

# Impact of Hiked Prices of Food and Basic Commodities on Poverty in Cambodia: Empirical Evidences from CBMS Five Villages

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The study on the impact of hiked prices of food and basic commodities on poverty is designed as a follow-up CBMS survey of 5 villages in a Northwest province of Cambodia. The hiked prices in Cambodia and in CBMS sites occurred when there were changes in demand and prices of petrol, food and other consumer goods at the international market. The rising prices have immediately resulted in food insecurity for many people and pushed small landholders into indebtedness and deteriorated the capacity of the poor to cope with any future shocks or crises. This requires a stronger social safety net program and a better targeting policy intervention to support the poor and the vulnerable.

**Keywords:** Community-Based Monitoring System (CBMS), commodity prices, price level changes, cost of living

Cambodia has strengthened its capacity to respond to abnormal inflation of food and non-food prices for the purpose of sustainable growth, food security and poverty reduction. Prices of food and non-food items rose gradually since the mid-2000 along with the rising price of energy, which suddenly increased more rapidly after January 2008 and reached double digits between May and October 2008. Although the prices of consumer goods show reversed trends after October 2008, many consumer and productive goods in December 2008 remained higher than one year earlier. This abnormal phenomenon has provoked enormous policy debates and responses to maintain food security and speed of poverty reduction in Cambodia.

Cambodia is one of the net importing countries in terms of oil and many recorded consumer goods except rice (United Nations Cambodia, 2008). The integration of its economy to international market has enhanced economic performance and poverty reduction of the country in the last decade or so. Any change in demands of its produce and prices of important products will unduly affect the productivity and society as a whole. While the economic and administrative reforms and infrastructure development are on progress, Cambodia is still behind its neighboring countries in curbing any shocks or seizing economic opportunities generated by rising prices. The recent fluctuation in prices has somehow undermined the government's efforts of poverty reduction, which

is obvious in many dimensions. Like other countries, the poor landless are the most affected. About 20% of the rural population who are landless are characterized as net food buyers. They have to take a variety of measures, such as reducing food consumption and therefore resulting in poor nutritional intake, or taking children out of schools or even working harder to earn enough income to buy food. In addition, 45% of the Cambodians in the rural areas are land poor; they own one hectare or less to grow rice for their own household consumption (Sophal, 2008). Rice growers accounted for dominant agricultural producers in the country. Most of large farm rice producers, however, did not make any profits from selling their rice since the rising price began after the harvests and they had already sold out their produce before the time of rising prices between July 2007 and July 2008. About 30% of its population, or 4 million people, who are poor are struggling to earn meager income to survive even though the labor wage has been doubled or tripled in many cases. Also, irregular jobs have limited their earning ability. As a result, poor children stop schooling to help earn money to buy food or since their parents cannot continue to support their school fees (Caritas Cambodia, n.d.).

## RESEARCH METHODOLOGY

This study was designed to use a survey method in order to generate evidences of both positive and negative effects of surging prices on rural livelihoods and poverty in five Community-Based Monitoring System (CBMS) sites. In addition, it was also designed to build up on CBMS method and create a panel household dataset or households that were interviewed in 2006 and again in 2008 for poverty monitoring and improving local planning in CBMS sites. The evidences from this micro survey were expected to provide policy recommendations to mitigate the negative effects and promote the positive ones. The focus was particularly given to household experiences and poverty in the five CBMS sites. In addition, this is

designed to understand coping strategies that the poor households used in response to hiked prices. Assessment was made to focus on any possible food shortages in the lean period (May-October 2008) and on existing interventions to prevent people from falling and deepening into poverty. As for the positive effects, local farmers and producers were assessed whether they were able to gain any benefits from the hiked food prices to produce surplus for sale to increase income and improve food security. Some questions were added to the CBMS questionnaire in 2006 to capture the changes in the livelihood conditions and constraints for longer term expansion of agricultural production in curbing any unexpected shocks and boosting agricultural and rural development.

