receive for doing skilled construction work is twice that of others.

**Table 3.3: Median wage for day labour by season from 2008–2009**

	2008*		2009**		Change 09/08	
	Dry	Wet	Dry	Wet	Dry	Wet
<b>Received by workers</b>						
Transplanting paddy	6,000	5,000	9,000	10,000	50%	100%
Harvesting paddy	7,000	10,000	10,000	10,000	43%	0%
Weeding	11,000	12,000	10,000	10,000	-9%	-17%
Transplanting other crops	10,000	10,000	10,000	10,000	0%	0%
Clearing bushes/trees	8,000	10,000	10,000	10,000	25%	0%
Construction work	10,000	10,000	15,000	15,000	50%	50%
<b>Paid by employers</b>						
Transplanting paddy	8,000	10,000	10,000	10,000	25%	0%
Harvesting paddy	8,000	10,000	10,000	10,000	25%	0%
Weeding	12,000	12,000	10,000	10,000	-17%	-17%
Transplanting other crops	10,000	10,000	10,000	10,000	0%	0%
Clearing bushes/trees	10,000	10,000	15,000	10,000	50%	0%
Construction work	15,000	12,500	15,000	15,000	0%	20%

\* *Figures computed from High Food Prices Survey in 2008*

\*\* *Source: Survey of 1070 households by CEA in 15 target villages (July, 2009)*

Overall, the survey shows that in 2009 the daily wage in the agriculture sector was around 10,000 riels and for construction workers was from 12,000 to 20,000 riels per day. These figures show little difference from those of 2008. However, these figures are nominal, which inflation is not factored into the equation. There is little change even though those wages are corrected for inflation rate that was running at -3.9 percent for the whole year. It should be noted that these types of agricultural work are not available the whole year round. Villages need to find other work if they are to make a living.

### 3.3. Impact on income

#### 3.3.1 Income sources in July 2009 compared to July 2008

In July 2009, an average of over 31% of the total households surveyed said they had engaged in self-employment activities, and another 26.5% had engaged in agricultural wage labour as their source of income. These figures are not very different from those of July 2008, in which about 29% of households were involved in self-employment and 26.7% in agricultural wage labour.

The secondary sources of income in which many surveyed households were engaged in July 2009, included fishing (19%), labour work (13%), selling vegetables (14.6%) and raising livestock (10%). Again, these figures are not very different from those of July 2008, when 19.3% of households were involved in fishing, 13% in labour work, and 11.8% in selling vegetables. The only significant difference in sources of income between July 2008 and July 2009 is the percentage of households involved in raising livestock, which rose from just 6.3% in July 2008 to 10% in July 2009.

Income generating activities and the extent to which villagers were involved in those activities are found to be somewhat different across the villages and periods surveyed. In wet season

rice villages, the major sources of income for households in 2009 were self-employment, sale of paddy rice and agricultural labour wage, with 33.7%, 28.8%, and 28.8% of households engaged in these activities respectively. Other sources of income for 2009 that many households were involved in were labour work, sale of vegetables, and raising livestock. Compared to a year earlier, the study shows that more households were engaged in animal raising, vegetable sales and self-employment, and fewer households received income from paddy sale, construction work and remittance from abroad.

In ***dry season rice villages***, the primary earning activities were self-employment, fishing and garment work, with 28.8%, 23.6% and 13% of households, respectively. Other important income sources included sale of paddy rice, sale of handicraft goods and raising livestock. Compared to the previous year, the study found a higher percentage of households received income from fishing and from domestic and foreign remittance, but a lower percentage of households were involved in construction work, sale of handicraft products, sale of other agriculture products and salary from NGOs or companies.

In ***cash crop villages***, a majority of villagers were engaged in agricultural labour work, with about 53% of households depending on this activity for their living in July 2009, rising from 51% in 2008. Other than this, in 2009 25.6% of the households were also involved in self-employment, 23.4% in sale of vegetables and 20% in labour work. The figures for 2008 were respectively 23.4%, 21.1% and 16.9%. It is interesting to note that raising livestock, labour work, vegetable sales and construction work gained popularity, as the percentage of households involved in those activities increased by 4.7%, 3.1%, 2.3% and 2.2%, respectively.

**Table 3.4: Percentage of households involved in earning activities**

	Wet season rice	Dry season rice	Cash crops	Fish- ing	Land abun- dant	Poor- est rural	Poor urban	Tour- ism depend- -ent	Total
<i>Income generating activities in July 2008</i>									
Selling paddy rice	33.4	11.9	1.7		18.8	1.4	0.0	0.0	7.8
Selling vegetable/fruits	11.4	3.7	21.1	5.8	12.8	19.5	2.5	0.0	11.8
Other agricultural products	2.7	2.4	6.9	1.4	2.8	9.0	0.0	1.3	3.8
Wage labour from agricultural work	28.9	6.3	51.5	0.0	24.0	53.3	1.9	14.9	26.7
Clearing land for others	0.0	0.6	2.2	0.0	1.4	16.2	0.0	1.3	1.9
Garment work	4.9	13.6	2.5	1.4	5.8	7.1	22.8	1.3	6.3
Construction work	9.8	12.3	2.0	1.4	2.8	8.1	30.4	6.8	7.1
Self-employed business	32.3	28.1	23.4	11.4	25.5	13.8	65.8	62.1	28.9
Labour work	16.1	6.3	16.9	12.8	8.4	14.8	9.8	14.9	13.0
Civil servant	7.9	6.9	2.2	4.3	5.8	6.2	16.5	9.4	6.0
NGOs/companies	4.4	5.6	0.3	2.9	5.8	0.5	7.0	14.9	3.9
Selling handicraft	0.0	15.2	0.0	0.0	2.8	1.9	0.9	44.7	5.2
Animal raising	6.0	7.6	3.4	4.3	17.1	16.2	0.0	0.0	6.3
Pension fund	0.0	0.6	0.3	0.0	0.0	1.0	0.6	0.0	0.3
Foreign remittance	5.7	2.6	0.7	0.0	2.8	0.0	0.0	0.0	1.5
Domestic remittance	2.2	0.6	1.1	0.0	5.8	1.4	2.8	0.0	1.7
Forest products	0.5	0.6	0.0	1.4	8.4	22.9	0.0	1.3	2.8
Fishing	2.2	17.3	0.3	94.2	28.9	2.4	0.0	0.0	19.3
Commission fees (land)	0.0	0.0	0.0	0.0	1.4	0.5	0.0	1.3	0.3
Other sources	1.4	4.3	3.7	4.3	3.6	4.3	9.2	0.0	3.9
<i>Income generating activities in July 2009</i>									
Sale of paddy rice	28.8	12.6	2.9	0.0	14.4	4.3	0.0	0.0	7.4
Sale of vegetable/fruits	13.4	4.3	23.4	2.9	14.2	21.9	3.5	1.3	12.9
Other agricultural products	3.3	0.6	6.6	0.0	2.8	7.1	0.0	0.0	3.2
Wage labour from agricultural work	28.8	5.6	53.0	0.0	21.2	49.5	1.9	14.9	26.5
Clearing land for others	0.0	0.0	2.2	0.0	1.4	10.5	0.0	1.3	1.5
Garment work	4.9	13.0	0.9		4.4	11.9	24.7	1.3	5.7
Construction work	8.4	7.6	1.5	1.4	4.2	4.3	26.9	12.3	6.2
Self-employed business	33.7	28.8	25.6	11.4	31.3	17.6	68.0	64.7	31.1
Labour work	16.6	6.3	20.0	11.4	14.0	11.0	11.7	17.4	14.6
Civil servant	7.9	6.3	2.2	4.3	5.8	7.1	16.5	8.1	5.9
NGOs/companies	5.2	4.3	0.7	4.3	7.2	1.4	8.9	14.9	4.5
Sale of handicrafts	0.0	11.9	0.0	0.0	2.8	0.5	0.0	37.9	4.2
Livestock-raising	11.4	8.7	8.0	4.3	27.7	12.9	0.9	4.3	10.0
Pension fund	0.0	0.6	0.3	0.0	0.0	1.0	0.6	0.0	0.3
Foreign remittance	4.4	3.7	0.0	0.0	5.0	0.0	1.6	1.3	1.8
Domestic remittance	3.0	2.6	2.0	1.4	5.6	1.0	2.8	0.0	2.4
Forest products	0.0	0.6	0.0	0.0	9.0	15.7	0.0	1.3	2.2
Fishing	1.4	23.6	0.0	92.8	24.0	1.0	0.0	0.0	19.0
Commission fees (land)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other sources	1.4	3.7	3.9	1.4	4.2	5.7	7.6	0.0	3.5

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009)

Unsurprisingly, fishing is the main source of income in the **fishing village**: the 2009 figure, 92.8%, showed little variation from 2008, when 94.2% of households engaged in fishing to earn their income. It is unfortunate that fishing households lack variety in their income sources compared to other villages. Their other income sources are labour work (a slight fall from 12.8% in 2008) and self-employment (unchanged from the previous year) in each of which 11.4% of households have been involved in 2009.

More significant changes were found in **land abundant villages** between 2008 and 2009. There was a slight fall in the percentage of households involved in agricultural labour, from 24% in 2008 to 21.2% in 2009. In contrast, the percentage of households engaged in self-employment as one of their sources of income rose from 25.5% in 2008 to 31.3% in 2009. The most notable change was the rise in the proportion of households raising livestock for a living, from 17% in 2008 to 27.7% in 2009.

**Poorest rural villages** have less stable sources of income than other villages. The main form of work – 49.5% of households in 2009 and 53.3% of households in 2008 – is agricultural labour. Other than this, 21.9% of households engaged in sale of vegetables in 2009. A further 17.6%, 15.7%, 12.9%, 11.9%, 11%, and 10.5% have been involved in self-employment, forest products, animal raising, garment work, labour work and land clearing, respectively. The 2008 figures are fairly similar: 22.9% counted income from forest products as one of their sources of income, 19.5% from sale of vegetables, 16.2% from land clearing, 16.2% from animal-raising, 14.8% from labour work, and 13.8% from self-employment. Only 7.1% were involved in garment work in 2008 compared to 11.9% a year later.

The 2009 figures for **poor urban villages** show little change from those of 2008. In 2009, 68% of households were engaged in self-employment as one of their income sources, a rise of 2% in 2008. About 27% of them and 24.7% of them were engaged in construction work and garment work, respectively. Around 16.5% of them also served in the civil service and 11.7% were engaged in labour work. With the exception of construction work, which showed a fall of almost 4% of those engaging in construction work, other employment activities each increased by about 2% compared to 2008.

In the **tourism dependent villages**, in 2009, 64.7% of households surveyed were engaged in self-employment, a slight increase from 62.1% in 2008. Involvement in handicrafts, another source of income for many villagers, fell from 44.7% in 2008 to about 38% in 2009. In 2008 other sources of income many villagers were engaged in were agricultural wage labour, labour work, and NGO works, each of which involved 14.9% of villagers. This figure was largely unchanged in 2009, with the exception of labour work, which rose by about 3% in 2009. Construction work became more significant in 2009 compared to 2008, with 12.3% of households reporting it as another source of income, a 6% increase from 2008. One further change in 2009 was the introduction of raising livestock, in which about 4% of households were involved compared to none in 2008.

### **3.3.2 Earnings of July 2009 compared with July 2008**

A significant number of households perceived falls in income for most earning activities in the year 2008 to July 2009. As indicated in Table 3.5, the activities that more than 60% of households surveyed reported as losing the most earning included sale of handicraft products, self-employment, fishing, construction work, sale of other agricultural products, clearing forest, garment work, and forest products. This income decline can be attributed to many factors, but the ED, which has strong links with these activities, may have played an important role in this development.

Differentiating changes in income across villages by earning activities provides an interesting result. In all villages, an average of 55.2% of total households reported a decrease in income from paddy sale, while 26.8% reported an increase and 18% reported no change. Of these, households in cash crop and poorest rural villages reported no increase in income, while 50% of households in cash crop villages and 100% in poorest rural villages reported a decrease in income. Significant falls in income were also seen by 78.4% of households in land abundant villages, and by 53.8% of households in dry season rice villages. In wet season rice villages, 43% of surveyed households reported a decrease in earnings, while 41.9% reported an increase.

A decrease in earnings from the sale of vegetables was reported by 66% of surveyed households compared with July 2008; only 14.5% reported an increase in income. The remaining 19.5% reported no change in earnings. In the fishing village, 100% of households reported a decrease in earnings. Similarly, no households in dry season rice and poor urban villages reported an increase in income. In these two villages as well as in cash crop villages, more than 70% of households reported a decrease in earnings from sale of vegetables.

About 67% of households surveyed reported a decrease in income from the sale of other agricultural products compared with the previous year, and 11.8% reported an increase. The remaining 21.1% reported no change in income. In dry season rice villages, 100% of households reported an increase in income; in contrast, 100% of households in land abundant villages reported a decrease in income. More than 70% of households in wet season rice as well as poorest rural villages reported a decrease in earnings.

For 2009 income from labour in agriculture, about 49.3% of total households surveyed reported a decrease in earnings compared with earnings from previous year, about 15.3% reported an increase, and about 35.4% reported no change in earnings. In cash crop, fishing and poorest rural villages, 50% or more of the village households reported a decrease in income. There was an increase in the earnings of 50% of households in the poorest rural villages.



**Table 3.5: Percentage change in income between July 2008 and July 2009**

		Wet season rice	Dry season rice	Cash crops	Fish- ing	Land abund- -ant	Poorest rural	Poor urban	Tour- ism depen- dent	Total
Paddy	<i>Increase</i>	41.9	11.5	n/a	n/a	13.7	n/a	n/a	n/a	26.8
	<i>Decrease</i>	43.0	53.8	50.0	n/a	78.4	100.0	n/a	n/a	55.2
	<i>No change</i>	15.1	34.6	50.0	n/a	7.8	n/a	n/a	n/a	18.0
Vegetable	<i>Increase</i>	16.2	n/a	10.2		39.1	20.0	n/a	n/a	14.5
	<i>Decrease</i>	45.9	75.0	77.0	100.0	30.4	50.0	n/a	71.4	66.0
	<i>No change</i>	37.8	25.0	12.8	n/a	30.4	30.0	n/a	28.6	19.5
Other agri products	<i>Increase</i>	n/a	100.0	14.0	n/a	n/a	n/a	n/a	n/a	11.8
	<i>Decrease</i>	71.4	n/a	72.1	n/a	100.0	33.3	n/a	n/a	67.1
	<i>No change</i>	28.6	n/a	14.0	n/a	n/a	66.7	n/a	n/a	21.1
Agri work	<i>Increase</i>	34.2	28.6	10.0	27.3	11.6	50.0	n/a	30.3	15.3
	<i>Decrease</i>	25.0	28.6	53.8	58.4	45.3	50.0	n/a	30.3	49.3
	<i>No change</i>	40.8	42.9	36.3	14.3	43.0	n/a	n/a	39.4	35.4
Clearing forest	<i>Decrease</i>	n/a	n/a	100.0	n/a	n/a	63.6	n/a	n/a	66.7
	<i>No change</i>	n/a	n/a	n/a	n/a	100.0	36.4	n/a	100.0	33.3
Garment	<i>Increase</i>	n/a	5.3	n/a	18.2	n/a	3.1	n/a	n/a	4.8
	<i>Decrease</i>	100.0	59.6	60.0	18.2	53.8	80.0	100.0	n/a	66.0
	<i>No change</i>	n/a	35.1	40.0	63.6	46.2	16.9	n/a	n/a	29.3
Construction	<i>Increase</i>	20.7	23.1	n/a	100.0	n/a	n/a	4.1	n/a	12.9
	<i>Decrease</i>	51.7	23.1	50.0	n/a	100.0	100.0	91.8	76.9	67.3
	<i>No change</i>	27.6	53.8	50.0	n/a	n/a	n/a	4.1	23.1	19.9
Self employed	<i>Increase</i>	13.3	10.7	4.5	n/a	14.9	8.0	3.0	n/a	6.1
	<i>Decrease</i>	67.6	64.1	79.2	100.0	63.2	68.0	83.8	91.1	78.2
	<i>No change</i>	19.0	25.2	16.2	n/a	21.9	24.0	13.2	8.9	15.7
Labour work	<i>Increase</i>	24.4	16.7	9.4	n/a	9.7	n/a	n/a	n/a	8.6
	<i>Decrease</i>	46.7	50.0	57.8	57.7	67.7	38.5	71.4	65.5	57.8
	<i>No change</i>	28.9	33.3	32.8	42.3	22.6	61.5	28.6	34.5	33.6
Civil servant	<i>Increase</i>	55.2	50.0	100.0	68.2	75.0	38.5	34.6	50.0	57.3
	<i>Decrease</i>	6.9	10.7	n/a	n/a	n/a	n/a	11.5	n/a	5.0
	<i>No change</i>	37.9	39.3	n/a	31.8	25.0	61.5	53.8	50.0	37.6
NGO/company	<i>Increase</i>	50.0	33.3	n/a	n/a	37.9	n/a	n/a	31.3	26.3
	<i>Decrease</i>	31.3	16.7	n/a	50.0	24.1	n/a	26.3	n/a	20.3
	<i>No change</i>	18.8	50.0	100.0	50.0	37.9	100.0	73.7	68.8	53.4
Handicraft	<i>Decrease</i>	n/a	94.0	n/a	n/a	100.0	n/a	n/a	88.8	91.3
	<i>No change</i>	n/a	6.0	n/a	n/a	n/a	n/a	n/a	11.2	8.7
Raising livestock	<i>Increase</i>	17.6	n/a	n/a	n/a	23.3	35.7	n/a	n/a	18.3
	<i>Decrease</i>	47.1	100.0	46.2	n/a	65.0	50.0	n/a	n/a	57.5
	<i>No change</i>	35.3	n/a	53.8	n/a	11.7	14.3	n/a	n/a	24.2
Pension	<i>Increase</i>	n/a	100.0	n/a	n/a	n/a	n/a	n/a	n/a	27.3
	<i>No change</i>	n/a	n/a	100.0	n/a	n/a	100.0	100.0	n/a	72.7
Foreign remittance	<i>Decrease</i>	20.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	8.7
	<i>No change</i>	80.0	100.0	n/a	n/a	100.0	n/a	n/a	n/a	91.3
Domestic remittance	<i>Increase</i>	33.3	n/a	n/a	n/a	18.2	n/a	n/a	n/a	12.1
	<i>Decrease</i>	33.3	n/a	n/a	n/a	50.0	100.0	n/a	n/a	27.6
	<i>No change</i>	33.3	100.0	100.0	n/a	31.8	n/a	100.0	n/a	60.3
Forest product	<i>Increase</i>	n/a	n/a	n/a	n/a	12.5	n/a	n/a	n/a	6.3
	<i>Decrease</i>	n/a	100.0	n/a	n/a	58.3	77.8	n/a	n/a	64.6
	<i>No change</i>	n/a	n/a	n/a	n/a	29.2	22.2	n/a	100.0	29.2
Fishing	<i>Increase</i>	n/a	29.9	3.1	6.2	n/a	n/a	n/a	n/a	6.7
	<i>Decrease</i>	100.0	40.3	83.1	74.3	n/a	100.0	n/a	n/a	76.9
	<i>No change</i>	n/a	29.9	13.8	19.5	n/a	n/a	n/a	n/a	16.4
Other	<i>Increase</i>	n/a	20.0	48.7	n/a	n/a	n/a	11.1	n/a	21.8
	<i>Decrease</i>	n/a	60.0	30.8	n/a	61.1	25.0	55.6	n/a	40.0
	<i>No change</i>	100.0	20.0	20.5	100.0	38.9	75.0	33.3	n/a	38.2

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009)



Earnings from forests were reported to have decreased for about 66.7% of households while another 33.3% of them reported no change in earnings. In both land abundant and tourism dependent villages, 100% of households reported no change in earnings, whereas 100% and 63.6% of households in cash crop villages and poorest rural villages, respectively, reported a decrease in earnings.