### *Site Selection*

With financial support from CBMS network, supported by the International Development Research Centre (IDRC), the survey was conducted in three communes of Kratie and Battambang provinces and six communes of Kompong Thom province in 2006. All villages and households were included in the survey. For this survey, Battambang was selected since the province is located in a fast growing and developing area. It is also known as one of the rice surplus producing provinces in Cambodia. In addition, Battambang province has experienced more dynamic economic activities and growth than the other two CBMS provinces. Five villages (Samraong Outrea, Bak Amraek, Svay Chrum, Reach Dounkeo, and Sdei Leu) under Phase I and II of CBMS site were chosen from Prek Norint, Samrong Khnong and Prek Luong Ek Phnom districts of Battambang province. Table 1 shows the number of total panel households and characteristics of each village.

For this survey, the households interviewed in 2006 were also selected to be interviewed in September 2008 to create the 1,132 panel household data and shape the main findings that will shed lights to the discussion in this article.

**Table 1**  
*Village Selection Characteristics*

Village	Households	Commune	Village characteristics
Svay Chrum	216	Prek Norin	Close to the market centre, rice farming and petty trade are main source of income
Reach Dounkeo	150	Prek Norin	Remote village, wet and dry season rice farming and fishing
Samraong Outrea	343	Samrong Khnong	Good road access and connection to market, rice farming, fruit trees and petty trade
Sdei Leu	234	Prek Luong	Cash crop and wet rice farming
Bak Amraek	189	Prek Luong	Wet and dry season rice farming and fishing
<b>Total</b>	<b>1132</b>		

### *Instruments Design*

The questionnaires were developed and revised based on the last CBMS questionnaire. As recommended during the CBMS local team meeting, individual information is adopted to be used in this study. Items such as marital status, age, sex, literacy level, education, access to school, access to health care, reasons children drop out of school, occupation, child labor, the question on disabilities and information related prices were added to the questionnaire. To update the instruments, consultations were made with the advisory team. Pre-testing of the questionnaires was also done to discover its weaknesses and be the basis for its revision. Finally, the instruments were adopted to use for data collection to cover the indicators collected from household. A total of 156 indicators focusing on impact of rising prices were included in the questionnaire.

There are two forms used in this study. Form A: Household Listing Form is used to record preliminary information of each household and at the same time, for the purpose of mapping each household in the village. This tool is used in

conducting household interviews. Form B: Household Questionnaire is the tool used to collect data from household. Basic information on the characteristics of each person includes sex, age, relationship to the head of the household, education and disabilities, and so forth. The topics of the household questionnaire are covered demography, education, occupation, disabilities, health information, housing condition, energy (source of light, fuel, etc.), source of drinking water and sanitation, household expenditures, household income, crises or household disadvantages, household property, feeding animal, agricultural land, violence, security and order, mortality, food, transportation, credit access, employment, recreation and present status of well-being. Other forms included (1) house sticker; (2) control form for supervisor; (3) summation sheet of daily supervision for commune councilor; (4) daily report form for enumerator; and (5) age conversion.

### *Enumerators Recruitment*

Schoolteachers were employed as enumerators in the project. Usually, schoolteachers were

employed to conduct the population census and to administer the general election in Cambodia as well. The schoolteachers were hired for this purpose for one month. The timing to hire schoolteachers is good for this CBMS survey since it coincides with the school year break.

Partially, members of the Village Development Committee, which have become part of the voluntary Commune Planning and Budgeting Committee, have been recruited jointly by the commune councils and the Supervisory Team. They were later trained to become enumerators. Those with a good command of quantitative skills were trained to be data processors.

The village chief was not considered for any substantial role in the survey. Village chief has a lot to offer and could play a helpful role without acting as interviewer. In Phase II, the village chiefs assisted the enumerators with regards to geographical locations, mapping and arrangement of appointments with the households. Commune councilors acted as supervisors, field editors and did manual data processing and analysis as well.