Overall earnings from garment work decreased for 66% of total surveyed households; another 29.3% of them reported no change and 4.8% reported an increase. Households from wet season rice and poor urban villages seem most dependent on earnings from garment work and 100% of them reported a decrease in earnings from this income source. Similarly, 80% of households in poorest rural villages and 50% of households in dry season, cash crop and land abundant villages reported a decrease in earnings. In the fishing village, where there is less variety in income sources, more than 60% of the households reported no change in income from this source while another 18.2% reported an increase. Very few households in other villages reported any increase in income from garment work.

Income from construction work decreased for 67.3% of surveyed households and increased for 12.9%. Among these, all surveyed households in land abundant and poorest rural villages and over 90% of households in poor urban villages reported a decrease in income. In contrast, all households in the fishing village reported an increase in income from construction. About 77% of households in tourism dependent villages and more than 50% of households from wet season rice and cash crop villages also reported a decrease in their earnings. Earnings from this sector remained the same for more than 50% of households in dry season rice as well as cash crop villages.

Among surveyed households, 78.2% claimed earnings from self-employment had fallen. In all surveyed villages, from the percentage of households reporting a decrease in earnings ranged from 63.2% to 100%. An average of 57.8% of villagers reported a decrease in earnings from labour work. Poor urban households are more affected than others as more than 71% of their households suffered from a decrease in earnings. In contrast, poorest rural households were the least affected, as 61.5% of their households their income from this source was unchanged.

The trend in income from the civil service was the opposite: 57.3% of surveyed households reporting an increase in earnings while another 37.6% reported no change. Of these, 100% of households in cash crop villages reported an increase in income and between 50 and 75% of households in wet season rice, dry season rice, fishing, land abundant and tourism dependent villages also reported an increase in income.

More than half of total surveyed households, including households in cash crop and poorest rural villages, reported no change in earnings from NGOs and companies compared with the previous year. About 20% of village households reported a decrease in earnings. The fishing village reported a greater decrease in income from this source than others, with half the households reporting a decrease in earnings. In contrast, some households in wet season rice, dry season rice, land abundant and tourism dependent villages reported some increase in earnings from this source. Earnings from handicrafts, on average, decreased for 91.3% of surveyed households from dry season, land abundant, and tourism dependent villages, and remained the same for the other 8.7%.

While more households were involved in raising livestock in 2009 than in 2008, the average percentage of households surveyed reporting an increase in earnings from this source was only 18.3% compared with 57.5% of households reporting a decrease in earnings. These included all households in dry season rice villages. Although there was no increase in the earnings of cash crop village households from this source, 53.8% of them reported that earnings were unchanged.

An increase in pension earnings was reported by 100% of households from dry season rice villages, while all households from other villages – cash crop, poorest rural and poor urban – reported no change. Although this could suggest that this income source is little affected, our data clearly shows that for most it is not a significant source of income.

Earnings from remittance abroad also remained unchanged for an average of 91.3% of surveyed households: households in dry season rice and land abundant villages and 80% of those in wet season rice villages reported no change in earnings; another 20% reported a decrease in income.

Remittance within the country is another source of income not many villagers are involved in. About 60% of all surveyed households reported no change in income from in-country remittance. Households from dry season rice, cash crop and poor urban villages make up most of these households. Of all households surveyed, only 27.6% of them reported a decrease in income. This group comprises all households from poorest rural, half the households from land abundant villages, and one-third of households from wet season rice villages.

Earnings from the forest decreased for 64.6% of households in all surveyed villages and remained the same for another 29.2%. All households from dry season rice villages, 77.8% from poorest rural and 58.3% from land abundant villages experienced a decrease in earnings from this source. Households from tourism dependent villages made up most of those who reported no change in earnings. The only type of village with a reported increase in earnings was land abundant villages, with 12.5% reporting an increase in income.

In terms of income from fishery, 64.6% of households from all surveyed villages reported a decrease in earnings, while 16.4% of them reported no change. All households from wet season rice and poorest rural villages, 83.1% from the fishing village, and 74.3% from land abundant villages make up most of those who reported a decrease in earnings from fishery. The main significant increase in earnings was only seen in dry season rice villages, 29.9% of those households reported an increase in earnings from this source.

Compared with 2008, earnings from other sources of income in 2009 decreased for some 40% of surveyed households, remained the same for another 38.2%, and increased for the remaining 21.8%.

In summary, the three major sources of income in all households surveyed were self-employment, wage labour from agricultural work and fishery. Many earning activities, namely, raising livestock, self-employment, and labour work, are found to have gained popularity as an increasing number of households have engaged in those for a living. At the same time, fewer households in the surveyed villages are engaged in other activities including sale of handicraft products, construction work, forest products and sale of agricultural products, suggesting they have possibly been affected by the global financial crisis. Furthermore, the earning activities which are most likely to get hit by the ED include sale of handicraft products, self-employment, fishing, construction work, sale of other agricultural products, clearing forest, garment work, and forest products, as the majority of households involved with these perceived a decrease in their income.



# IMPACT ON HOUSEHOLD PRODUCTION OF FOOD CROPS



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## IV. Impact on Household Production of Food Crops

This chapter examines agricultural land characteristics in the surveyed villages and explores the impact of the ED on household production of food crops. Section 4.1 outlines the percentage of households who possess land, types of land they possess, mode of acquisition, documentation, land conflict and its effect on agricultural production, land use, and the types of crop grown on it. Section 4.2 attempts to explain the impact of the ED on the production of rice, maize and cassava in the studied villages. A comparison between the results of the current study and those of the High Food Prices study conducted in 2008 in the same sample villages is made to see the likely effect of the ED on production of food crops.

### 4.1. Characteristics of agricultural land in the surveyed villages

Table 4.1 explores the current situation of land ownership and land use in the surveyed villages in 2009. The data from the survey shows that 36.3% of households in the surveyed villages do not own any plots of land. The average percentage of those who possess no land (36.3%) is higher than the 25.5% who own one plot of land or the 22% who own two plots of land. Another 12.3% own three plots of land, while the remaining own four or more.

Poor urban and fishing villages had the highest percentage of landless households, followed by tourism dependent villages. Dry season rice and poorest rural had the lowest percentage of landless households. In terms of having larger or more land plots, dry season rice and land abundant villages had a higher percentage of households with more land plots than others.

Different types of land are owned. An average of 57.9% of households own types of wet season rice land, 19.1% own types of dry season rice land, and 18% own *chamkar* land or other crop land. Most villagers from tourism dependent and land abundant villages and about one-third of those from poorest rural and wet season rice villages own wet season rice land. More than 66% of households in dry season rice villages and more than 29% of households from the fishing village own dry season rice land. Villages with the highest percentage of households owning *chamkar* land are fishing and cash crop villages.

Landowners in the surveyed villages reported different means of land acquisition: more than 36% acquired their land through inheritance / gift from relatives, 26.6% through purchase; 25.8% in the form of an allocation by an authority, and another 11.4% by clearing forest.

Tourism dependent villages have a high percentage of households, 95.1%, who acquired their land in the form of inheritance / gift from relatives. More than 46.5% of households in cash crop villages acquired their lands through purchase, 47.1% from the fishing village by clearing forest, about 44% from land abundant villages and more than one-third from dry season rice and wet season rice villages in the form of an allocation by an authority.

Because villagers have acquired their lands in different ways, a significant 43.7% reported that they had no documents for their land. The percentage of households without documents is fairly high in poorest rural, tourism dependent, land abundant and fishing villages, and also in poor urban villages where 50% of the households had no documents. A very small number of households reported that they hold land titles (*slap morn*) and the new type of land title. Those who reported owning either of these two types of land title only make up 10% of all surveyed households, and the only villages with a significant percentage of households with land titles are poor urban villages, almost 44% of those households reportedly have the new type of land title.



Villagers have other types of documents however. About 26.7% of landowners reported that they had other types of documents for their land, while 19.7 of them reported that they had payment receipts as evidence of their land purchases. Land conflicts are not particularly prevalent according to the 2009 survey – only 1.7% of households reported that they were involved in any type of land conflict, a figure that is slightly higher in poorest rural and fishing villages than others.

Among those involved in land conflicts, 26.7% of them reported that they were in conflict with companies, and 19.7 of them with relatives. About 10% of them are in conflict with either the local authorities or authorities from a provincial town or Phnom Penh. Many more of them, about 43.7%, reported conflicts with others beside the above mentioned. Only 0.4% of cash crop village households had land conflicts, all of them with their relatives. Poorest rural villages, which have had the highest percentage of households with land conflicts, compared to all others, all reported being involved in land conflicts with local authorities. About 40% of households from the fishing village reported having land conflicts with companies.

The land conflicts had affected agricultural productivity in 25% of all surveyed households. All households from cash crop villages in conflict with relatives reported that productivity had decreased. Similarly, about 40% of households from land abundant villages, some of them in conflict with authorities in provincial town or Phnom Penh, others with companies, and most of them with other types of stakeholders, reported a decrease in productivity as a result of the conflicts. No households from wet season rice, dry season rice, fishing, poor urban and tourism dependent villages reported a decrease in productivity due to land conflicts.

With few households involved in land conflicts, the percentage of those who planned to sell land was also low – an average of 3.3% of all surveyed households. The only significant figure is for tourism dependent villages, with almost 10% of households reporting that they planned to sell their land.

A high average percentage, 86.1%, of households in all surveyed villages reported using their land for own cultivation – poor urban villages were alone in having few households using land for their own cultivation. The remaining 13.9% of all surveyed households reported that they either left their lands idle, let others cultivate it for free, rented it to others for money or for a share of rice, or mortgaged it. Poor urban villagers made comparatively little use of their lands as more of them tended to leave their lands idle, let others cultivate it for free or rented it to others. A greater proportion of households in poorest rural and tourism dependent villages than in other villages either left their lands idle or let others cultivate it for free in spite there being a high percentage of those using their land for own cultivation, unlike those in poor urban villages.



**Table 4.1: Percentage of households with Land Characteristics in July 2009**

		Wet season rice	Dry season rice	Cash crops	Fish- ing	Land abund- ant	Poor- est rural	Poor ur- ban	Tour- ism depen- dent	Total
# Plots	0	14.7	9.4	38.4	81.4	22.0	6.8	92.5	66.2	36.3
	1.0	29.4	20.0	24.5	12.9	39.7	45.1	4.5	20.3	25.5
	2.0	39.2	27.5	24.5	5.7	14.2	39.1	1.5	5.4	22.0
	3.0	14.7	25.0	11.1	0.0	21.3	9.0	0.8	5.4	12.3
	4.0	1.4	10.0	0.5	0.0	0.7	0.0	0.8	1.4	2.1
	>4	0.7	8.1	0.9	0.0	2.1	0.0	0.0	1.4	1.9
Types	Wet season rice	73.0	33.6	28.6	0.0	93.9	77.9	50.0	95.1	57.9
	Dry season rice	4.0	66.4	0.4	29.4	4.0	1.0	0.0	0.0	19.1
	Both wet- and dry season rice	20.8	0.0	0.8	0.0	1.0	0.0	18.8	0.0	4.3
	<i>Chamkar</i>	2.2	0.0	69.3	70.6	1.0	19.1	18.8	2.4	18.0
	Other	0.0	0.0	0.8	0.0	0.0	2.0	12.5	2.4	0.7
Acquisition	Allocated by authority	34.1	39.1	8.7	17.6	43.9	3.5	18.8	0.0	25.8
	Cleared forest	0.9	7.3	16.6	47.1	1.5	31.8	12.5	4.9	11.4
	Bought	22.1	26.6	46.5	11.8	30.3	10.1	31.3	0.0	26.6
	Inherited / gift from relative	42.9	26.9	28.2	23.5	24.2	54.5	37.5	95.1	36.2
Documentat- ion	Payment receipt	16.4	33.6	19.1	11.8	20.7	5.6	0.0	4.9	19.7
	Land title ( <i>slap morn</i> )	15.0	11.0	5.4	5.9	1.0	0.5	0.0	12.2	7.3
	Land title (new type)	0.0	4.0	2.9	0.0	0.0	1.5	43.8	7.3	2.6
	Other documents	46.0	27.2	33.2	17.6	11.6	18.2	6.3	4.9	26.7
	No document	22.6	24.2	39.4	64.7	66.7	74.2	50.0	70.7	43.7
Conflict	Yes	0.0	0.3	0.4	5.9	2.5	6.0	0.0	2.4	1.7
With whom?	Relatives	0.0	0.0	100.0	0.0	0.0	0.0	4.8	4.9	19.7
	Local authorities	0.0	0.0	0.0	0.0	0.0	100.0	4.8	12.2	7.3
	Authorities in provincial town or Phnom Penh	0.0	0.0	0.0	0.0	8.3	0.0	4.8	7.3	2.6
	Company	0.0	0.0	0.0	40.0	8.3	0.0	14.3	4.9	26.7
	Other	100.0	100.0	0.0	60.0	83.3	0.0	71.4	70.7	43.7
Prod. down	Yes	0.0	0.0	100.0	0.0	40.0	16.7	0.0	0.0	25.0
Plan to sell	Yes	1.3	2.4	5.4		3.5	3.6		9.8	3.3
Land use	Own cultivation	93.4	90.5	91.1	88.2	91.4	72.4	12.5	51.2	86.1
	Others cultivate for free	0.0	2.1	0.9	5.9	2.5	2.5	25.0	34.1	3.0
	Idle land / not cultivated	0.9	0.3	2.6	5.9	3.5	22.6	37.5	12.2	5.8
	Rent / share rice with others	5.3	7.0	5.5	0.0	2.5	2.0	25.0	2.4	4.9
	Mortgage the land	0.4	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.2
Main crop	Wet season rice	88.9	32.1	28.6		92.7	59.4	6.3	51.2	55.2
	Dry season rice	1.8	57.5		29.4	1.0	1.0	0.0	0.0	16.1
	Maize	0.4	0.0	8.1	23.5	0.0	0.0	0.0	0.0	1.9
	Cassava	0.0	0.0	9.8	0.0	0.0	0.0	0.0	0.0	1.8
	Vegetable	0.0	0.0	0.0	29.4	0.0	0.0	0.0	0.0	0.4
	Fruits (mango or cashew)	0.9	0.0	22.2	0.0	0.0	15.2	6.3	0.0	6.8
	Don't know / unidentifiable	0.0	0.9	0.0	5.9	0.0	0.0	0.0	0.0	0.3
	Not cultivated (left idle)	0.9	0.6	3.4	5.9	3.7	22.8	37.5	12.2	6.1
	Others	7.1	8.9	27.8	5.9	2.6	1.5	50.0	36.6	11.4
To use	Self-employed farm	93.2	32.7	90.8	18.8	94.4	85.0	6.3	48.8	72.6
	Rent out	5.5	6.0	7.1	0.0	1.5	1.0	6.3	4.9	4.5
	Sharecropping	0.9	0.0	0.8	0.0	0.5	1.0	18.8	0.0	0.8
	Offer to others for free cultivation	0.0	1.6	0.0	0.0	0.5	2.6	31.3	31.7	2.3
	Left idle	0.5	59.7	1.3	81.3	3.0	10.4	37.5	14.6	19.8
Grow crop	No	34.8	57.5	38.0	100.0	26.2	15.8	85.7	41.9	46.3
	Most for household consumption	56.0	41.2	47.7	0.0	63.1	58.6	14.3	56.8	44.6
	Most for sale	9.2	1.3	14.4	0.0	10.6	25.6	0.0	1.4	9.1

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009)

The main crop cultivated during the previous season at the time of the survey, by 55% of surveyed households, was wet season rice. Very few households in poor urban villages and only 28.6% in cash crop villages were engaged in wet season rice cultivation, however. Another 16.1% of surveyed households were engaged in dry season rice cultivation, but this was mainly in the dry season rice and fishing villages. Some 6.8% of surveyed households were engaged in fruit growing (usually mango or cashew), mainly in cash crop villages and poorest rural villages.

The overall average percentage for other crops is very low, but at the village level, they are still significant since some individual villages engaged in growing certain crops, while other villages did not. For example, the overall average of maize growers was only 1.9%, but 23.5% of households from the fishing village and 8.1% from cash crop villages were growing maize. In cash crop villages, 9.8% of households were growing cassava, and in the fishing village 29.4% of households were engaged in growing vegetables – the only ones to do this. Among households in poor urban and poorest rural villages, the lands of 37.5% and 22.8% of households, respectively, are left idle and uncultivated. An average of 11.4% of the total surveyed households use their lands to grow other kinds of crops.

When village households were asked how they planned to use their lands differently in the future 72.6% planned to farm it themselves, 19.8% planned to leave it idle, 4.5% of them planned to rent it out, 2.3% planned to offer it to others to cultivate for free, and 0.8% of them planned to sharecrop it with others. A significant percentage of fishing village households planned to leave their lands idle.

Although almost two-thirds of households planned to farm their own land, 46.3% of the surveyed households did not have plan to grow any crops yet. Another 44.6% of them said they would grow crops, mainly for household consumption. Only 9.1% of them planned to mostly grow crops for sale.

Table 4.2 addresses the changes and the differences in land characteristics and land use from 2008 to 2009. In 2009, the number of landless households increased by 6.2% compared to 2008. At the same time, the number of those who own one or two plots of land has decreased by 12%. There was a big increase in landless households in cash crop villages, where 20% more of its households became landless in 2009, compared to the previous year. Poorest rural villages, however, experienced a decrease of 13.2% in the percentage of landless households in their villages, parallel with an increase of 12.6% in the percentage of households who own two plots of land in these villages. However, the trend seen in poorest rural villages is contrary to all other villages.

As previously noted, land conflicts have also decreased, by an average of 1.9% compared to the previous year, despite some increases in land conflicts in poorest rural villages. While there have been no changes in the number of conflicts in other villages, the fishing village and land abundant villages each have had a decrease of more than 17% in the number of households involved in land conflicts.

In 2009, the percentage of households involved in land conflicts with authorities in provincial town or in Phnom Penh decreased by 67.6%, but land conflicts with companies actually increased for 26.7% of households.

Farm productivity was reported to have fallen for 43.9% of households. However the percentage of those who planned to sell their land rose by 1.9%.

**Table 4.2: Percentage change of households with land characteristics between June 2008 and July 2009**

		Wet season rice	Dry season rice	Cash crops	Fishing	Land abundant	Poor est rural	Poor urban	Total
# Plots	0.0	6.5	-3.3	20.2	5.2	-6.5	-13	9.0	6.2
	1.0	2.0	-4.7	-11.5	-10.9	3.3	-4.6	-10.5	-6.3
	2.0	-9.0	-9.2	-8.6	5.7	-14.3	12.6	0.8	-5.7
	3.0	8.0	9.0	0.1	0.0	16.6	5.8	0.0	5.4
	4.0	-8.2	1.3	-1.0	0.0	0.0	0.0	0.8	-1.0
	>4	0.7	6.8	0.9	0.0	0.8	-0.6	0.0	1.4
Types	Wet season rice	22.0	-7.5	-32.0	0.0	34.2	-4.9	2.0	1.6
	Dry season rice	-26.7	9.6	-6.4	0.8	3.5	1.0	-16.0	-2.7
	Both wet- and dry season rice	3.0	-0.7	0.8	-14.3	1.0	-0.6	18.8	0.3
	<i>Chamkar</i>	2.2	-0.4	40.1	20.6	-33.5	4.2	2.8	2.8
	Other	-0.4	-1.1	-2.6	-7.1	-5.2	0.3	-7.5	-1.9
Acquisition	Allocated by authority	-6.1	8.3	-21.1	10.5	0.8	0.1	14.8	-3.6
	Cleared forest	-2.0	-2.2	10.8	4.2	0.9	6.5	-3.5	2.6
	Bought	0.8	-3.9	26.5	11.8	-15.7	3.2	23.3	2.5
	Inherited / gift from relative	7.4	-2.2	-16.2	-26.5	13.9	-9.8	-34.5	-1.4
Documentat- ion	Payment receipt	-23.0	9.5	4.5	-2.5	-23.5	1.5	-20.0	-4.9
	Land title (slap morn)	-1.1	-9.6	-3.4	-1.3	-3.6	-5.2	-28.0	-5.1
	Land title (new type)	-0.8	2.9	-9.0	0.0	-1.7	0.4	23.8	-1.6
	Other documents	25.3	-6.5	13.5	17.6	8.7	5.5	2.3	7.6
	No document	-0.3	3.6	-5.5	-13.9	20.1	-2.2	22.0	4.0
Conflict	Yes	0.0	0.0	0.1	-17.2	-17.8	4.3	0.0	-1.9
With whom?	Relatives	-100	-100	100.0	0.0	-2.9	0.0	4.8	11.2
	Local authorities	0.0	0.0	-100	-100	0.0	100	4.8	-5.5
	Authorities in provincial town or Phnom Penh	0.0	0.0	0.0	0.0	-86.0	0.0	4.8	-67.6
	Company	0.0	0.0	0.0	40.0	8.3	0.0	14.3	26.7
	Other	100.0	100.0	0.0	60.0	80.5	-100	71.4	35.2
Prod. down	Yes	0.0	-100	100.0	-25.0	-44.4	-50	0.0	-43.9
Plan to sell	Yes	0.5	1.7	5.0	-14.3	1.0	2.5	-16.0	1.9
Land use	Cultivate	4.8	0.4	-3.5	16.8	17.3	-19.0	-16.7	-1.3
	Let someone else cultivate for free	-0.4	1.8	0.2	5.9	2.5	1.9	0.0	2.1
	Left idle	-0.4	-1.1	-0.8	-22.7	-17.1	15.1	20.8	-0.3
	Sharecrop with someone else	-4.4	-1.1	4.2	0.0	-2.8	1.4	-4.2	-0.7
	Mortgage	-9.3	-8.2	-1.4	0.0	-5.3	-0.1	-29.2	-5.5
Main crop	Rice, wet season	19.9	-9.1	-32.2	0.0	40.3	-20	-21.8	-2.9
	Rice, dry season	-27.8	-0.2	-5.8	0.8	-0.6	1.0	-8.0	-6.1
	Maize	0.0	0.0	-0.8	-5.0	0.0	-3.0	-4.0	-1.4
	Cassava	0.0	0.0	0.9	0.0	0.0	0.0	0.0	-0.5
	Vegetable	-0.4	-0.7	0.0	29.4	0.0	-0.6	0.0	0.0
	Permanent crop	0.4	0.0	19.1	0.0	-3.2	9.2	-1.8	4.5
	Don't know / can't say	0.0	0.9	0.0	5.9	0.0	0.0	-32.0	-0.4
	Nothing (uncultivated)	0.9	0.2	2.0	-15.5	3.7	18.7	21.5	4.4
	Other	7.1	8.9	16.8	-15.5	-40.1	-5.1	46.0	2.4
To use	Self-employed farm	1.8	-60.2	-7.8	-74.1	18.1	-12.	-17.8	-18.2
	Rent out	-2.3	-0.1	6.4	0.0	-4.4	-0.1	-17.8	-0.1
	Sharecropping	0.9	-0.4	0.5	0.0	0.5	1.0	10.8	0.5
	Offer to others for free cultivation	-0.9	1.6	-0.3	0.0	-0.1	2.0	3.3	1.3
	Leave it idle	0.5	59.0	1.3	74.1	-14.1	9.2	21.5	16.5

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009) and Survey of 991 households by CDRI in 14 target villages (June, 2008)

## 4.2. Impact on household production of food crops

### *Production of wet season rice*

Of the total agricultural plots, 52% of them were used to cultivate wet season rice in the last season. Wet season rice farmers, on average, owned about 1 hectare of land, which could produce 1515 kg of paddy rice, earning them \$254. However, substantial funds – an average of around \$112 – were needed to purchase various inputs. The net profit after accounting for production cost was around \$142, which was about a 29% drop from a year earlier.

Disaggregate production according to land holding size also yields an interesting result, which is consistent with the findings of the previous study (CDRI 2008). On average, those who hold more land to grow wet season rice were able to achieve a better harvest and higher net profit. However, in spite of this, large-land holders tended to use agricultural land less productively than small-land holders. As can be seen from Table 4.4 the yield per hectare decreased considerably as the size of land increased.

**Table 4.3: Wet season rice production**

	2009		2008		Change
	N	Mean	N	Mean	
Plot size (ha)	683	1.0	645	1.0	-5%
Harvest (kg)	678	1,515	621	1,737	-13%
Yield per ha		1,529		1,659	-8%
Seed (0.000 riel)	169	14	390	3	324%
Fertilizer (0.000 riel)	306	25			
Ploughing (0.000 riel)	311	14	508	12	11%
Transplanting (0.000 riel)	182	13	413	5	143%
Pumping (0.000 riel)	84	8	399	3	174%
Harvesting (0.000 riel)	348	20	484	16	31%
Threshing (0.000 riel)	497	6	543	6	-3%
Transporting (0.000 riel)	159	6	454	4	44%
Other (0.000 riel)	187	7	467	11	-32%
Total cost (0.000 riel)	629	47	606	53	-11%
Total cost / plot (USD)		112		130	-14%
Revenue / plot (USD)		254		330	-23%
Net profit / plot (USD)		142		200	-29%
<b>Total cost / hectare (USD)</b>		<b>113</b>		<b>124</b>	<b>-9%</b>
<b>Revenue / hectare (USD)</b>		<b>256</b>		<b>315</b>	<b>-19%</b>
<b>Net profit / hectare (USD)</b>		<b>143</b>		<b>191</b>	<b>-25%</b>

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009) and Survey of 991 households by CDRI in 14 target villages (June, 2008)

**Table 4.4: Wet season rice production by land size**

	< 0.5 ha		0.5 – 1 ha		1 – 3 ha		> 3 ha		2009	
	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean
Plot size (ha)	359	0.3	182	0.9	124	1.9	18	8.8	683	1.0
Harvest (kg)	357	680	179	1,523	123	3,075	18	7,263	678	1,515
Yield per ha		2,093		1,722		1,585		825		1,529
Seed (0.000 riel)	48	4	58	10	49	21	14	36	169	14
Fertilizer (0.000 riel)	156	12	80	28	59	48	10	57	306	25
Ploughing (0.000 riel)	132	6	88	12	78	23	13	43	311	14
Transplanting (0.000 riel)	111	10	44	16	25	19	2	17	182	13
Pumping (0.000 riel)	46	5	20	14	16	10	2	5	84	8
Harvesting (0.000 riel)	143	7	96	17	93	33	16	91	348	20
Threshing (0.000 riel)	214	3	154	5	112	10	16	25	497	6
Transporting (0.000 riel)	58	3	48	5	45	8	7	14	159	6
Other (0.000 riel)	116	4	40	10	25	14	6	16	187	7
Total cost (0.000 riel)	315	21	174	45	122	92	17	219	629	47
Total cost/ plot (USD)		49		108		221		524		112
Revenue/ plot (USD)		114		255		515		1,216		254
Net profit/ plot (USD)		65		147		294		692		142
<b>Total cost/ hectare (USD)</b>		<b>152</b>		<b>123</b>		<b>114</b>		<b>60</b>		<b>113</b>
<b>Revenue/ hectare (USD)</b>		<b>351</b>		<b>288</b>		<b>265</b>		<b>138</b>		<b>256</b>
<b>Net profit/ hectare (USD)</b>		<b>199</b>		<b>166</b>		<b>151</b>		<b>79</b>		<b>143</b>

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009)

### ***Production of dry season rice***

Of the total agricultural plots in the villages studied, about 19% of them were for dry season rice production. Households who grew dry season rice, on average, possessed about 1 hectare of agricultural land during the survey period. They harvested more than three tons of paddy rice, which was the equivalent of \$708 in cash during the last season. Dry season rice, however, is much more costly to produce than wet season rice because it requires more money to pump water into a paddy field and to purchase fertilizer. The total production cost amounted to \$355 during the last season, a 21% increase from 2008. Subtracting all costs, the net profit from growing dry season rice in 2009 was \$354, 31% up from last year.

Table 4.6 analyses the production cost and profit according to the size of the land holding using data from the current survey. Interestingly, the results are somewhat different from the findings on the production of wet season rice production. Net profit per hectare increases when the land size is from 0.5 hectare to 3 hectares and declines thereafter. These figures suggest that farmers can use land most productively for cultivation of dry season rice when they own around 2 hectares.

**Table 4.5: Dry season rice production**

	2009		2008		Change
	N	Mean	N	Mean	
Plot size (ha)	200	1	246	1	-5%
Harvest (kg)	198	3,772	236	2,968	27%
Yield per ha		4,044		3,033	33%
Seed (0.000 riel)	34	18	117	7	145%
Fertilizer (0.000 riel)	194	53			
Ploughing (0.000 riel)	123	10	167	10	0%
Transplanting (0.000 riel)	19	10	122	6	61%
Pumping (0.000 riel)	181	21	220	27	-22%
Harvesting (0.000 riel)	178	17	196	11	57%
Threshing (0.000 riel)	189	14	220	12	14%
Transporting (0.000 riel)	120	14	165	8	68%
Other (0.000 riel)	190	33	226	55	-40%
Total cost (0.000 riel)	200	148	234	119	24%
Total cost / plot (USD)		355		294	21%
Revenue / plot (USD)		708		564	26%
Net profit / plot (USD)		354		270	31%
<b>Total cost/ hectare (USD)</b>		380		301	26%
<b>Revenue/ hectare (USD)</b>		760		577	32%
<b>Net profit/ hectare (USD)</b>		379		276	37%

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009) and Survey of 991 households by CDRI in 14 target villages (June, 2008)

**Table 4.6: Dry season rice production by land size**

	< 0.5		0.5 – 1		1 – 3		> 3		2009	
	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean
Plot size (ha)	78	0.4	77	0.9	41	2	4	7	200	1
Harvest (kg)	76	1,430	77	3,619	41	7,194	4	16,150	198	3,772
Yield per ha		4,010		4,225		4,417		2,485		4,044
Seed (0.000 riel)	20	12	11	25	3	30	0		34	18
Fertilizer (0.000 riel)	74	24	75	54	41	93	4	154	194	53
Ploughing (0.000 riel)	52	6	49	13	20	17	2	13	123	10
Transplanting (0.000 riel)	1	5	13	7	4	18	1	9	19	10
Pumping (0.000 riel)	65	10	74	20	38	37	4	46	181	21
Harvesting (0.000 riel)	59	5	76	15	39	31	4	73	178	17
Threshing (0.000 riel)	72	5	75	13	38	25	4	81	189	14
Transporting (0.000 riel)	42	4	50	15	24	20	4	56	120	14
Other (0.000 riel)	73	13	74	35	39	60	4	116	190	33
Total cost (0.000 riel)	78	62	77	155	41	262	4	533	200	148
Total cost/ plot (USD)		148		372		626		1,275		355
Revenue/ plot (USD)		269		680		1,351		3,033		708
Net profit/ plot (USD)		120		308		725		1,758		354
<b>Total cost/ hectare (USD)</b>		<b>416</b>		<b>434</b>		<b>384</b>		<b>196</b>		380
<b>Revenue/ hectare (USD)</b>		<b>672</b>		<b>708</b>		<b>740</b>		<b>416</b>		760
<b>Net profit/ hectare (USD)</b>		<b>256</b>		<b>274</b>		<b>355</b>		<b>220</b>		379

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009)

### Maize production

About 1.9% of agricultural plots were used for maize production. On average, maize producers in the sample villages had five hectares per plot, which produced about four tons of maize during the last season. Maize provided higher profits than wet season rice and the production cost was also reasonable. The total cost required was estimated at about \$1000 per plot, consisting largely of expenditure on seed, land preparation and transplanting seedlings. Despite, a good harvest, net profit generated from maize production in 2009 was \$1400, a decline of about 74% from the previous year.

**Table 4.7: Maize production**

	2009		2008		Change
	N	Mean	N	Mean	
Plot size (ha)	24	5	37	9	-40%
Harvest (kg)	22	40,129	36	40,397	-1%
Yield per ha		7,631		4,625	65%
Seed (0.000 riel)	24	118	32	262	-55%
Fertilizer (0.000 riel)	2	30			
Ploughing (0.000 riel)	19	146	26	398	-63%
Transplanting (0.000 riel)	16	75	22	84	-11%
Pumping (0.000 riel)					
Harvesting (0.000 riel)	17	175	29	181	-3%
Threshing (0.000 riel)	3	47	18	63	-27%
Transporting (0.000 riel)	5	50	22	75	-34%
Other (0.000 riel)	6	79	22	127	-38%
Total cost (0.000 riel)	24	445	37	953	-53%
Total cost/ plot (USD)		1,065		2,354	-55%
Revenue/ plot (USD)		2,467		7,680	-68%
Net profit/ plot (USD)		1,402		5,327	-74%
<b>Total cost/ hectare (USD)</b>		203		269	-25%
<b>Revenue/ hectare (USD)</b>		469		879	-47%
<b>Net profit/ hectare (USD)</b>		267		610	-56%

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009) and Survey of 991 households by CDRI in 14 target villages (June, 2008)

### Cassava production

Of the surveyed sample, about 2% of households reported that they grew cassava during the last season. Cassava growers generally owned about 2 hectares of land. The average harvest of cassava last season was 14 tons per plot, or \$390 in cash. A total cost of around \$166 is required for ploughing, harvesting, processing, transporting and for other things. Cassava is easier to plant and take care of than the two previous crop types. Yet it also provided a handsome amount of profit around \$392 per season.



**Table 4.8: Cassava production**

	2009		2008		Change
	N	Mean	N	Mean	
Plot size (ha)	23	2	26	2	6%
Harvest (kg)	21	14,243	21	16,671	-15%
Yield per ha		8,188		10,194	-20%
Seed (0.000 riel)	4	33			
Fertilizer (0.000 riel)					
Ploughing (0.000 riel)	15	27	4	11	148%
Transplanting (0.000 riel)	11	32			
Pumping (0.000 riel)	0				
Harvesting (0.000 riel)	14	86	2	10	761%
Threshing (0.000 riel)	1	19	2	4	368%
Transporting (0.000 riel)	9	28	4	14	101%
Other (0.000 riel)	8	36	9	121	-70%
Total cost (0.000 riel)	22	121	16	80	51%
Total cost / plot (USD)		289		198	46%
Revenue / plot (USD)		681		741	-8%
Net profit / plot (USD)		392		543	-28%
<b>Total cost / hectare (USD)</b>		166		121	37%
<b>Revenue / hectare (USD)</b>		392		453	-14%
<b>Net profit / hectare (USD)</b>		226		332	-32%

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009) and Survey of 991 households by CDRI in 14 target villages (June, 2008)

In sum, most farmers are likely to have been affected by the ED. With the exception of those who grew dry season rice, the net profits of other farmers decreased significantly compared to previous year. The results of the study revealed that maize producers lost the most profit followed by cassava and wet season rice producers.

# IMPACT ON HOUSEHOLD CONSUMPTION AND FOOD STOCKS



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## V. Impact on Household Consumption and Food Stocks

While the household consumption is characterised by the household income, this chapter aims to assess the extent to which the household's consumption on food and non-food items in 2009 differs from that in 2008. Thus, section 5.1 illustrates the pattern of food and non-food consumption in both years while section 5.2 tries to provide the status of the household's food stocks that could indicate the household's resilience capacity and vulnerability in terms of addressing food security.

### 5.1. Impact on household consumption

Of all surveyed households during the survey period, 63% ate two meals per day during the last seven days, while the rest ate three meals. On average, a household consumes 2 kg of milled rice per day. For daily food consumption, households also spend in addition to the cost of rice. The level of spending varies from one village to another. Overall, half the surveyed households reported that they had spent US\$1.25 (5,000 riels) or less on food per day during the last seven days. However, 23% had never spent more than US\$0.5 (2,000 riels) on food per day. Households in the poorest rural villages had spent a lot less. Fifty percent of the respondent households in the poorest rural villages could not afford to spend more than US\$0.50 (2,000 riels) per day. Households in the fishing village also spent less on food than other villages. Spending on food by 50% of the reported households in this village never exceeded US\$0.75 (3,000 riels) per day.

Usually, households in rural villages can harvest food by themselves through fishing, collecting by-products, and so on. The household survey in 15 villages shows that 32% of the surveyed households had engaged in harvesting food in the last seven days. These households reported that they would earn an average of US\$0.75 (3,000 riels) per day from the food they produced/collected, if sold. However, almost none of the interviewed households in poor urban and tourism dependent villages could produce or harvest food by themselves.

**Table 5.1: Changes of the household's consumption expenditure** (% of households within village)

		Wet season rice	Dry season rice	Cash crops	Fish- ing	Land abun- dant	Poor- est rural	Poor ur-ban	Tour- ism depen- -dent	Total
<b>Expenditure on Food Consumption</b>										
Jun 2008 vs. Jan 2008	Increase	94.0	79.4	98.1	100.0	89.4	99.3	100.0	...	91.7
	No change	5.2	11.3	1.9	0.0	9.3	0.7	0.0	...	4.2
	Decrease	0.7	9.2	0.0	0.0	1.3	0.0	0.0	...	1.6
Jul 2009 vs. Feb 2009	Increase	16.1	31.9	31.9	7.1	19.1	27.1	45.1	23.0	26.9
	<b>No change</b>	<b>28.7</b>	<b>26.9</b>	<b>36.6</b>	<b>38.6</b>	<b>31.9</b>	<b>27.8</b>	<b>27.1</b>	<b>35.1</b>	<b>31.2</b>
	<b>Decrease</b>	<b>55.2</b>	<b>41.3</b>	<b>31.5</b>	<b>54.3</b>	<b>48.9</b>	<b>45.1</b>	<b>27.8</b>	<b>41.9</b>	<b>41.9</b>
<b>Expenditure on Non-food Consumption</b>										
Jun 2008 vs. Jan 2008	Increase	50.2	44.8	48.4	28.0	56.2	48.3	45.8	...	47.8
	No change	49.2	54.9	51.3	66.4	42.8	51.7	51.6	...	51.2
	Decrease	0.6	0.3	0.3	5.6	0.9	0.0	2.6	...	1.0
Jul 2009 vs. Feb 2009	Increase	6.3	28.1	10.6	2.9	10.6	13.5	27.1	13.5	14.8
	<b>No change</b>	<b>38.5</b>	<b>37.5</b>	<b>51.9</b>	<b>35.7</b>	<b>39.7</b>	<b>46.6</b>	<b>34.6</b>	<b>36.5</b>	<b>41.4</b>
	<b>Decrease</b>	<b>55.2</b>	<b>34.4</b>	<b>37.5</b>	<b>61.4</b>	<b>49.6</b>	<b>39.8</b>	<b>38.3</b>	<b>50.0</b>	<b>43.8</b>

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009) and Survey of 991 households by CDRI in 14 target villages (June, 2008)

In general, the pattern of expenditure on both food and non-food consumption between February and July 2009 was unlike that between January 2008 and June 2008. Driven mainly by high food and oil prices during the first quarter of 2008, Cambodia's inflation rate between July 2007 and July 2008 peaked at 22.3%, while the price of food, beverages, and tobacco increased by 36.8% over the same period (CDRI, 2008, p.13). Despite this, almost none of the respondents in all 15 villages saw their household expenditure on food and non-food products decrease in June 2008 compared to January 2008. Food expenditure increased among 92% of the surveyed households in June 2008. This simply indicates that although the price was rising, people across villages still managed to increase their spending. Over the same period, 48% of the respondents reported that their household expenditure on non-food products increased while the other half reported their spending was unchanged.

The pattern of expenditure on food and non-food consumption during the Economic Downturn (ED) represents a mixed picture of changes in spending. A large proportion of the surveyed households found their expenditure on food and non-food products fell in July 2009 compared to February 2009. Food expenditure decreased among 42% households, 31% were just able to maintain their level of expenditure, while the other 27% reported their expenditure had increased. The decrease was proportionally highest among households in fishing and wet season rice villages. Around 55% of the respondents in both types of villages spent less on food consumption in July 2009 compared to February 2009.

Only 15% of the surveyed households indicated that their expenditure on non-food consumption, such as clothes, child education, electricity, energy and transportation had increased. There was no change in expenditure for 41% of households in July 2009 compared to February 2009. The remaining 44% spent less on non-food products. As with food expenditure, the decrease is more evident in fishing and wet season rice villages – 61% and 55% respectively of respondents in both types of village noticed their household expenditure on non-food consumption had declined between February 2009 and July 2009.