### ***Training Activities***

*Field operation training (supervisors and enumerators).* Training on data collection was conducted for a total of 30 trainees, including village chiefs and commune councilors. The training took three days plus one extra day for pre-testing of the questionnaire. It was found that the school teachers absorbed instructions more quickly than the non-teachers. Former enumerators in CBMS phase II were also found to understand quickly.

On the third day of the training, the participants were requested to interview each other using the household questionnaire. The respondent acted as a head of household and was made to answer all the questions as read by the interviewer and then vice versa. The exercises using the questionnaires were collected and corrected by lecturers (supervisory members). Feedbacks were received after each exercise and were discussed during the lecture time. The exercises were done in all of the training sessions of data collection.

*Pre-tests.* Pre-testing of the system instruments was adopted. The trainees spent one day for pre-testing. Each enumerator was requested to interview at least two households, one small and one large, to experience different sizes of households. The pre-testing was aimed to get feedback from the enumerators and possibly rectify any unclear questions or omit questions that are not applicable. During the pre-testing, supervisors and supervisory members visited and observed every enumerator while interviewing the household.

After each session of data collection training, a pre-testing training was conducted to test the trainees on the following capabilities: (1) absorption; (2) strength capacity of field supervisors; (3) ability to encode for enumerators; and (4) accuracy in checking for local supervisors. After each pre-testing session, feedbacks were discussed, adjustments and recommendations were made.

The pre-testing of the questionnaire was to the advantage of the actual census. The questionnaire became error-free and more accurate. The enumerators and supervisors became well-versed in interviewing, encoding and checking for errors. Problems and constraints encountered during the pre-testing were easily solved since it was discussed in the presence of the advisory team.

### ***Manual Editing Training***

Manual coding training was conducted for commune councilors who were involved in the project. Interviewed questionnaires were checked, verified and the answers were coded by the trained commune council members. These commune council members are supervised by the district and provincial CBMS team members and after manual coding is accomplished, the questionnaires are then submitted to the provincial leader for computer machine processing.

Manual editing tools have been developed. Manual editing is divided into three parts: (1) the enumerators check all questions and answers for every interview questionnaire in their village; (2) data was checked by the commune councilors

(supervisor during data collection) in their commune by using the instruction manual for editing data; and (3) although the field supervisors had checked the questionnaires, preliminary checking were carried out at the districts by the district and the provincial CBMS team member before the questionnaires were accepted. All completed and checked questionnaires are sent to the National Institute of Statistics (NIS) for machine processing (data entry, analysis and results). The instruction manual for manual editing and coding is in Khmer language. All the data and results were sent to the CBMS network after it was translated into English.

### ***Training of Data Processors***

At the NIS, the team selected and trained 10 statistics officials to perform computerized data entry. An application frame in SPSS was developed and installed for them. It was useful to have involved the statistics officials in this job. Some of them already had experience in data entry. However, there were not enough computers with the capacity to install the SPSS program and thus we had to use Microsoft Excel instead.

### ***Computer Processing***

After manual data cleaning, data entry is done at NIS. Before entering data, the CBMS team members at the NIS have to undergo training on the SPSS software program which includes data entry, data cleaning and analysis. The CBMS supervisory team members from the central office supervised the data entry and data cleaning. In cases where there are errors, the concerned enumerator was requested to re-interview the said household. Errors were mostly related to household income, expenditure and assets.

The input documents were derived from the CBMS questionnaires and the data entry system was designed to input data of each type of questionnaire separately. The household questionnaire (Form B) was created separately in two parts: individual data file called individual file (File A) and household data file (File B). The listing

form (Form A) and the household questionnaire (Form B) were used to create separate files for each village.