It is likely that economic pressures are affecting people's nutrition. In group discussions with men and women in all rural villages, it was consistently pointed out (except in the fishing village) that although the price of domestically produced products had fallen, the price of food items and other imported commodities had continued to rise. Although the price of fish was rising, fish catches were decreasing, resulting in less income for households. If this incidence is common it indicates that it is likely that those who can least afford to spend more are being squeezed by economic pressure. While people earned less from their cheap domestically produced commodities, the decrease or lack of change in food expenditure obviously indicates they consumed less food since the price of food commodities remained high. This was a further threat to people's nutrition.

In summary, the pattern of household expenditure on food and non-food consumption in a period of economic downturn is dissimilar to that within a period of high inflation and high food prices in particular. Expenditure on both food and non-food products of the majority have decreased or remained unchanged in spite of food prices continuing to rise. Fishing and wet season rice villages are more disadvantaged as a higher proportion of their households, compared to other villages, could not even maintain the level of expenditure. Further, people's nutrition was threatened, as many could not afford to spend more when food prices keep increasing.

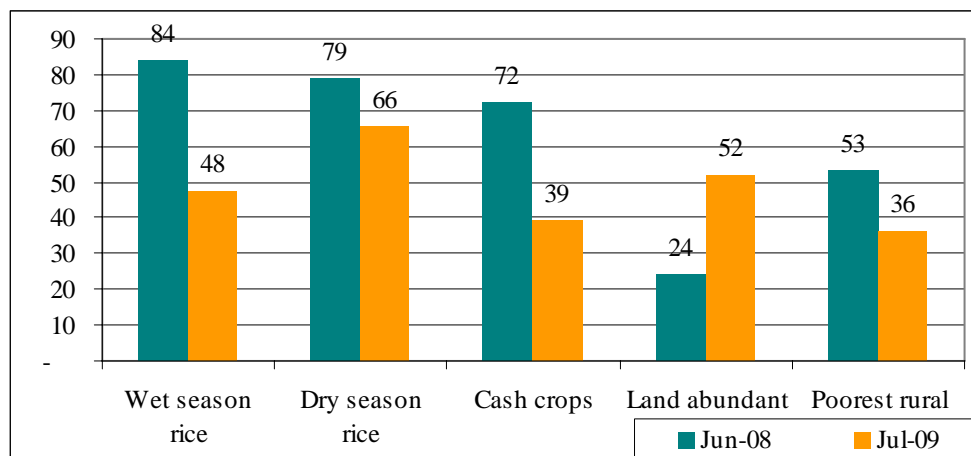
## 5.2. Impact on food stocks

Data from both June 2008 and July 2009 indicate that households only held stocks of paddy and milled rice, while almost none kept stocks of other crops such as soybean, mung bean, maize, cashew, and cassava. However, the level of paddy stocks held is not the same for both years. Figure 5.2 shows a significant difference between the proportion of households holding stocks of paddy rice in 2008 and 2009. Although it is not an ideal comparison since the figure does not represent the status of stocks in the same month in each year, the statistics may help provide some understanding of the difference.

### *Stocks of paddy rice*

Overall, the proportion of households in rural villages with stocks of paddy rice in July 2009 is 45%, which is 17% less than in June 2008 (62%). Excluding the fishing village, which held no paddy rice stocks in July 2009, rural households held an average of 600 kg of paddy in July 2009, but half the rural households held less than 400 kg of paddy. In June 2008, an average paddy stock per household was 813 kg, while 50% of the rural households had more than 500 kg of paddy in stock. Except for land abundant villages, the share of households holding stock declined in all rural villages. Less than half (48%) of the surveyed households in wet season rice villages had paddy stock in July 2009, while 84% did in June 2008. Similarly, the percentage of households in cash crop villages holding paddy stock was 72% in June 2008, which fell to 39% by July 2009. In contrast, more households in land abundant villages had stocks of paddy rice – 52% in July 2009 compared to 24% in June 2008.

**Figure 5.1: Percentage of households with stocks of paddy rice** (% of households within each village)



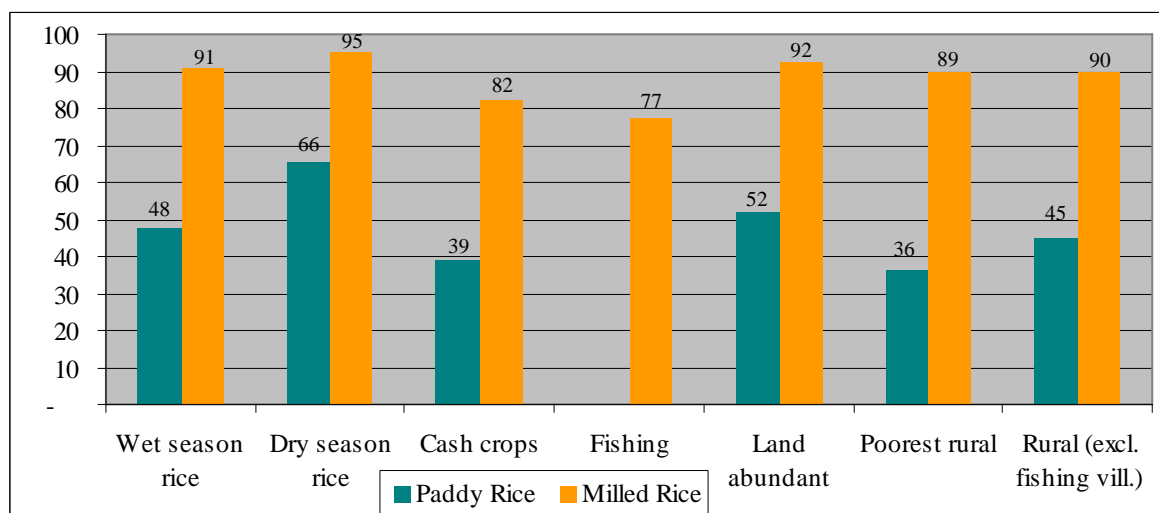
Source: Survey of 1070 households by CEA in 15 target villages (July, 2009) and Survey of 991 households by CDRI in 14 target villages (June, 2008)

Of the respondents from poorest rural villages, 36% reported having paddy stocks in July 2008. At least a household had 180 kg of paddy stock. But half of them had less than 150 kg of stock compared to 400 kg, which is the median paddy stock amount for all rural villages in the survey.

A small percentage of respondent households in the tourism dependent village held paddy stocks in July 2009. Only 14% of the respondents reported their households had stock and although 91% of them had milled rice stocks in their home, 90% of the respondents had less than 50 kg of milled rice stocks in July 2009.

## Stocks of milled rice

**Figure 5.2: Percentage of households keeping stock of paddy and milled rice in July 2009 (% of households within each village)**



Source: Survey of 1070 households by CEA in 15 target villages (July, 2009)

Figure 5.2 indicates that in July 2009, about 90% of surveyed households in rural villages (excluding the fishing village) held at least 0.5 kg of milled rice stock for their household consumption. In general, there was little difference in the proportion of households with milled rice stocks (89%) in rural villages in June 2008 compared to July 2009. On average, a rural household in July 2009 had 29 kg of milled rice held at home for daily consumption, but 50% of them did not have more than a 20 kg stock of milled rice. In June 2008, an average stock of milled rice per household was 35 kg and half of the surveyed rural households had less than 20 kg of milled rice.

About 10% of households in rural villages had no milled rice in their house at the time of the interview. These households only bought milled rice for cooking when mealtime came. Some households reported that they didn't have any milled rice left – usually their children bought milled rice on their way home from work. The proportion of households holding no milled rice was largest in the fishing village, where 23% had no milled rice left on the day of interview.

## Food insecurity

Although 94% of the surveyed households in rural villages had stocks of both paddy and milled rice in July 2009, about 30% of the households had 500 kg or less of paddy stock. For milled rice stocks, 82% had no more than 50 kg of stock in their home (36% had stock of 10kg or less and another 46% had stock of between 10 and 50 kg).

Of held stocks (paddy and milled rice), half the households in rural villages would consume all their available stock in 36 days. The survey in July 2009 indicated that a household consumes 2 kg of milled rice per day on average. Among rural villages (excluding the fishing village), households in tourism dependent village appear more disadvantaged in terms of food insecurity compared to other types of rural villages. Although 92% of the respondents in this village reported having stocks of paddy and milled rice, the stocks of half the interviewed households would be consumed within 12 days. In the fishing village, 50% of the surveyed households would consume their current rice stock in just two days, while 50% of the surveyed households in poor urban villages would consume their rice stock in five days.



**Table 5.2: Profile of food insecurity** (% of households within village)

	Wet season rice	Dry season rice	Cash crops	Fish ing	Land abun dant	Poor est rural	Poor urba n	Tour- ism depen dent	Total	Rural villages
HHs with rice stocks	94	96	88	77	96	97	92	92	<b>93</b>	<b>94</b>
# remaining days of stock (median)	49	91	33	<b>2</b>	67	20	5	12	<b>20</b>	<b>36</b>
HHs with adequate stocks	31	47	26	0	33	<b>12</b>	7	11	<b>24</b>	<b>28</b>
HHs whose food security is threatened	54	48	62	<b>86</b>	59	<b>80</b>	65	68	<b>63</b>	<b>61</b>

*Source: Survey of 1070 households by CEA in 15 target villages (July, 2009)*

The next harvest season will come in four months' time. Only 28% of households in rural villages have sufficient stocks of paddy and milled rice to provide for household consumption until the next harvest season, while the other 72% do not have stocks of either paddy or milled rice to secure their consumption until the next harvest. However, not all these households reported they would be food insecure over the lean period (from August to the end of November 2009). Of the respondents in these rural villages, 61% believe their households may encounter food insecurity. Among rural villages, the largest proportion (80%) of households in the poorest rural villages might struggle with food shortages. In the fishing village, 86% of respondents believed their households would be food insecure over the lean period.



# IMPACT ON HOUSEHOLD ASSETS AND LIVESTOCK PRODUCTION



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## VI. Impact on Household Assets and Livestock Production

This chapter attempts to provide an understanding of the impact of the ED on household assets and livestock production. The results of the High Food Prices study, which was conducted in the same villages during 2008, are used as a baseline for measuring impact. Section 6.1 gives an overview of household types across the villages and examines the impact of the ED on household assets by comparing the percentage of households holding assets in 2009 to that of a year earlier. Section 6.2 aims to see the impact on livestock production by carefully examining the production of livestock including cattle, pigs and poultry, the reasons behind the sale of livestock, and the constraints faced by farmers engaged in this business.

### 6.1. Impact on household assets

Asset is a good indicator showing how poor or healthy a household is. Previous poverty studies showed that selling assets were often used as a coping strategy by poor people. Therefore, the poor who are likely to be the ones hit most by the ED would experience a negative change in their asset accumulation. On the other hand, some better-off households who have forward-looking behaviour would invest more and their asset accumulation would in turn be positive. To capture the impact of ED, it is important to see change of the household asset accumulation.

#### *House types*

In 2009, on average, 47% of surveyed households reportedly owned houses with tin roofs, another 27.6% owned houses with cement, tile or fibro roofs, and another 25.4% owned huts with palm leaf roofs. The very small remaining 0.1% reportedly owned flats. The percentage of households who owned houses of bricks was highest in dry season rice villages; the percentage of those who owned houses of tin is highest in poor urban villages, followed quite closely by the fishing village; the percentage of those who own huts made of wood or palm leaves is highest in poorest rural villages. Poor urban villages were the only ones whose households reported ownership of flats.

**Table 6.1: Types of houses in 2009 (%)**

	Wet season rice	Dry season rice	Cash crops	Fishing	Land abundant	Poorest rural	Poor urban	Tour- ism depend- ent	Total
Cement/tile/fibro roof	37.2	65.9	28.8	0.0	34.1	15.6	8.5	14.9	27.6
Tin roof	51.4	21.7	39.4	77.2	32.1	18.5	90.2	59.6	47.0
Palm-leaved roof	11.4	12.4	31.9	22.8	33.7	65.9	0.6	25.5	25.4
Flat	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.1

*Source: Survey of 1070 households by CEA in 15 target villages (July, 2009)*

#### *Percentage of households holding assets*

Household assets are quite important indicators of household incomes. Of all households surveyed for this study in 2009, an average of 61.4% of them owned a television, 49.7% owned a cell phone, and 40.4% owned a motorbike. Another small proportion of households owned a cart, a water pump, and/or a hand tractor. Very few households reported ownership of cars, threshers, or tractors. Of all households in all villages, the percentage of those who owned a TV, cell phone and motorbike was highest in poor urban villages and lowest in poorest rural villages.

In comparison with the previous year, among all surveyed villages, the average percentage of households owning a cell phone rose sharply, by 11.7%. The biggest change could be seen in the fishing village, where 21.3% more households owned a cell phone. In contrast, the percentage of those who owned a cart decreased by 7.5%, with the biggest change seen in cash crop villages in which cart ownership decreased by 19.5%.

At individual village level, compared to 2008, while most other villages saw a decrease in the percentage of households who own a TV, poor urban villages saw a substantial increase. Ownership of a TV was reported by 25% more households compared to the previous year. A similar phenomenon can also be observed for ownership of a motorbike. The percentage of those owning a motorbike increased significantly in poor urban villages, by 19.2%, but decreased for other villages, except dry season rice and fishing villages.

**Table 6.2: Percentage of households holding assets in 2008 and 2009**

	Wet season rice	Dry season rice	Cash crops	Fishing	Land abundant	Poorest rural	Poor urban	Tourism dependent	Total
<b>2008</b>									
TV	73.3	78.0	60.6	66.1	62.3	22.9	65.4	...	60.4
Cell phone	41.5	26.7	41.8	37.3	39.7	12.4	68.4	...	37.9
Motorbike	41.0	29.3	51.4	0.0	43.0	29.4	62.4	...	40.4
Cart	20.7	28.0	30.3	0.0	22.5	43.8	12.0	...	25.3
Hand tractor	15.7	24.7	16.3	0.0	13.9	5.9	0.0	...	12.4
Tractor	0.7	0.0	4.3	0.0	0.7	1.3	0.0	...	1.3
Car/taxi	0.0	1.3	4.3	0.0	3.3	2.6	7.5	...	3.0
Water pump	23.1	55.3	21.6	1.7	5.3	7.2	0.0	...	18.1
Thresher	3.0	2.7	3.4	0.0	0.7	0.0	0.0	...	1.6
Rice mill	2.2	4.7	4.8	0.0	2.0	1.3	0.0	...	2.5
<b>2009</b>									
TV	74.7	73.8	56.5	52.8	59.7	18.6	91.1	66.4	61.4
Cell phone	52.3	41.0	46.1	58.6	45.4	17.6	85.8	50.0	49.7
Motorbike	38.3	39.0	50.8	4.3	36.3	27.1	81.6	51.5	40.4
Cart	26.1	23.2	10.8	1.4	39.4	34.8	7.6	10.6	17.8
Hand tractor	7.6	34.4	10.6	0.0	14.5	2.4	0.9	0.0	11.1
Tractor	0.8	1.3	3.5	0.0	0.8	0.0	0.9	0.0	1.6
Car/taxi	3.0	3.0	9.3	1.4	0.8	0.0	7.0	0.0	4.7
Water pump	15.2	56.9	11.3	2.9	5.6	1.4	0.0	14.9	14.0
Thresher	2.7	3.0	4.9	1.4	1.4	0.0	0.0	0.0	2.7
Rice mill	0.5	3.0	2.9	1.4	3.6	7.1	0.6	1.3	2.6
<b>Change</b>									
TV	1.4	-4.2	-4.1	-13.3	-2.6	-4.3	25.7	...	1.1
Cell phone	10.8	14.3	4.2	21.3	5.7	5.2	17.3	...	11.7
Motorbike	-2.7	9.6	-0.6	4.3	-6.8	-2.3	19.2	...	0.1
Cart	5.3	-4.8	-19.5	1.4	16.9	-9.0	-4.4	...	-7.5
Hand tractor	-8.1	9.7	-5.7	0.0	0.6	-3.5	0.9	...	-1.3
Tractor	0.1	1.3	-0.8	0.0	0.1	-1.3	0.9	...	0.3
Car/taxi	3.0	1.7	5.0	1.4	-2.5	-2.6	-0.6	...	1.7
Water pump	-7.9	1.6	-10.3	1.2	0.3	-5.8	0.0	...	-4.1
Thresher	-0.2	0.4	1.6	1.4	0.7	0.0	0.0	...	1.1
Rice mill	-1.7	-1.6	-1.9	1.4	1.6	5.8	0.6	...	0.1

*Source: Survey of 1070 households by CEA in 15 target villages (July, 2009) and Survey of 991 households by CDRI in 14 target villages (June, 2008)*

In sum, the impact of the ED on assets is not entirely clear. The percentage of households holding some sort of asset such as a TV, cell phone, car or taxi increased, while the percentage of households owning productive assets such as a cart, hand tractor or water pump were reported to have dropped compared to the figures of a year earlier. The decline of the latter assets may reflect a slowdown in economic activities in the agriculture sector in the surveyed villages.

## **6.2. Impact on livestock production**

During the time of the study, an average of about 70% of surveyed households were raising livestock. The percentage at village level was very high among wet season rice, dry season rice, cash crop, land abundant and poorest rural villages, and lowest in the fishing and poor urban villages. Of these households, an average of 40.8% raised cattle, 22.3% raised pigs and 60% raised poultry.

### ***Cattle production***

The average percentage of surveyed households who raised cattle in 2009 was 40.8%. Among them, there were very few households from poor urban villages, less than 1%, and none from the fishing village raising cattle.

The number of cattle raised by households varied. More than 33% of households in cash crop villages raised one head of cattle; more than 30% in wet season rice villages and almost 30% in dry season rice villages raised two cattle. While some households raised three or four cattle, around 23% of households in wet season rice and about 26% of households in land abundant villages raised more than five cattle.

During the past six months, 8.4% of these cattle raising households have sold their cattle. This figure is slightly higher in land abundant villages than in others. The vast majority of households who had sold their cattle, 81%, cited the need for money as their reason. Some other reasons given include old age and sickness, and that it was time to sell the animals. An average of 6.8% of respondents cited the former reason and another 5.4 cited the latter as their reasons. Among them, households from poorest rural villages made up the majority of those who cited old age and sickness as the reason for selling their cattle.

While some villagers raised and sold cattle, other villagers were not able to raise cattle. During the surveys, about 46.1% of the households reported that they could not raise cattle because they lacked the money to buy animals, while another 28.2% reported that they had no land on which to raise cattle. Another 18.8% were unable to raise cattle because they had no one to guard them, demonstrating that there was either a lack of household labour or that their household members were involved in work outside the home or village.

The shortage of money to buy cattle was seen as an issue for many households in dry season rice and poorest rural villages. More than 80% of households within each of these villages and more than 71% of households in land abundant villages reported that they could not afford to buy cattle. On a different note, in the wet season rice villages, their main barrier to not being able to raise cattle seemed to centre around the fact that they lacked someone to guard the cattle, whereas many villagers in fishing and poor urban villages had no land on which to raise cattle.



**Table 6.3: Cattle production (% of households)**

		Wet season rice	Dry season rice	Cash crops	Fish- ing	Land abun- dant	Poor- est rural	Poor urban	Total
Raise animal	Yes	88.3	88.3	74.1	30.0	90.2	84.3	29.1	69.8
<b>Cattle production 2009</b>									
Raise	Yes	54.1	70.8	36.8		71.9	60.5	0.9	40.8
How many	1.0	10.6	12.5	33.5		16.6	26.6		20.7
	2.0	33.2	29.3	27.4		19.7	34.4		27.2
	3.0	23.6	25.6	9.8		17.7	11.7	100.0	17.6
	4.0	9.5	16.8	18.0		19.9	12.5		16.5
	>5	23.1	15.9	11.2		26.0	14.8		17.9
Sold	Yes	13.6	11.3	7.2		17.0	12.5		8.4
Why sold	Need money	86.0	76.9	78.6		87.1	68.0		81.1
	Old age/ sickness		5.8	7.1		4.7	28.0		6.8
	Infertility	6.0	5.8			4.7			3.4
	Lack of feed			4.8					1.4
	It's time to sell	4.0	11.5	9.5					5.4
	Other	4.0				3.5	4.0		2.0
Why cannot raise	Not enough pasture		2.5	3.6	8.5	2.3	2.9		3.8
	Lack of money to buy more cattle	46.2	83.3	55.1	35.9	71.4	80.0	9.6	46.1
	No one to guard	50.3	11.7	31.4	1.4	26.3	12.9	2.6	18.8
	Not safe			1.7	1.4		1.4	1.3	1.2
	No land to raise on	1.8	2.5	3.8	52.9			85.6	28.2
	Others	1.8		4.3			2.9	1.0	1.9
<b>Change 2009/2008</b>									
Raise	Yes		-1.9	-17.5		37.9	-4.7	0.9	-4.3
How many	1.0	-7.3	-9.9	17.0		-7.9	15.7		2.9
	2.0	-7.9	3.1	4.8		-10.5	9.6		-0.6
	3.0	9.9	7.9	-4.9		4.5	-7.1	100.0	1.6
	4.0	-5.5	3.7	4.1		3.0	-0.4		2.5
	> 5	10.8	-4.7	-20.9		10.9	-17.8		-6.4
Sold	Yes	2.9	-6.1	-6.3		13.0	4.8		-0.3
Why sold	Need money	4.8	19.2	0.8		20.4	13.5		12.5
	Old age/ sickness	-6.3	-13.5	-7.7		-12.0	-8.4		-10.7
	Infertility	6.0	5.8			4.7			3.4
	Lack of feed			4.8		-16.7			0.2
	It's time to sell	4.0	11.5	9.5					5.4
	Other	-8.5	-23.1	-7.4		3.5	-5.1		-10.8
Why cannot raise	Not enough pasture	-11.9	-18.6	-14.2	-41.5	-7.7	0.8		-9.1
	Lack of money to buy more cattle	-27.0	12.8	-15.2	-14.1	-1.9	-7.9	9.6	-29.2
	No one to guard	36.9	3.2	20.5	1.4	9.6	2.8	2.6	7.5
	Not safe	-1.5		0.7	1.4		1.4	1.3	0.7
	No land to raise on	1.8	2.5	3.8	52.9			85.6	28.2
	Others	1.8		4.3			2.9	1.0	1.9

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009) and Survey of 991 households by CDRI in 14 target villages (June, 2008)

Compared with 2008, the average percentage of households who raised cattle decreased by 4.3% in 2009. With fewer households raising cattle, the percentage of those who sold their cattle also decreased, by 0.3%. Although it is not a significant increase, among villagers who have sold their cattle, there are 12.5% more households this year than last year who cite the need for money as their reason for selling their cattle.

This year, there is a significant decrease of 29.2% in the number of households who reported that they could not raise cattle due to lacking the money to buy them; however, there was at the same time a substantial increase, 28.2%, in the percentage of those who did not have land to raise cattle.

### ***Pig production***

Household surveys from 2009 reveal that around 22.3% of surveyed households raised pigs. Among them, about 54.4% of households raised only one pig, and about 27.4% who raised two pigs. Some households – 10.2% of the total surveyed households – raised more than five pigs. Between the different villages, more households in dry season rice and poorest rural villages raised just one pig, while many more households in the fishing village raised two pigs. Among those who raised five pigs across the villages surveyed, there were more households from wet season rice villages than other villages.

During the last six months, 9% of pig-raising households have sold their pigs. The figure at the village level was higher among households in dry season rice villages than in others, with 20% of their households selling their pigs. The two significant reasons cited for the sale of pigs among villagers were that it was time to sell and that they needed money urgently. Over 40% of villagers cited each of these as their main reasons. More villagers from wet season rice and poorest rural villages cited the urgent need for money as their reason for selling their pigs.

For those who could not raise pigs, the main reason was reported to be lack of capital. More than 84% of households cited lack of capital as the barrier. This figure is consistent across all villages, except for the fishing village. In the fishing village, about one-third of households reported lack of capital, one-third reported that they had no one to help look after the pigs, and another one-third reported that they found it difficult to feed the pigs if they raised them.

A comparison between the years 2008 and 2009, according to the High Food Price survey of 2008 and the current survey, reveals that 3% more households raised pigs in 2009 than in 2008 and that there tended to be more households raising one and two pigs. Cash crop villages had a very high increase of 22.5% in the number of households who raised pigs in 2009 compared to 2008; on the other hand, land abundant villages reported a 22.7% decrease in the number of households who raised pigs in 2009.

**Table 6.4: Pig production (% of households)**

		Wet season rice	Dry season rice	Cash crops	Fish- ing	Land abun- dant	Poor- est rural	Poor urban	Total
<i>Pig production 2009</i>									
Raise	Yes	12.7	36.7	36.5	16.9	11.9	29.2	0.0	22.3
How many	1.0	42.9	70.9	44.2	0.0	50.0	71.1	0.0	54.4
	2.0	33.3	23.6	27.3	80.0	33.3	15.6	0.0	27.4
	3.0	0.0	1.8	10.4	10.0	0.0	2.2	0.0	4.9
	4.0	0.0	1.8	5.2	0.0	0.0	4.4	0.0	3.1
	>5	23.8	1.8	13.0	10.0	16.7	6.7	0.0	10.2
Sold	Yes	8.4	20.0	12.6	0.0	6.0	7.8	0.0	9.0
Why sold	It's time to sell	27.3	43.3	65.4	0.0	44.4	38.5	0.0	47.2
	Need money urgently	63.6	40.0	34.6	0.0	44.4	61.5	0.0	44.9
	Lack of animal feed	0.0	13.3	0.0	0.0	11.1	0.0	0.0	5.6
	Other	9.1	3.3	0.0	0.0	0.0	0.0	0.0	2.2
		80.9	82.9	82.7	33.3	79.6	92.1	0.0	84.1
Why cannot raise	Lack of capital								
	No one to help	5.9	7.1	9.9	33.3	9.3	5.9	0.0	7.7
	Difficult to get feed	2.9	4.3	4.9	33.3	7.4	0.0	0.0	3.7
	Other	10.3	5.7	2.5	0.0	3.7	2.0	0.0	4.5
<i>Pig production 2008</i>									
Raise	Yes	21.7	29.2	14.0	11.4	34.7	31.0	3.5	19.4
How many	1.0	42.5	47.4	39.5	12.1	39.9	62.9	18.2	41.0
	2.0	23.8	28.1	11.7	51.7	28.9	14.5	27.3	24.7
	3.0	6.3	11.1	18.5	12.1	16.8	3.2	0.0	12.9
	4.0	13.8	4.4	15.4	0.0	6.4	3.2	0.0	8.1
	>5	13.8	8.9	14.8	24.1	8.1	16.1	54.5	13.4
Sold	Yes	8.4	15.3	3.5	8.5	18.7	14.0	2.8	9.0
Why sold	It's time to sell	33.3	66.2	60.0	66.7	37.9	44.8	33.3	51.1
	Need money urgently	66.7	21.1	40.0	33.3	42.1	37.9	33.3	37.6
	Lack of animal feed	0.0	0.0	0.0	0.0	0.0	6.9	0.0	0.6
	Other	0.0	12.7	0.0	0.0	20.0	10.3	33.3	10.7
		42.3	53.5	55.8	79.0	73.6	80.4	11.5	54.8
Why cannot raise	Lack of capital								
	No one to help	34.5	13.2	23.8	17.7	22.7	5.9	7.2	19.1
	Difficult to get feed	15.5	10.9	6.6	0.0	0.0	7.8	28.2	9.2
	Other	7.7	22.5	13.8	3.3	3.6	5.9	53.1	17.0
<i>Change 2009/2008</i>									
Raise	Yes	-9.1	7.5	22.6	5.5	-22.7	-1.8	-3.5	3.0
How many	1.0	0.4	23.5	4.6	-12.1	10.1	8.2	-18.2	13.5
	2.0	9.6	-4.5	15.5	28.3	4.4	1.0	-27.3	2.8
	3.0	-6.3	-9.3	-8.1	-2.1	-16.8	-1.0	0.0	-8.1
	4.0	-13.8	-2.6	-10.2	0.0	-6.4	1.2	0.0	-5.0
	>5	10.1	-7.1	-1.8	-14.1	8.6	-9.5	-54.5	-3.2
Sold	Yes	0.0	4.7	9.1	-8.5	-12.8	-6.2	-2.8	0.0
Why sold	It's time to sell	-6.1	-22.9	5.4	-66.7	6.5	-6.4	-33.3	-3.9
	Need money urgently	-3.0	18.9	-5.4	-33.3	2.3	23.6	-33.3	7.3
	Lack of animal feed	0.0	13.3	0.0	0.0	11.1	-6.9	0.0	5.0
	Other	9.1	-9.3	0.0	0.0	-20.0	-10.3	-33.3	-8.4
		38.6	29.4	26.9	-45.7	6.0	11.7	-11.5	29.3
Why cannot raise	Lack of capital								
	No one to help	-28.6	-6.0	-13.9	15.6	-13.5	0.1	-7.2	-11.4
	Difficult to get feed	-12.6	-6.6	-1.7	33.3	7.4	-7.8	-28.2	-5.5
	Other	2.5	-16.8	-11.3	-3.3	0.1	-3.9	-53.1	-12.5

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009) and Survey of 991 households by CDRI in 14 target villages (June, 2008)

The average percentage of households that sold their pigs in 2009 remained unchanged from 2008. A comparison of villages, however, reveals an increase in the percentage of households selling their pigs in dry season rice and cash crop villages, but a decrease in land abundant, fishing and poorest rural villages.

Over 7% more households on average reported an urgent need for money as their reason for selling pigs in 2009, compared to 2008. There was a significant increase in the number of households selling pigs for this reason in poorest rural and dry season rice villages. In the fishing village, where reports of a lack of money decreased but the lack of human labour to work inside the house increased, 33.3% fewer households than in other villages reported an urgent need for money as the reason behind their pig sale. Also, while an average of 29.3% more households in 2009 reported a lack of capital as their reason for being unable to raise pigs, the fishing village experienced a significant decrease of 45.7% in the number of households who lacked capital for pig-raising. While jobs were somewhat affected by the ED, in 2009 the average decrease in the number of households who lacked human labour to help raise their pigs was 11.4%. The trend is, again, opposite in the fishing village, which formerly lacked variety in its sources of income, and which have succeeded in diversifying somewhat by doing other work to cope with the crisis. Therefore, this year, there was an increase of 15.6% in the number of households who reported that they could not raise pigs because there was no one to help look after them.

### ***Poultry production***

Survey findings show that an average of 60% of households in all surveyed villages raised poultry, and that the percentage of poultry-raising households was highest in the wet season rice villages and lowest in fishing and poor urban villages.

More than 63% of the households raised from one to five poultry while 22% raised from six to 10. Another 14.5% of them raised more than 10. During the past six months, around 13.8% of households have sold their poultry. About half of them did so because they needed money and about 39.3% sold because it was time to sell. More households in dry season rice and poorest rural villages than others reported that they sold their poultry because of an urgent need for money.

Some households could not raise poultry. Of these, 27.9% claimed that they lacked the capital needed to raise poultry and 13.9% reported that they had no one to help look after and feed the animals. For another 57.5% of the households who could not raise poultry, other reasons were involved, but the survey did not elicit details of these other reasons. Poorest rural villages had a higher percentage of households who sold poultry because of a need for money than others.

The percentage of households involved in poultry production decreased in 2009 compared with 2008. Between the villages, the percentage of households involved in poultry production decreased by around 14% and 15% in cash crop and poorest rural villages, respectively. In contrast, it increased considerably in urban villages, in 25.2% of households.

In 2009, 10% more households raised one to five head of poultry, but the number of those who raised more than this decreased compared to 2008. There was also a slight increase of 0.6% in the number of households selling poultry during the last six months. Although the percentage of those who sold due to an urgent need for money was quite high in 2009, it actually declined by 30.6% since 2008. There was a sizeable decrease in the wet season rice and land abundant villages in particular.

**Table 6.5: Poultry production (% of households)**

		Wet season rice	Dry season rice	Cash crops	Fish- ing	Land abund- ant	Poor- est rural	Poor urban	Total
<i>Poultry production 2009</i>									
Raise	Yes	87.5	74.9	62.1	25.7	75.9	62.0	28.2	60.0
How many	1–5 heads	60.4	70.4	61.7	67.9	53.6	71.9	84.3	63.4
	6–10 heads	19.9	17.7	25.4	10.7	29.0	22.3	6.7	22.1
	>10 heads	19.6	11.9	12.9	21.4	17.4	5.8	9.0	14.5
Sold	Yes	26.1	18.7	6.6	1.4	34.1	22.0	1.6	13.8
Why sold	It's time to sell	52.1	26.7	36.8	100.0	43.9	16.3		39.3
	Need money urgently	44.8	69.8	47.4		39.8	69.8	60.0	49.6
	Lack of animal feed					1.8			0.6
	Other		3.5	15.8		14.6	14.0	40.0	10.5
Why cannot raise	Lack of capital	17.4	23.3	31.7	36.5	30.7	52.0	1.3	27.9
	No one to help	17.4	6.8	23.6	7.8	13.1		14.5	13.9
	Difficult to get feed		4.5			2.2			0.6
	Other	65.2	65.4	44.7	55.7	44.0	48.0	84.1	57.5
<i>Poultry production 2008</i>									
Raise	Yes	80.7	77.3	76.4	33.9	78.1	77.4	3.0	65.2
How many	1–5 heads	55.0	65.3	48.4	45.0	37.3	59.3	100.0	53.0
	6–10 heads	24.8	19.0	27.7	40.0	27.1	18.7		24.0
	>10 heads	20.2	15.7	23.9	15.0	35.6	22.0		23.1
Sold	Yes	28.8	20.0	11.6		21.3	11.2		14.3
Why sold	It's time to sell	6.1	23.3	33.3		6.3	17.6		16.2
	Need money urgently	87.9	70.0	66.7		93.8	76.5		80.1
	Lack of animal feed	3.0							0.7
	Other	3.0	6.7				5.9		2.9
Why cannot raise	Lack of capital	65.8	84.6	64.4	66.7	55.6	83.5	33.3	73.1
	No one to help	10.5	7.7	13.6		5.6	3.8		7.9
	Difficult to get feed	2.6	2.6						0.8
	Other	21.1	5.1	22.0	33.3	38.9	12.7	66.7	18.2
<i>Change 2009/2008</i>									
Raise	Yes	6.8	-2.4	-14.3	-8.2	-2.2	-15.4	25.2	-5.2
How many	1–5 heads	5.4	5.1	13.2	22.9	16.3	12.6	-15.7	10.4
	6–10 heads	-4.8	-1.3	-2.3	-29.3	1.9	3.6	6.7	-1.9
	>10 heads	-0.6	-3.8	-11.0	6.4	-18.2	-16.2	9.0	-8.5
Sold	Yes	-2.7	-1.3	-5.0	1.4	12.8	10.8	1.6	-0.6
Why sold	It's time to sell	46.0	3.4	3.5	100.0	37.6	-1.4		23.1
	Need money urgently	-43.1	-0.2	-19.3		-54.0	-6.7	60.0	-30.6
	Lack of animal feed	-3.0				1.8			-0.1
	Other	-3.0	-3.2	15.8		14.6	8.1	40.0	7.6
Why cannot raise	Lack of capital	-48.4	-61.3	-32.7	-30.2	-24.9	-31.5	-32.0	-45.2
	No one to help	6.9	-0.9	10.1	7.8	7.6	-3.8	14.5	6.1
	Difficult to get feed	-2.6	1.9			2.2			-0.2
	Other	44.2	60.3	22.6	22.4	5.1	35.3	17.5	39.3

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009) and Survey of 991 households by CDRI in 14 target villages (June, 2008)

There was a considerable decrease, of 45.2%, in the number of households who reported that they could not raise poultry due to a lack of capital, but only a slight increase in those who reported that they could not raise poultry because they had no one to help.

# IMPACT ON HEALTH AND EDUCATION



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## VII. Impact on Health and Education

This chapter wishes to understand the extent to which the economic downturn may have had consequences on the ability of the household to spend on health treatment and to keep children in school. Section 7.1 assumes the expenditure on healthcare as to indicate the impact on health, then, section 7.2 aims to measure the dropout rate of school-children.

### 7.1. Impact on health

The pattern of expenditure on health observed in June 2008 and July 2009 appears to parallel spending on food and non-food consumption. When asked to compare their expenditure on health between January 2008 and June 2008, almost no respondents in the household survey (June 2008) reported a decrease in household expenditure. It was unchanged for 32%, while 67% reported an increase in expenditure in June 2008 compared to January 2008. The highest reported increases were in land abundant and poorest rural villages – 90% and 82% respectively.

**Table 7.1: Changes of the household's expenditure on healthcare** (% of households within village)

		Wet season rice	Dry season rice	Cash crops	Fish- ing	Land abund- -ant	Poor- est rural	Poor ur- ban	Tour- ism depen- dent	Total
<b>Expenditure on healthcare</b>										
Jun 2008 vs. Jan 2008	Increase	67.7	79.4	54.9	59.6	90.1	82.4	30.4	...	67.2
	No change	27.1	19.9	45.1	40.4	9.9	17.6	69.6	...	32.0
	Decrease	5.3	0.7	0.0	0.0	0.0	0.0	0.0	...	0.8
Jul 2009 vs. Feb 2009	Increase	39.9	33.1	50.9	31.4	41.1	33.8	35.3	37.8	39.3
	No change	39.2	40.6	31.0	42.9	33.3	36.8	43.6	33.8	37.1
	Decrease	21.0	26.3	18.1	25.7	25.5	29.3	21.1	28.4	23.6

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009) and Survey of 991 households by CDRI in 14 target villages (June, 2008)

The household survey (July 2009) presents a situation in which the ability of the household to spend on healthcare varies among groups of households. The 2009 figures show a different trend, not all or majority of the household were able increase or even maintain their level of spending on healthcare services. In July 2009, health expenditure in 24% of surveyed households declined compared to February 2009, was unchanged in 37% of households, and increased among 39% of surveyed households.

### 7.2. Impact on education

According to the Education Statistics and Indicators (DoP/MoEYS, 2008/09), the national primary school dropout rate was 8.8% and 13.5% for remote areas in the school year 2007–08. From the same source, the dropout rate for lower secondary school was 24.2% nationwide and 20.3% for remote areas.

The survey found that 52.5% of the households have at least one primary school-age child aged between 6 and 12 years. Out of these households, there are 900 children in total, 50.6% of them female. Relatively more households in fishing and poorest rural have primary school-age children – 66% and 61% respectively. When asked whether any of these children had

dropped out of school since Khmer New Year (April 2009), only 16 children from 12 households were reported. This number of children represents only 1.8% of all primary school-age children in all surveyed villages.

From the survey in July 2009, 5% of the households reported they had members who had dropped out of school in the last nine months. The poorest rural and fishing villages reported the highest percentage – 10 and 9% respectively.

Respondents reported that the main reason for children dropping out was either distance or lack of safety. This was reported by 28%, while 13% said their children had no interest in study. Almost none of the respondents viewed lack of school facilities or toilets as either their first or second main reasons. But, no teachers / poor quality of teaching / lack of study materials and helping with the household chores were raised as the second main reason for dropping out of school, followed by lack of transportation.