### ***Analysis and Validation of the Survey Results***

The most challenging effort here was to determine the poverty line for each commune and the proportion of poor households in the village and commune. This was done on the basis of consumption expenditure per capita, in line with the adopted national definition. The Poverty Line (PL) is derived by:

- Using national rural poverty line in 2004 as a base to generate PL for 2006 and 2008.
- Adjusting rural inflation based on Cambodia Development Resource Institute (CDRI) / NIS rural price survey of 106 items, 2005 - 2008.
- PL: 1,753 riels in 2004 as base:
  - o **PL 2006 = 2,079 riels** (1,753 riels adjusted with 18.59 % inflation between 2004 and 2006)
  - o **PL 2006 = 2,427 riels** (1,753 riels adjusted with 38 % inflation between 2004 and 2008)
  - o Movement in and out of poverty of panel households between 2006 and 2008

## **TRENDS IN PRICES OF FOOD AND NON FOOD ITEMS**

### ***National Trends in Prices of Food and Non-Food Items***

The consumer prices in Cambodia somewhat remained stable between 2000 and 2003; however, prices increased since mid-2004 and reached the highest record in the period of May and October 2008. Although the price of food consumer items started to decline after reaching its highest record of annual inflation rate of 37% in August 2008, it still remained at 32% in November 2008. The key concerns about food security and poverty reduction in Cambodia is about the hiked prices of staple food, especially rice. The official statistics show

that the price of rice has become more stable or showing a declining trend. However, average price of rice in November 2008 is 2,780 riels per kilogram or still 77% higher than one year ago (about 1,570 riels per kilogram) while price of meats such as pork, beef and chicken remained 17% more expensive.

The official rural Consumer Price Index (CPI) is still not available from the Ministry of Planning. Therefore, for the purpose of this study, the author have to use the changes in prices from CDRI price surveys of 106 food and non-food items conducted in a number of village and district/provincial markets in October 2005 and again in March and September 2008. The survey suggests that price of all food and non-food consumer items in the rural areas were much higher than the national rate of price increase that was released by the government. All consumer goods in the rural area increased by 86%, much higher than the 34% reported by the official CPI in Phnom Penh in the last three year periods. The price gaps between urban and rural area may be due to high transaction and transportation cost of goods and services since the infrastructure development is still in progress. Food and non-food consumer items in the rural areas, on average, increased by 94% and 71%, respectively, in September 2008, higher than that in the same month in 2005; or further increased by 13% for food and 30% for non-food consumer items in rural areas.

High price events, like low price events, are not rare incidence in agricultural markets and farmers in Cambodia. High prices are often short-lived compared with low prices, which persist for longer periods. What distinguishes the current situation in the agricultural markets is the concurrence of the hiked price for Cambodia farmers of not just a selected few, but nearly all major food and other necessary commodities and the possibility that the prices may continue to remain high after the effects of short-term shocks dissolve.

Causes of recent rising prices is mostly driven by changes in demand and prices of food and oil at international markets where the concerns about food security and poverty reduction should be

focused on short-, medium- and long-term impacts. The prices of food and other necessary commodities are, historically, highly volatile and started to rise along with rising oil price since 2003 (Bounds, 2007). The upward trend continued and reached double digits between 2007 and 2008 in most developing countries (Asian Development Bank [ADB], 2008). Initial causes of the late 2006 price spikes included unseasonable droughts in grain producing nations and rising oil prices. Oil prices further increased the costs of fertilizers, food transport, and industrial agriculture. Other causes were due to the increasing use of bio-fuels in developed countries to substitute the need for fossil oil and an increasing demand for a more varied diet (especially meat) across the expanding middle-class populations of Asia. These factors, coupled with falling world food stockpiles, all contributed to the dramatic worldwide rise in food prices. Short- and medium-term causes and impacts on poverty reduction in developing countries remain a topic of debate on poverty reduction, inequality and growth in developing countries. These may include structural changes in trade and agricultural production, agricultural price supports and subsidies in developed nations, diversions of food commodities to high input foods and fuel, commodity market speculation, and climate change.