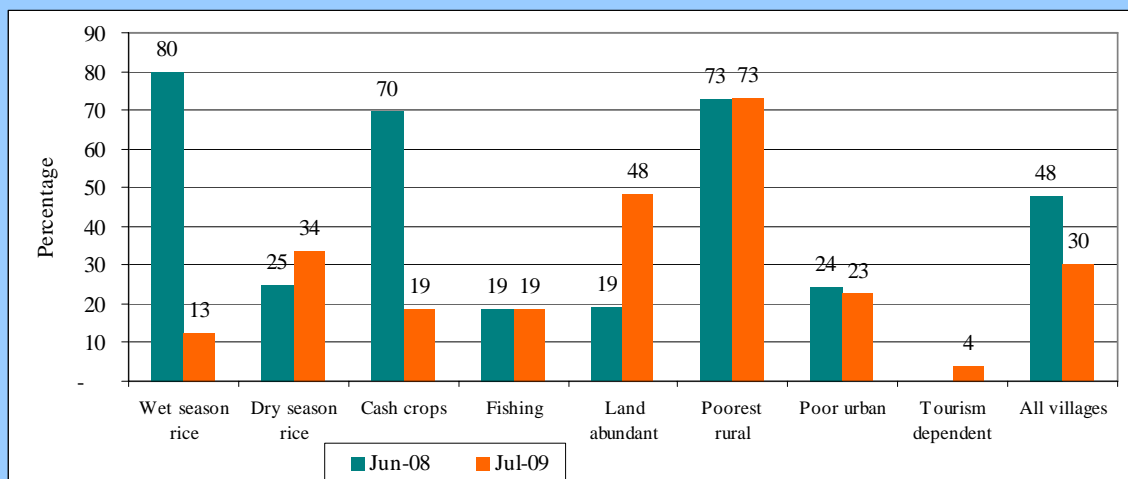
**Table 7.2: Households with primary school-age children**

		Wet season rice	Dry season rice	Cash crops	Fish -ing	Land abund -ant	Poo- rest rural	Poor ur- ban	Tour- ism depen -dent	Total
HHs with primary school age (% of households within village)		49.0	47.5	50.0	65.7	51.1	60.9	52.6	52.7	53
Children aged 6-12	Total (#)	96	113	170	82	119	157	97	66	900
	Female (%)	51.0	57.5	45.3	50.0	47.1	55.4	46.4	53.0	51
Children aged 6-12 dropped school during April-July 2009	Total (#)	1	-	7	-	2	6	-	-	16
	Female (#)	0	0	5	0	1	3	0	0	9

*Source: Survey of 1070 households by CEA in 15 target villages (July, 2009)*

In sum, although some households reported their children had dropped out of school during April-July 2009 and in the last nine months (November 2008 to July 2009), the figure was not sufficiently significant to indicate that the economic downturn had translated into this being, one of the ways households were coping with financial difficulties. On the other hand, among households reported their livelihood difficulty in the past six months (during February-July 2009), it confirms that only 0.5% and 1.1% find lack of money to pay for child education respectively as first and second difficulty in their households.

# EXTERNAL ASSISTANCE



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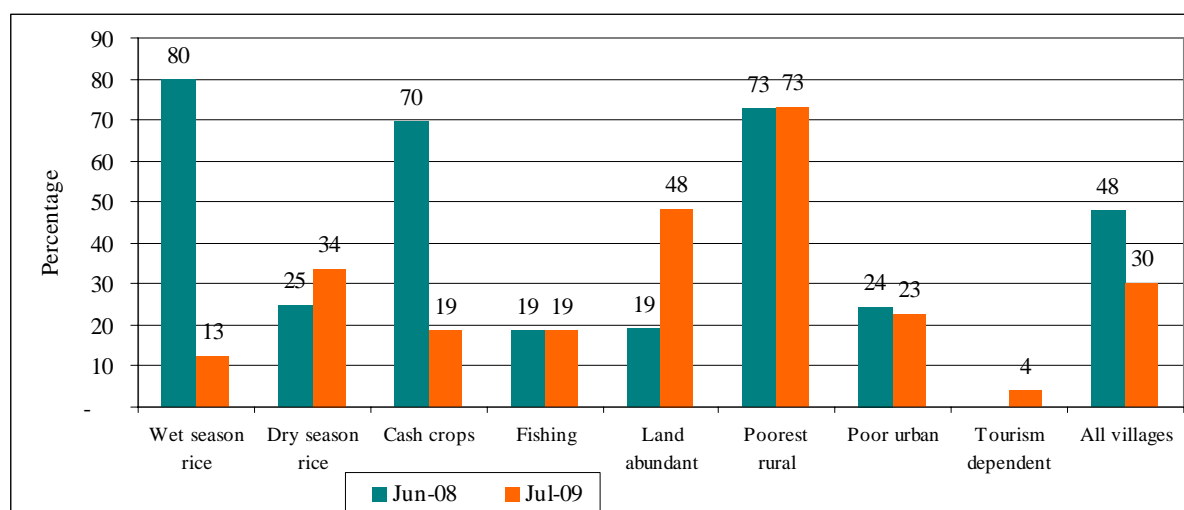
## VIII. External Assistance

This chapter presents the profile of external assistance that the village households had received within past six months. Section 8.1 focuses on the extent and types of the external assistance in the surveyed communities; section 8.2 identifies the sources of interventions such as the government, NGOs, and political parties. NGOs in this context also include projects of donors such as WFP and ADB. Furthermore, section 8.3 outlines the types of assistance that are of preference by households in each community.

### 8.1. Coverage of external assistance

Overall, the proportion of households receiving assistance has declined since 2008. In June 2008, 47.9% of the surveyed households reported that they had received aid in the past six months. In July 2009, the percentage declined to only 30.2%. However, it is important to note that while Cambodia experienced high food prices, it was a national election year (July 2008), before which [members of] political parties visited their constituencies more often and presented gifts.

**Figure 8.1: Percentage of households receiving assistance in the past six months**



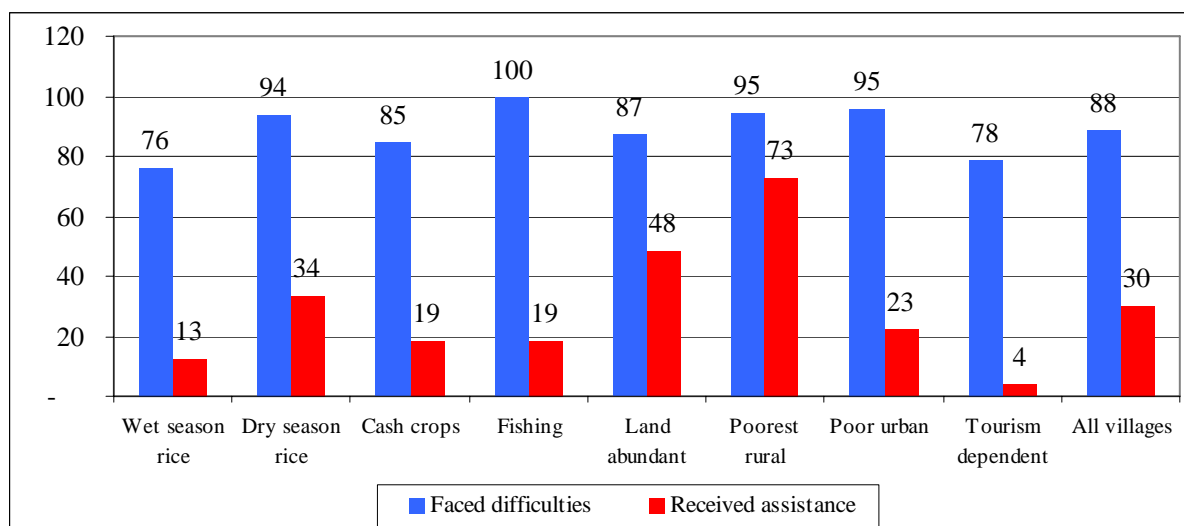
*Source: Survey of 1070 households by CEA in 15 target villages (July, 2009) and Survey of 991 households by CDRI in 14 target villages (June, 2008)*

Major recipients of assistance during the first half of 2008 were households in wet season rice (80%), poorest rural (72.7%), and cash crop (69.6%) villages. While a similar proportion (72.9%) in poorest rural villages continued to receive assistance during early 2009, assistance to wet season and cash crop villages fell significantly, by 12.6% and 18.5% respectively, since 2008. The decline was mainly due to the reduction of the free healthcare service in both types of villages, of micro-credit with a low interest rate and of the school feeding programme in cash crop villages. The school-feeding programme benefited to households (48.5%) in land abundant villages, none of which received that kind of aid during first semester of 2008.

The household survey shows that 30% of surveyed households received aid during the first half of 2009. The pattern of external assistance was most concentrated in poorest rural villages, followed by land abundant and dry season rice villages. In poorest rural villages, 73% of surveyed households have received aid since early 2009. Of the surveyed households, almost half in land abundant villages compared to only about one-third in dry season rice

villages received aid. The lowest proportion of aid recipient households were observed in the tourism dependent village in which just 4% of households received external assistance.

**Figure 8.2: Percentage of households facing difficulties and receiving assistance in the past six months [February-July 2009]**

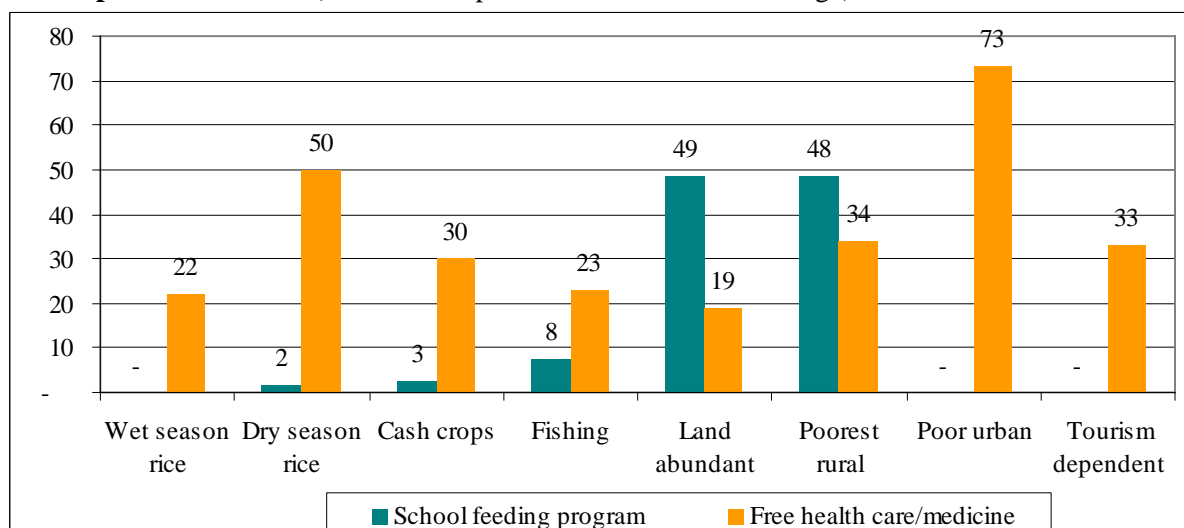


Source: Survey of 1070 households by CEA in 15 target villages (July, 2009)

Aid was provided mainly in the form of free healthcare/ medicine and the school-feeding program. Of all aid-recipient households, 35% of them have received free healthcare/medicine since early 2009, while 25% have been recipients of the school feeding programs. Other forms of assistance usually observed in the community include micro-credit schemes with low or no interest rates, food for work, and animal feed/livestock raising.

The intervention of **free healthcare/medicine** is present in all surveyed villages, but the assistance has reached a greater proportion of households in poor urban villages and dry season rice villages – 73% and 50% respectively – since January 2009. In the remaining villages about 20 to 30% of its aid-recipient households benefited from free healthcare/medicine.

**Figure 8.3: Distribution of free healthcare service/medicine and school-feeding programme to aid-recipient households (% of aid-recipient households within village)**



Source: Survey of 1070 households by CEA in 15 target villages (July, 2009)

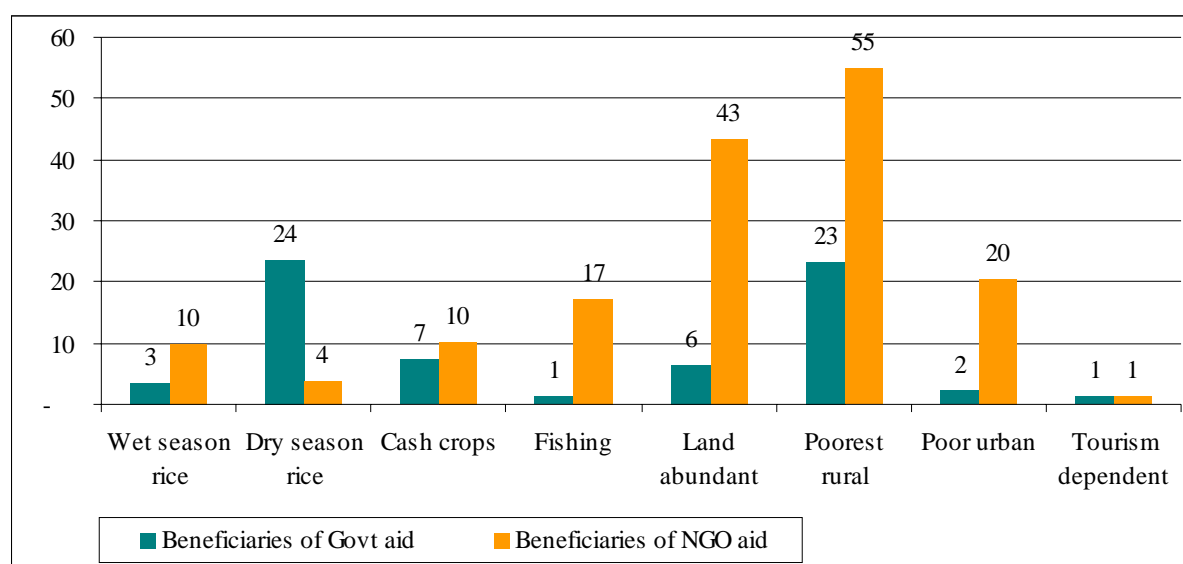
**School feeding programmes** appear to be targeted mainly at the poorest rural and land abundant villages. About 50% of aid-recipient households in both types of village received support from the school-feeding programme and about 10% of aid recipient households in all surveyed villages were beneficiaries of food-for-work. **Food-for-work** assistance was largely concentrated in poorest rural villages, which received 97% of the assistance, reaching about one-third (33%) of the village's households.

The assistance of the **micro credit scheme** with low or no interest rates reached nearly 15% of aid-recipient households. Of these, 35% live in poorest rural villages and 20% live in land abundant villages. None of the surveyed households in poor urban and tourism dependent villages benefit from micro credit scheme assistance. Assistance in terms of **animal feed/livestock raising** has benefited nearly 10% of recipient households – 60% of them in poorest rural villages.

## 8.2. Sources of assistance

The provision of assistance to people in the surveyed villages is mainly through aid from the government and NGOs. Nearly 40% of aid-recipient households in the surveyed villages were beneficiaries of government aid. NGO aid reached a larger proportion of the households. Almost all (93%) aid-recipient households said they had been assisted by NGO aid in the past six months. This aid includes aid from development agencies such as WFP. Aid intervention from other sources such as political parties has been minimal – only about 1% of aid recipients were provided with aid from this source, but aid from individuals has benefited 10% of aid-recipient households.

**Figure 8.4: Distribution of households who are recipients of assistance from the government and NGOs (%)**



Source: Survey of 1070 households by CEA in 15 target villages (July, 2009)

**Government aid** is more concentrated in poorest rural villages and dry season rice villages while the NGO aid is more targeted to poorest rural and land abundant villages, also benefiting fishing and poor urban villages.

The government aid is mainly in the form of free healthcare/medicine. Since early 2009 nearly two-thirds (63%) of aid-recipient households have benefited from the government's free healthcare/medicine. This has largely been directed to people in poorest rural villages and



dry season rice villages – 77% and 61% respectively in these villages have received this aid. Other aid provided by the government included vet services and a nutrition programme for children and pregnant women. Each reaches 13% of aid-recipient households.

Aid provided **by NGOs** includes: school feeding programs; free healthcare service/ medicine; micro-credit schemes with low interest rates; food for work; and other aid such as mosquito nets. The school-feeding programme is primarily targeted to land abundant and poorest rural villages – about 50% and 60% respectively of its aid-recipient households benefit from this type of assistance. Similarly, NGO aid through the **food-for-work** and the **micro-credit schemes** with low interest rates is largely targeted at poorest rural villages. In these types of village, food-for-work reaches 40% of the village's aid-recipient households while 20% of them benefit from micro-credit schemes. For example, Lutheran World Federation (LWF) provides funds to saving groups in Anha Ses, a poorest rural village in Thpong district, Kampong Speu province.

**Mosquito nets** provided by NGOs have been delivered to almost all aid-recipient households in Tumnuh Takuon and Kbal Tumnuh villages. Although Tumnuh Takuon is land abundant and Kbal Tumnuh is a cash crop farming village, both villages are susceptible to malaria.

Minimal external assistance has been delivered to the fishing village. Less than 20% of the village's surveyed households have received aid, typically in the form of **free food** such as rice, noodles and soy sauce, in the past six months. Although this sort of assistance reached only 4% of the surveyed households across 15 villages, nearly half the aid-recipient households in the fishing village (Kampong Preah) are beneficiaries of this type of NGO-provided aid.

NGOs are the main source of **free healthcare service/medicine** assistance to people in poor urban communities. Although the government provides a great deal of this type of aid, very little was offered to poor urban villages in Phnom Penh. However, the intervention has been complemented by NGO efforts, especially in the areas of free healthcare/medicine delivery. Of four recipient households in poor urban villages, three had received free healthcare/medicine from NGOs.

In summary, aid provided to surveyed villages was largely through the intervention of the government and NGOs. While about 40% of aid-recipient households were beneficiaries of government aid, the NGO aid reached almost all aid-recipient households. Both the government and NGO aids are concentrated in poorest rural villages, followed by dry season rice and land abundant villages. Aid intervention by the government and NGOs appears to be complementary. As the government provided free healthcare/medicine to poorest rural villages, the communities also benefited from the school-feeding program, food-for-work and mosquito nets delivered by NGOs. Similarly, while the government's free healthcare/medicine is limited in poor urban communities, the gap is complemented by NGO efforts. Three out of four surveyed households in Phnom Penh's poor urban villages are beneficiaries of NGO-provided free healthcare/medicine.

### 8.3. Preferred assistance

Free healthcare service/medicine remains relevant and welcome to people across all villages. About 45% of the respondents stated that free healthcare service/medicine was their preferred form of assistance, whether from the government or development partners. The desire for free healthcare service / medicine was pronounced in fishing and tourism dependent villages. Around two-thirds of the respondents in these villages called for this aid, reflecting limited intervention through this type of assistance in the past in both communities. Although there have been some intervention from the government and NGOs, community people in dry season rice, poorest rural, and poor urban villages still expressed their need for free healthcare service/medicine, with nearly half the respondents regarding this as a priority.

**Table 8.1: Percentage of households expressing their preferred assistance**

No	Types of assistance	Wet season rice	Dry season rice	Cash crops	Fishing	Land abundant	Poor-est rural	Poor urban	Tour-ism dep-ent	Total
1	School-feeding program	4.9	0.7	5.6	12.9	19.6	28.3	2.4	2.7	9.3
2	Nutrition programme for children and pregnant women	1.4	4.7	1.4	8.6	0.7	0.8	0.8	2.7	2.2
3	Free food aid for family	14.7	10.1	22.0	48.6	24.6	26.8	17.5	58.1	24.0
4	Food for work	3.5	3.4	3.7	8.6	7.2	18.1	0.0	1.4	5.6
5	Free healthcare/medicine	49.0	28.4	40.7	74.3	47.8	39.4	34.1	62.2	43.8
6	Micro credit scheme with low interest rate	30.1	8.8	31.3	52.9	18.1	9.4	23.8	41.9	24.8
7	Free seed distribution	17.5	11.5	11.2	15.7	17.4	6.3	0.8	4.1	10.9
8	Offer chemical fertilizer on credit	48.3	8.8	1.9	2.9	8.7	0.8	0.0	0.0	9.7
9	Find market for agricultural produce	13.3	17.6	35.5	0.0	13.0	1.6	1.6	4.1	14.0
10	Animal feed / animal raising	30.1	18.9	35.5	40.0	37.0	33.9	0.8	56.8	30.0
11	Vet service	0.7	4.1	0.0	2.9	4.3	1.6	0.0	0.0	1.6
12	Others aids	30.1	59.5	43.9	27.1	57.2	56.7	63.5	48.6	49.1
Distribution of other wanted aids (percentage within other aids)										
1	Infrastructure (roads, bridges, irrigation, pumps)	56.1	33.8	61.4	0.0	57.5	77.3	69.3	28.0	55.0
2	Clean water and sanitation	19.5	46.3	30.1	0.0	43.8	36.4	16.0	44.0	32.4
3	School/support for child education	7.3	0.0	13.3	0.0	8.2	13.6	28.0	12.0	11.5
4	Agricultural inputs/techniques	26.8	38.8	10.8	0.0	9.6	12.1	2.7	8.0	15.2
5	Fishing gear	0.0	0.0	0.0	76.5	2.7	0.0	0.0	0.0	3.3
6	Land	2.4	1.3	8.4	23.5	6.8	1.5	2.7	8.0	5.0
7	Electricity	0.0	1.3	12.0	0.0	0.0	1.5	4.0	4.0	3.5

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009)

Free food distribution (or food transfer programme) is an obvious need. Although a smaller proportion of respondents chose this type of assistance than free healthcare service / medicine, this assistance was the most important for people living in fishing and tourism dependent

villages, followed by poorest rural and land abundant villages. Moreover, it was evident that the school-feeding programme was actually directed towards the needs of the beneficiaries. Although both poorest rural and land abundant villages have been major targets of this program, the people continued to see this type of assistance as a priority. Furthermore, though the assistance of food-for-work appears less relevant to people in other villages, it is still useful for people in poorest rural villages even if they have already been recipients.

Villagers also want the assistance of the animal feed / livestock raising and micro credit schemes. These are preferred by people across all villages, but poor urban villages do not see animal feed / livestock raising as relevant to their needs. Meanwhile, although the option of animal feed / livestock raising was viewed most positively by respondents in the tourism dependent village, people in the fishing community saw micro credit schemes as more necessary. Respondents from rice and cash crop farming villages were alone in wanting help finding markets for their products.

Nearly half the respondents regarded infrastructure such as schools/ study materials, clean water and sanitation, electricity, fishing gear, agriculture inputs / techniques and land provided through aid as important. About 55% of these respondents wished for infrastructure such as roads, bridges, irrigation system and pumps and one-third wanted assistance such as clean water and sanitation such as wells, ponds, latrines and sewage systems. However, interest in roads/ bridges was insignificant in tourism dependent and dry season rice villages, which may reflect already existing infrastructure in these villages.

Respondents in the fishing village expressed different needs from people in other villages in the survey. Roads, irrigation system, clean water and sanitation, and agricultural inputs or techniques were not significant to them. They preferred fishing gear and land. People in both wet and dry season rice villages wanted assistance in terms of agricultural inputs/ techniques.

## **IX. Conclusion**

The study primarily employed the July 2009 household survey to compare with the similar survey of June 2008. Although the survey was not designed to give national representation of households, it is indicative of the major types of communities in Cambodia. A large sample size in each village can speak for the whole village. Evidence from about 1,000 households representing the total populations of the 15 villages can supplement the macro and sector level studies conducted by other institutions such as UNDP, ILO, World Bank and CDRI. They illustrate the impact of the economic downturn, precipitated by both the global economic crisis and the collapse of the domestic real estate market, on households, men and women and the various types of communities.

The impact of the economic downturn on households can be revealed by broad indicators such as the types of difficulty they have faced, the major experiences of the past three months, and the significance of and reasons for the outstanding loans they obtained. As many as 89% of households in the 15 villages surveyed had encountered difficulties in the past six months, relatively more so in the poor urban and cash crop villages. This could be explained by the decline in economic activity and consumption in the urban areas as well as the substantial reduction in the prices of many cash crops and remittances, as more than 140,000 garment and construction workers lost their jobs in the city. The three types of difficulty that were reported most frequently were job loss / reduction in income, lack of money to repay loans, and sickness/health expenses. These reflect the difficult economic situation resulting from the economic downturn.

An indicator of the negative impact of the economic downturn was the austerity measures or unpopular coping strategies people had to employ in the past three months. More than 50% of the households reported they had relied more on less preferred/cheap food, reduced daily food consumption, buying food on credit, or taking out more loans. These negative undertakings disproportionately fell on Cambodian women as they reduced their food consumption so there was more for men, and were also responsible for taking out loans or buying food on credit because they were more reliable about repaying debt.

Another striking finding is that as many as 71% of households had outstanding loans by July 2009. This is significantly higher than the finding of the comparable survey in June 2008 when this figure was 63%. The largest increase was found in the cash crop villages where many farmers incurred losses due to the substantial decline in prices. Some borrowed to expand their business in an attempt to increase income, others to pay for agricultural inputs, which had become more expensive, hoping to get the same high prices as in 2008. A large number of households also needed to take out loans to purchase food and pay for healthcare. It is notable that 7 to 10% of the loans were obtained to repay previous debts. Villagers still paid as much as 6.9% interest per month for loans from private moneylenders, which tend to be smaller than loans from MFIs, which charged 3.9% per month. Without more income in the immediate future, households with outstanding loans at such high interest rates could become indebted, perhaps resulting in distress sales of productive assets such as draught animals or land, leading to a worsening situation.

The survey found that households were also affected through their members losing jobs as a result of the economic downturn. The poor urban and tourism dependent villages were affected the most, causing 9% of households in poorest rural and poor urban villages to lose jobs, suggesting the poor are the ones suffering the most from the economic downturn. The survey indicated there was no significant difference between males and females in terms of the impact on job losses. Wage levels were largely unaffected, except for daily workers who

weeded the wet season crops in 2009. Wage earners in the agriculture sector made around 10,000 riels per day, while construction workers earned from 12,000 to 20,000 riels per day in 2009 – almost the same as wages in 2008.

In the aftermath of the economic downturn, more households than before relied on animal-raising, self-employment and day labour as they could not count on their previous income sources: selling handicrafts, construction work, clearing land, collecting forest products and certain agricultural products such as cassava, maize and cashew. Most farmers by July 2009 had been negatively impacted by the economic downturn through price falls, while they had already paid for higher-priced inputs. Net profits of farmers other than dry season rice farmers were found to have decreased significantly from the previous year. The survey found that maize producers incurred the biggest loss, followed by cassava and rice producers in the wet season in 2008.

The majority of households in the surveyed villages were engaged in raising livestock and a considerable number of households sold their livestock during the six months before July 2009. Among those who sold their livestock, which is one of their household assets, a significant number reported that they needed money urgently for family needs. The percentage of households involved in poultry production decreased, compared with the previous year, by around 15% in the cash crop and poorest rural villages, which does not help during a period of economic downturn.

One of the core concerns is food security and people's nutritional status. The survey found that the households likely to be food insecure were among the landless and land-poor. Among rural households, 85% of the landless reported they faced food insecurity in the lean period of July–October 2009. Food insecurity was also high among rural households owning less than one hectare of land. Half the respondents from these households foresaw food shortages for household consumption in the coming months.

The survey could only rely on broad indicators to assess the impact of the economic downturn on health and education. There appears some indication of impacts on health. It found as many as 24% of the surveyed household had reduced health expenditure. Furthermore, most households were worried about the lack of money to pay for healthcare in the near future as they realised they were facing a difficult time to make an income. In terms of education, although a number of households reported their children had dropped out of school after Khmer New Year (April 2009) and since August 2008, the figure is not significant enough to attribute it to the economic downturn. Among the households reporting livelihood difficulties since January 2009, only around 1% said they lacked the money to pay for children's education. This reflects that education is free and perhaps also that it might be too soon to see the impact on the long-term pursuits of the population.

The surveyed explored whether the affected villagers had received external assistance in the wake of the economic crisis. It found a large number of households reporting they had received assistance from the government, NGOs or programmes of development partners. About 40% of the aid-dependent households benefited from government interventions in the form of free healthcare. Aid provided by NGOs or development partners included in-school feeding, food-for-work, and free mosquito nets, which were reported to have reached almost all intended households. Both the government and NGO social assistance were concentrated in poorest rural villages, followed by dry season rice and land abundant villages, which are also poor. Similarly, while the government's free healthcare/medicine is limited in poor urban communities, the NGOs complemented this. Three out of four households surveyed in Phnom Penh's poor urban villages are the beneficiaries of free healthcare/medicine provided by NGOs.

The survey identified the assistance preferred by the villagers, although it does not suggest whatever is preferred by them should be provided. Table 8.1 provides all the options preferred by each village. About 45% of the respondents valued free healthcare/medicine the most. This preference was pronounced in the fishing and tourism dependent villages, with around two-thirds of the respondents in these villages calling for it. This reflects the limited provision of this assistance to both communities so far. However, even in the communities where free healthcare was available, the villagers still expressed their strong preference for free healthcare. They even preferred it to free food distribution, which was the second preference. Free food distribution was the first priority in the fishing and tourism dependent villages, followed by poorest rural and land abundant villages. The third intervention preferred was the school-feeding programme. Although both the poorest rural and land abundant villages have been major beneficiaries of the school-feeding programme, people continued to see this type of assistance as a priority intervention through external assistance. Food-for-work appeared less relevant to people in many villages, but was still considered helpful by people in the poorest rural villages.

As for the assistance of longer term benefits, villagers in all the communities also called for a micro credit scheme with low interest rates, more infrastructure, more schools/study materials, clean water and sanitation, electricity, fishing gear, agriculture inputs/techniques and land. About 55% of the respondents wanted infrastructure such as roads, bridges, irrigation system and pumps and one-third wished for clean water and sanitation such as wells, ponds, latrines and sewage systems.

In conclusion, the survey found that the economic downturn has had a substantial negative impact on all 15 communities, which have different locations and livelihood pursuits. Without intervention, their lives are likely to become more burdened unless the economic conditions improve so they can earn a decent income. The survey also presents what households and communities preferred as external assistance from government, development partners and NGOs.

## Annexes

**Table 2.11. List of Micro Finance Institutions**

No	Short Name/ Acronym	Full Name
1	AMK	Angkor Mirkroheranhvatho (Kampuchea) Co., Ltd
2	AMRET	AMRET Ltd
3	CBIRD	Cambodian Business Integrated in Rural Development Organization
4	CHC	CHC Limited
5	CREDIT	Cambodia Rural Economic Development Initiatives for Transformation
6	EAP	Entean Akpevath Pracheachun
7	FF	Farmer Finance Ltd
8	FUDF	Farmer Union Development Fund
9	GCMF	Green Central Micro Finance Ltd
10	HKL	Hattha Kaksekar Ltd
11	IPR	Intean Poalroath Rongroeurng
12	MAXIMA	MAXIMA Mikroheranhvatho Co. Ltd
13	PRASAC	PRASAC MFI Ltd
14	SATHAPANA	SATHAPANA Ltd
15	SEILANITHIH	Seilanithih Limited
16	TFMF	Tong Fang Micro Finance Ltd.
17	TPC	Thaneakea Phum (Cambodia), Ltd.
18	VFC	Vision Fund Cambodia



**Table 2.12: Percentage of households facing difficulties during February-July 2009**

No	Types of Challenge	Wet season rice	Dry season rice	Cash crops	Fishing	Land abundant	Poor-rural	Poor-urban	Tourism dependent	Total
<b>First Difficulty</b>										
1	Job lost / income decreased	16.7	24.0	19.8	32.9	18.7	15.1	61.4	50.0	27.8
2	Sick / health expense	43.5	36.0	28.6	27.1	41.5	34.1	18.9	22.4	32.1
3	High food prices	4.6	10.0	5.5	8.6	2.4	9.5	11.8	5.2	7.3
4	Lack of money to pay debt	11.1	10.0	21.4	18.6	15.4	6.3	6.3	3.4	12.3
5	Not safe / robbery	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0
6	Lack of money to pay house rental	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
7	Lack of money for children's education	0.0	0.0	1.1	0.0	0.8	1.6	0.0	0.0	0.5
8	Bad weather	0.9	3.3	3.3	7.1	4.1	0.0	0.0	0.0	2.3
9	Shortage of money / poor	2.8	10.7	3.8	0.0	3.3	3.2	0.8	5.2	4.0
10	Lack of food	13.9	2.0	11.0	1.4	10.6	26.2	0.0	8.6	9.5
11	Others	6.5	4.0	5.5	2.9	3.3	4.0	0.8	5.2	4.0
<b>Second Difficulty</b>										
1	Job lost / income decreased	21.1	19.8	18.9	25.8	28.4	7.0	22.6	21.1	19.6
2	Sick / health expense	22.5	15.3	18.9	9.7	13.6	23.5	21.5	10.5	17.9
3	High food prices	8.5	18.0	9.8	22.6	6.2	23.5	11.8	26.3	15.1
4	Lack of money to pay debt	36.6	22.5	16.7	22.6	25.9	17.4	22.6	26.3	22.6
5	Not safe / robbery	1.4	0.0	0.0	4.8	0.0	0.0	1.1	0.0	0.7
6	Lack of money to pay house rental	0.0	0.0	0.0	0.0	0.0	0.9	4.3	0.0	0.7
7	Lack of money for children's education	0.0	1.8	0.0	0.0	1.2	0.9	4.3	0.0	1.1
8	Bad weather	1.4	1.8	9.8	9.7	12.3	7.0	0.0	0.0	5.7
9	Shortage of money / poor	0.0	5.4	8.3	0.0	3.7	3.5	1.1	10.5	4.1
10	Lack of food	5.6	4.5	10.6	3.2	7.4	10.4	7.5	2.6	7.3
11	Others	2.8	10.8	6.8	1.6	1.2	6.1	3.2	2.6	5.1
<b>Third Difficulty</b>										
1	Job lost/ income decreased	8.7	5.7	13.2	9.1	15.2	11.5	13.0	20.0	11.5
2	Sick / health expense	17.4	14.3	11.3	12.1	24.2	21.2	17.4	20.0	16.8
3	High food prices	17.4	20.0	15.1	6.1	18.2	15.4	13.0	0.0	14.5
4	Lack of money to pay debt	26.1	34.3	15.1	39.4	30.3	11.5	8.7	0.0	21.8
5	Not safe/robbery	0.0	0.0	0.0	21.2	0.0	0.0	0.0	0.0	2.7
6	Lack of money to pay house rental	0.0	0.0	0.0	0.0	0.0	0.0	21.7	0.0	1.9
7	Lack of money for children's education	0.0	11.4	15.1	6.1	3.0	15.4	4.3	0.0	9.2
8	Bad weather	8.7	2.9	13.2	6.1	6.1	1.9	0.0	0.0	5.7
9	Shortage of money / poor	13.0	8.6	7.5	0.0	3.0	1.9	4.3	20.0	5.7
10	Lack of food	8.7	2.9	9.4	0.0	0.0	19.2	4.3	20.0	8.0
11	Others	0.0	0.0	0.0	0.0	0.0	1.9	13.0	20.0	2.3

Source: Survey of 1070 households by CEA in 15 target villages (July, 2009)

**Table 2.13: Percentage of households facing difficulties during January-June 2008**

No	Types of Challenge	Wet Season rice	Dry Season Rice	Cash Crops	Fishing	Land abundant	Poorest rural	Poor urban	Total
<b>1st difficulty in the past six months</b>									
1	Job loss / income decreased	1.6	0.7	0.6	0.0	0.0	0.0	0.9	0.6
2	Sick / health expense	20.3	25.3	20.2	18.5	32.4	35.5	21.1	25.6
3	High food prices	55.3	63.0	43.6	46.3	51.1	47.7	64.2	53.0
4	Lack of money to pay debt	12.2	3.4	11.7	9.3	4.3	3.2	2.8	6.5
5	Not safe / robbery	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	Lack of money to pay house rental	0.0	0.0	0.6	0.0	0.0	0.0	6.4	0.9
7	High fuel / transportation prices	4.1	4.8	9.8	7.4	2.2	1.3	0.9	4.3
8	Bad weather	0.8	0.0	4.3	0.0	2.9	1.3	0.0	1.6
9	Electricity / gas cuts	0.0	0.0	0.0	0.0	0.0	0.6	0.9	0.2
10	Death of household member / funerals	0.0	2.7	0.6	0.0	0.0	1.3	1.8	1.0
11	Other	5.7	0.0	8.6	18.5	7.2	9.0	0.9	6.3
	Total	100	100	100	100	100	100	100	100
<b>2nd difficulty in the past six months</b>									
1	Job loss / income decreased	2.5	2.1	0.7	0.0	2.3	0.0	0.0	1.2
2	Sick / health expense	22.0	28.1	12.4	13.0	20.3	28.7	5.7	19.7
3	High food prices	28.0	26.7	45.8	31.5	42.1	40.0	26.4	35.2
4	Lack of money to pay debt	16.1	12.3	12.4	7.4	16.5	13.3	14.2	13.6
5	Not safe/robbery	0.0	0.0	0.0	1.9	0.8	0.0	0.0	0.2
6	Lack of money to pay house rental	0.0	0.0	0.0	0.0	0.0	0.0	4.7	0.6
7	High fuel / transportation prices	15.3	27.4	26.1	37.0	8.3	7.3	43.4	21.6
8	Bad weather	1.7	1.4	0.7		6.0	0.7	0.9	1.7
9	Electricity / gas cuts	0.0	0.0	0.7	0.0	0.0	0.0	2.8	0.5
10	Death of household member / funerals	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.2
11	Other	14.4	2.1	1.3	9.3	3.8	8.7	1.9	5.5
	Total	100	100	100	100	100	100	100	100
<b>3rd difficulty in the past six months</b>									
1	Job loss / income decreased	1.3	0.0	1.9		9.5	0.0	1.7	1.9
2	Sick / health expense	26.3	16.4	17.5	17.3	14.3	12.4	15.5	16.7
3	High food price	13.8	8.2	12.6	7.7	8.3	13.2	5.2	10.4
4	Lack of money to pay debt	26.3	30.0	17.5	36.5	31.0	30.2	20.7	27.3
5	Not safe/robbery	0.0	0.9	1.9	5.8	0.0	0.8	8.6	1.9
6	Lack of money to pay house rental	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.3
7	High fuel/ transportation prices	8.8	12.7	24.3	28.8	20.2	9.3	24.1	16.9
8	Bad weather	1.3	5.5	7.8		6.0	8.5		5.0
9	Electricity/ gas cuts	0.0	0.0	3.9	0.0	0.0	0.0	15.5	2.1
10	Death of household member/ funerals	1.3	0.9	1.9	0.0	0.0	0.8	0.0	0.8
11	Others	21.3	25.5	10.7	3.8	10.7	24.8	5.2	16.6
	Total	100	100	100	100	100	100	100	100

Source: Survey of 991 households by CDRI in 14 target villages (June, 2008)

**Table 2.14: Percentage of households experiencing coping strategies in livelihoods during May-July 2009**

Coping strategies undertaken by households in the past three months		Wet season rice	Dry season rice	Cash crops	Fishing	Land abundant	Poor est rural	Poor urban	Tourism dependent
Rely on less preferred/expensive food	every day	14.7	6.9	13.9	12.9	6.4	12.0	4.5	5.4
	often	40.6	16.3	31.0	44.3	27.7	36.8	39.8	23.0
	sometimes	16.8	33.8	31.0	14.3	37.6	33.1	25.6	36.5
	rarely	8.4	3.1	4.2	7.1	3.5	3.0	2.3	9.5
	Total	<b>80.4</b>	<b>60.0</b>	<b>80.1</b>	<b>78.6</b>	<b>75.2</b>	<b>85.0</b>	<b>72.2</b>	<b>74.3</b>
Reduce daily food consumption	every day	0.7	1.3	1.9	8.6	1.4	1.5	1.5	0.0
	often	9.1	10.0	17.6	25.7	24.1	17.3	28.6	13.5
	sometimes	19.6	19.4	35.2	20.0	30.5	38.3	24.8	36.5
	rarely	6.3	3.1	4.2	4.3	1.4	9.0	0.0	2.7
	Total	<b>35.7</b>	<b>33.8</b>	<b>58.8</b>	<b>58.6</b>	<b>57.4</b>	<b>66.2</b>	<b>54.9</b>	<b>52.7</b>
Restrict food consumption for adults to leave more for young children	every day	0.0	0.6	2.3	0.0	0.0	3.8	3.0	1.4
	often	5.6	13.1	14.4	1.4	5.0	12.0	16.5	0.0
	sometimes	12.6	18.8	15.7	18.6	14.9	25.6	20.3	6.8
	rarely	4.9	0.0	4.2	4.3	2.1	12.0	0.0	0.0
	Total	<b>23.1</b>	<b>32.5</b>	<b>36.6</b>	<b>24.3</b>	<b>22.0</b>	<b>53.4</b>	<b>39.8</b>	<b>8.1</b>
Mothers / elder sisters eat less to leave food for other family members	every day	0.7	0.6	2.8	0.0	1.4	3.8	3.0	0.0
	often	12.6	15.0	13.0	2.9	7.1	18.8	21.1	0.0
	sometimes	13.3	21.9	20.4	10.0	20.6	33.8	27.1	4.1
	rarely	4.9	3.8	5.1	2.9	2.8	8.3	0.0	0.0
	Total	<b>31.5</b>	<b>41.3</b>	<b>41.2</b>	<b>15.7</b>	<b>31.9</b>	<b>64.7</b>	<b>51.1</b>	<b>4.1</b>
Borrow food, or rely on help from friends or relatives	every day	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.4
	often	10.5	7.5	11.1	11.4	6.4	17.3	12.8	4.1
	sometimes	19.6	11.9	32.4	57.1	26.2	44.4	18.0	29.7
	rarely	10.5	0.6	2.8	7.1	5.0	4.5	0.0	6.8
	Total	<b>40.6</b>	<b>20.0</b>	<b>46.3</b>	<b>75.7</b>	<b>37.6</b>	<b>66.2</b>	<b>31.6</b>	<b>41.9</b>
Purchase food on credit	every day	1.4	0.0	0.0	5.7	0.0	1.5	0.8	0.0
	often	23.8	11.9	20.8	34.3	8.5	31.6	17.3	5.4
	sometimes	49.0	50.6	41.2	42.9	48.2	43.6	24.8	35.1
	rarely	6.3	4.4	2.8	10.0	3.5	4.5	0.0	1.4
	Total	<b>80.4</b>	<b>66.9</b>	<b>64.8</b>	<b>92.9</b>	<b>60.3</b>	<b>81.2</b>	<b>42.9</b>	<b>41.9</b>
Take out loans	every day	0.0	6.3	0.0	0.0	0.0	0.0	6.0	0.0
	often	10.5	6.9	10.2	17.1	5.7	11.3	6.0	2.7
	sometimes	46.9	36.3	51.9	75.7	54.6	58.6	22.6	32.4
	rarely	17.5	11.3	11.1	2.9	14.9	8.3	6.8	10.8
	Total	<b>74.8</b>	<b>60.6</b>	<b>73.1</b>	<b>95.7</b>	<b>75.2</b>	<b>78.2</b>	<b>41.4</b>	<b>45.9</b>
Seek alternative or additional jobs	every day	0.0	2.5	5.6	1.4	2.1	0.8	2.3	8.1
	often	12.6	7.5	13.0	2.9	17.7	10.5	8.3	6.8
	sometimes	16.8	4.4	31.9	2.9	22.7	28.6	12.0	16.2
	rarely	2.1	2.5	8.3	2.9	5.0	11.3	0.0	2.7
	Total	<b>31.5</b>	<b>16.9</b>	<b>58.8</b>	<b>10.0</b>	<b>47.5</b>	<b>51.1</b>	<b>22.6</b>	<b>33.8</b>
More family members migrate to find work and/or food	every day	1.4	0.6	0.9	0.0	1.4	0.0	0.0	0.0
	often	5.6	1.9	4.2	5.7	9.2	2.3	0.8	0.0
	sometimes	9.8	3.1	9.7	1.4	17.0	12.8	1.5	0.0
	rarely	2.8	0.0	2.3	0.0	3.5	4.5	0.0	0.0
	Total	<b>19.6</b>	<b>5.6</b>	<b>17.1</b>	<b>7.1</b>	<b>31.2</b>	<b>19.5</b>	<b>2.3</b>	<b>0.0</b>
Increase fishing activities	every day	0.7	6.3	0.0	58.6	8.5	0.8	0.0	0.0
	often	6.3	10.0	1.9	24.3	8.5	4.5	0.8	0.0
	sometimes	7.0	6.3	1.9	7.1	14.9	9.8	0.0	1.4
	rarely	2.8	3.8	0.0	0.0	0.7	4.5	0.0	0.0
	Total	<b>16.8</b>	<b>26.3</b>	<b>3.7</b>	<b>90.0</b>	<b>32.6</b>	<b>19.5</b>	<b>0.8</b>	<b>1.4</b>
Increase forest clearing	every day	0.0	0.0	0.0	0.0	1.4	0.8	0.0	0.0

activities	often	0.0	0.6	1.4	0.0	11.3	6.0	0.0	0.0
	sometimes	0.0	0.6	0.0	1.4	3.5	13.5	0.0	0.0
	rarely	0.0	0.0	0.0	0.0	0.7	6.8	0.0	0.0
	Total	0.0	1.3	1.4	1.4	17.0	27.1	0.0	0.0
	every day	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sell domestic assets (furniture...)	often	0.7	1.3	0.5	0.0	0.7	0.0	0.0	1.4
	sometimes	1.4	1.9	3.2	2.9	1.4	1.5	0.8	4.1
	rarely	0.7	0.0	2.8	4.3	1.4	0.0	0.0	1.4
	Total	2.8	3.1	6.5	7.1	3.5	1.5	0.8	6.8
	every day	0.7	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Sell productive assets (farm implements, sewing machines, motorbikes...)	often	0.0	0.6	0.5	0.0	0.7	0.0	0.0	0.0
	sometimes	2.8	0.0	0.9	2.9	0.7	2.3	0.8	2.7
	rarely	1.4	2.5	2.3	1.4	0.7	0.8	0.0	0.0
	Total	4.9	3.8	3.7	4.3	2.1	3.0	0.8	2.7
	every day	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sell land	often	0.0	0.6	0.5	0.0	0.7	0.0	0.0	0.0
	sometimes	0.0	1.3	0.5	0.0	3.5	0.0	0.0	1.4
	rarely	0.7	1.3	0.9	0.0	1.4	0.0	0.0	0.0
	Total	0.7	3.1	1.9	0.0	5.7	0.0	0.0	1.4
	every day	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sell jewellery	often	0.0	0.6	0.5	0.0	0.0	0.0	1.5	1.4
	sometimes	5.6	6.9	11.6	15.7	7.8	2.3	11.3	9.5
	rarely	1.4	3.8	3.7	2.9	2.1	0.8	0.8	0.0
	Total	7.7	11.3	15.7	18.6	9.9	3.0	13.5	10.8
	every day	0.0	0.6	0.0	0.0	0.0	0.0	0.8	0.0
Consume seed stocks held for next season	often	0.7	1.3	0.5	0.0	6.4	9.8	0.0	0.0
	sometimes	2.8	5.0	1.9	0.0	10.6	17.3	0.0	4.1
	rarely	1.4	0.6	1.4	0.0	0.7	3.8	0.0	0.0
	Total	4.9	7.5	3.7	0.0	17.7	30.8	0.8	4.1
	every day	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Decrease expenditure on fertilizer, pesticide, animal feed, etc.	often	1.4	1.3	0.9	0.0	0.7	0.0	0.0	0.0
	sometimes	11.9	8.8	3.2	1.4	2.8	2.3	0.0	0.0
	rarely	1.4	0.6	3.7	0.0	2.8	1.5	0.0	0.0
	Total	14.7	10.6	7.9	1.4	6.4	3.8	0.0	0.0
	every day	0.0	1.9	0.0	0.0	0.0	0.0	0.0	1.4
Reduce expenditure on healthcare	often	10.5	6.9	6.9	2.9	7.1	10.5	7.5	0.0
	sometimes	12.6	23.1	23.1	27.1	22.7	29.3	25.6	9.5
	rarely	4.9	3.8	3.7	7.1	6.4	13.5	0.0	0.0
	Total	28.0	35.6	33.8	37.1	36.2	53.4	33.1	10.8
	every day	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

*Source: Survey of 1070 households by CEA in 15 target villages (July, 2009)*

**Table 2.15: Percentage of households undertaking coping strategies during April-June 2008**

No		Wet Season rice	Dry Season Rice	Cash Crops	Fish- ing	Land Abun- dant	Poor- est rural	Poor urban	Total
<b>Food consumption related</b>									
1	Rely on less preferred and less expensive food	67.4	68.7	57.2	64.4	43.7	78.1	63.2	62.8
2	Reduce daily food consumption	38.5	52.7	47.6	57.6	11.9	55.5	51.9	44.1
3	Restrict consumption by adults so small children can eat	21.5	37.3	23.6	52.5	16.6	65.2	60.2	37.4
4	Mothers / older sisters eat less than other household members	20.0	40.0	11.5	49.2	20.5	47.7	54.9	32.1
5	Mothers / elder sisters skip more meals than other household members	13.3	10.0	4.3	28.8	13.2	18.1	28.6	14.6
<b>Debt related</b>									
6	Borrow food / rely on help from friends or relatives	41.5	35.3	34.1	33.9	29.1	69.0	31.6	39.7
7	Purchase food on credit / incur debt	62.2	53.3	44.2	67.8	63.6	74.8	46.6	57.5
<b>Income-generating activities</b>									
8	Seek alternative or additional jobs	38.5	12.0	38.5	10.2	12.6	53.5	30.1	30.1
9	Increase the number of members migrating for work and/or food	14.1	6.7	6.3	5.1	2.0	12.3	2.3	7.1
10	Increase exploitation of common property resources	21.5	13.3	20.2	49.2	0.7	32.3	0.0	17.3
11	Plant more/new crops to cope with high food prices	35.6	6.0	37.5	3.4	13.2	48.4	0.0	23.4
<b>Household assets</b>									
12	Sell domestic assets	1.5	1.3	0.0	1.7	0.0	0.0	2.3	0.8
13	Sell productive assets	1.5	0.7	0.0	3.4	0.0	0.0	0.8	0.6
14	Sell land	2.2	0.7	0.5	0.0	2.0	0.6	3.0	1.3
15	Sell jewellery	3.7	6.0	0.5	16.9	0.0	0.6	5.3	3.3
16	Sell more animals than usual	7.4	10.7	3.8	0.0	2.0	7.1	0.0	4.8
<b>Others</b>									
17	Consume seed stocks held for the next season	3.0	6.7	0.5	1.7	3.3	12.3	0.8	4.1
18	Decrease expenditure on fertilizer, pesticide, fodder, animal feed, vet care...	12.6	19.3	0.5	0.0	2.0	0.0	0.0	5.0
19	Decrease expenditure on healthcare	9.6	46.0	9.1	15.3	6.0	33.5	12.0	18.9
20	Take children out of school	4.4	1.3	5.3	3.4	3.3	7.7	4.5	4.4

Source: Survey of 991 households by CDRI in 14 target villages (June, 2008)

**Table 5.3: Percentage of households holding stock of paddy rice**

	Wet season rice	Dry season rice	Cash crops	Fish- ing	Land abun- dant	Poor- est rural	Total	Rural villages
<b>Percentage of households holding stocks of paddy rice in June 2008</b>								
HHs with no stock of paddy rice	16.3	21.3	27.9	98.3	76.2	47.1	49.0	37.5
HHs with stock of paddy rice	83.7	78.7	72.1	2.0	23.8	52.9	51.0	62.5
	<i>10–250 kg</i>	<i>23.0</i>	<i>14.0</i>	<i>15.9</i>	<i>1.7</i>	<i>8.6</i>	<i>36.1</i>	<i>15.7</i>
	<i>1251–500 kg</i>	<i>23.0</i>	<i>18.7</i>	<i>18.3</i>	<i>0.0</i>	<i>7.3</i>	<i>12.9</i>	<i>16.0</i>
	<i>1500 kg</i>	<i>37.8</i>	<i>46.0</i>	<i>38.0</i>	<i>0.0</i>	<i>7.9</i>	<i>3.9</i>	<i>22.3</i>
Mean (kg)	722	1,392	812	120	534	237	836.5	812.7
Median (kg)	500	663	600	120	400	150	500	500
Min. (kg)	10	50	24	120	70	26	10	10
Max. (kg)	8,000	13,000	11,000	120	2,000	1,900	13,000	13,000
<b>Percentage of households holding stocks of paddy rice in July 2009</b>								
HHs with no stock of paddy rice	52.4	34.4	61.1	100.0	48.2	63.9	63.7	55.2
HHs with stock of paddy rice	47.6	65.6	38.9	0.0	51.8	36.1	36.3	44.8
	<i>10–250 kg</i>	<i>11.9</i>	<i>18.1</i>	<i>9.7</i>	<i>0.0</i>	<i>20.6</i>	<i>25.6</i>	<i>12.4</i>
	<i>1251–500 kg</i>	<i>18.2</i>	<i>21.3</i>	<i>13.4</i>	<i>0.0</i>	<i>13.5</i>	<i>6.8</i>	<i>11.5</i>
	<i>1500 kg</i>	<i>17.5</i>	<i>26.3</i>	<i>15.7</i>	<i>0.0</i>	<i>17.7</i>	<i>3.8</i>	<i>12.3</i>
Mean (kg)	752	638	621	0.0	588	340	601	601
Median (kg)	500	450	480	0.0	360	150	400	400
Min. (kg)	50	30	60	0.0	36	18	18	18
Max. (kg)	8,000	6,500	3,000	0.0	5,520	5,000	8,000	8,000

Source: Survey of 991 households by CDRI in 14 target villages (June, 2008) and Survey of 1070 households by CEA in 15 target villages (July, 2009)

**Table 5.4: Percentage of households holding stocks of milled rice**

	Wet Season rice	Dry Season Rice	Cash Crops	Fish- ing	Land Abun- dant	Poor- est rural	Total	Rural villages
<b>Percentage of households holding stocks of milled rice in June 2008</b>								
HHs with no stock of milled rice	9.1	5.0	17.6	22.9	7.8	10.5	10.9	10.5
HHs with stock of milled rice	90.9	95.0	82.4	77.1	92.2	89.5	89.1	89.5
]0 -10] kg	36.4	28.8	36.6	62.9	34.8	36.8	40.5	35.5
]10-50] kg	47.6	62.5	36.1	11.4	43.3	45.1	41.5	46.1
] 50 kg	7.0	3.8	9.7	2.9	14.2	7.5	7.1	7.8
Mean (kg)	32.9	26.2	50.9	8.3	47.0	24.6	35.3	35.3
Median (kg)	15.0	15.0	15.0	5.0	25.0	15.0	15.0	20.0
Min. (kg)	1.0	0.5	1.0	1.5	1.0	0.5	0.5	0.5
Max. (kg)	150	420	600	100	400	240	600	600
<b>Percentage of households holding stocks of milled rice in July 2009</b>								
HHs with no stock of milled rice	5.9	8.7	11.5	11.9	13.2	13.5	22.7	10.8
HHs with stock of milled rice	94.1	91.3	88.5	88.1	86.8	86.5	77.3	89.2
]0-10] kg	38.5	26.0	19.2	76.3	35.1	40.6	29.5	30.9
]10-50] kg	42.2	60.7	52.9	10.2	33.8	38.7	37.9	46.2
] 50 kg	13.3	4.7	16.3	1.7	17.9	7.1	9.9	12.1
Mean (kg)	26.4	23.2	31.7	12.6	44.7	28.2	28.4	28.8
Median (kg)	20.0	20.0	30.0	5.0	20.0	15.0	20.0	20.0
Min. (kg)	1.0	1.0	2.0	1.0	1.0	1.0	0.8	1.0
Max. (kg)	200	150	400	100	800	250	800	800

Source: Survey of 991 households by CDRI in 14 target villages (June, 2008) and Survey of 1070 households by CEA in 15 target villages (July, 2009)



**Table 8.2: Distribution to aid-recipient households**

No	Type of Aids	Wet Season rice	Dry Season Rice	Cash Crops	Fishing	Land Abundant	Poor-est rural	Poor urban	Total
Percentage of households receiving assistance during January-June 2008									
1	School-feeding program	0.0	0.0	27.1	0.0	0.0	28.2	36.4	16.6
2	Nutrition programme for children and pregnant women	0.9	0.0	0.0	0.0	3.4	1.8	0.0	0.9
3	Free food aid for family	0.0	0.0	0.7	50.0	13.8	1.8	36.4	2.7
4	Food for work	18.0	7.9	0.0	50.0	10.7	1.8	25.0	7.2
5	Free healthcare / medicine	60.9	36.8	57.9	0.0	17.2	22.2	20.0	44.4
6	Micro credit scheme with low interest rate	31.8	2.6	44.1	0.0	24.1	7.3	0.0	26.0
7	Free seeds distribution	0.9	0.0	4.8	0.0	20.7	0.9	0.0	3.4
8	Chemical fertilizer on credit	0.9	2.6	4.1	0.0	6.9	0.9	0.0	2.5
9	Animal feed / livestock raising	6.3	0.0	1.4	75.0	10.3	1.8	0.0	3.8
10	Vet service	26.6	0.0	11.0	0.0	3.4	10.0	0.0	12.9
11	Others aid	23.6	28.9	56.8	100.0	0.0	70.3	50.0	46.4
Percentage of households receiving assistance during February-July 2009									
1	School-feeding program	0.0	1.9	2.5	7.7	48.5	48.5	0.0	25.7
2	Nutrition programme for children and pregnant women	22.2	11.1	2.5	0.0	1.5	3.1	3.3	5.0
3	Free food aid for family	5.6	3.7	0.0	46.2	1.5	3.1	0.0	4.0
4	Food for work	0.0	1.9	0.0	0.0	0.0	33.0	0.0	10.2
5	Free healthcare / medicine	22.2	50.0	30.0	23.1	19.1	34.0	73.3	35.6
6	Micro credit scheme with low interest rate	38.9	3.7	20.0	30.8	13.2	16.5	0.0	14.2
7	Free seed distribution	0.0	1.9	0.0	0.0	7.4	7.2	0.0	4.0
8	Chemical fertilizer on credit	11.1	1.9	0.0	0.0	0.0	2.1	0.0	1.5
9	Animal feed / livestock raising	0.0	14.8	10.0	0.0	0.0	18.6	0.0	9.3
10	Vet service	0.0	33.3	0.0	0.0	0.0	3.1	0.0	6.5
11	Others aid	27.8	11.1	50.0	46.2	33.8	8.2	26.7	24.1
Change of aid-recipient household July 2009 compared to June 2008 (percentage points)									
1	School-feeding program	0.0	1.9	(24.6)	7.7	48.5	20.3	(36.4)	9.1
2	Nutrition programme for children and pregnant women	21.3	11.1	2.5	0.0	(2.0)	1.3	3.3	4.1
3	Free food aid for family	5.6	3.7	(0.7)	(3.8)	(12.3)	1.3	(36.4)	1.3
4	Food for work	(18.0)	(6.0)	0.0	(50.0)	(10.7)	31.2	(25.0)	3.0
5	Free healthcare / medicine	(38.7)	13.2	(27.9)	23.1	1.9	11.8	53.3	(8.8)
6	Micro credit scheme with low interest rate	7.1	1.1	(24.1)	30.8	(10.9)	9.2	0.0	(11.8)
7	Free seeds distribution	(0.9)	1.9	(4.8)	0.0	(13.3)	6.3	0.0	0.6
8	Chemical fertilizer on credit	10.2	(0.8)	(4.1)	0.0	(6.9)	1.2	0.0	(0.9)
9	Animal feed / animal raising	(6.3)	14.8	8.6	(75.0)	(10.3)	16.7	0.0	5.5
10	Vet service	(26.6)	33.3	(11.0)	0.0	(3.4)	(6.9)	0.0	(6.4)
11	Others aid	4.1	(17.8)	(6.8)	(53.8)	33.8	(62.0)	(23.3)	(22.3)

Source: Survey of 991 households by CDRI in 14 target villages (June, 2008) and Survey of 1070 households by CEA in 15 target villages (July, 2009)





វេទិកាសម្រាប់ការមិនមែនរដ្ឋាភិបាល ស្តីពីកម្ពុជា  
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Office Address: # 9-11, Street 476 Sangkat Toul Tompong I,  
P.O.Box: 2295 Phnom Penh-3, Cambodia

Tel: (+855) 23 214 429

Fax: (+855) 23 994 063

E-mail: [ngoforum@ngoforum.org.kh](mailto:ngoforum@ngoforum.org.kh)

Website: [www.ngoforum.org.kh](http://www.ngoforum.org.kh)