### ***Government and Donor Responses to the Rising Prices to Ensure Food Security and Sustain Growth for Poverty Reduction***

The Government and donors in Cambodia have been working together to set-up the immediate policy in response to food crises and sustainable growth for poverty reduction. The policy measures include (1) Government and ADB fund of USD3.5 million for food security and (2) government's temporary action to prohibit the export of paddy rice in order to increase internal stocks and sell paddy rice at a cheaper price to the poor before the national election in 2008. In order to secure employment and labor migration support, the government decided to issue passports to

Cambodian cross-border migrants free of charge; and to encourage the recruitment company to pay the visa fee for the migrants in credit in the late 2008. In addition, the poor can also benefit from health equity fund to improve health access for the poor that came into effect in 2007. The agricultural producers can also take advantage of the government's subsidy on advanced farming practice and productivity. The government also came up with its import policy of agricultural machinery and commitment to further boost agricultural growth through infrastructure development and development strategies.

### ***Rising Price of Farm Inputs and Farm Productivity***

The price of farm inputs, including fuels/transport, fertilizers and wage labor also increased at an alarming rate. For example, in May 2008<sup>1</sup>, the gasoline and diesel prices increased by 50% and 80%, respectively, one year ago. At the same time, the prices of fertilizers and wage labor also increased by 80-200% and 50%, respectively. This increased prices of farm inputs pushed up the production cost by 30% for dry season rice, by

70% for wet season rice, and by 45% for maize, cassava, and soybean production between May 2007 and May 2008. The increased cost of farm inputs and inadequate irrigation were cited as limiting factors to agricultural intensification and diversification in the CBMS sites.

Table 2 shows the yield of rice harvested by landholding groups in each study villages in the crop calendar of 2007-2008. On average, farmers in the CBMS villages produced around 2,380 kilograms of paddy rice per hectare. This yield was higher than national average (1,889 kilograms per hectare) for wet season rice. In contrast for the dry season rice, the yield obtained by CBMS farmers was lower than that of the national average yield of 3,684 kilograms per hectare in the same harvest season of 2008. While most of CBMS villages obtained good harvest due to good weather condition, Samraong Outrea experienced the lowest yield of paddy rice. About 68% of farming households in Samraong Outrea reported lower returns from their farming and about 22% reported the same returns, although there was good rain while remarkably smaller proportion of farming households in the other village experienced decline or no change in the yield of paddy rice that they obtained in the same harvesting periods.

**Table 2**  
*Rice Yield of Landholding Groups by Village, 2008*

<b>Village</b>	<b>&lt;0.5 ha</b>	<b>0.5-0.99 ha</b>	<b>1-1.99 ha</b>	<b>2-2.99 ha</b>	<b>&gt;3 ha</b>	<b>Total</b>
Svay Chrum	3,425	2,300	2,122	1,379	1,273	2,509
Reach Dounkeo	4,201	1,754	2,092	1,812	1,638	2,610
Samraong Outrea	2,291	1,801	1,623	1,918	1,686	1,967
Sdei Leu	3,598	2,056	1,711	1,700	1,471	2,565
Bak Amreak	3,172	1,555	1,694	1,750	1,687	2,455
<b>Total</b>	<b>3,181</b>	<b>1,914</b>	<b>1,828</b>	<b>1,730</b>	<b>1,515</b>	<b>2,380</b>

Only large landholding farmers, traders and dry-season rice growers are able to grasp benefits from the opportunities generated by rising food prices (Sophal, 2008; Fitzgerald & Sovannarith, 2007). In the CBMS sites, only 11% of farming households who are dry season rice growers could have gained from rising prices of paddy rice by selling some of their harvest. Therefore, large majority of farmers who were wet season rice growers did not make any gain or if any, only meager marginal profits from their farming due to high production cost. Small landholding farmers were more productive than large landholding farmers in terms of the amount of paddy rice harvested per hectare (Table 2). However, only 20% of small farmers who cultivated one hectare or less of rice land, compared to 47% of large landholding farmers, reported to obtain better returns from their rice farming than one year ago due to rising price and demand for their paddy rice.

About half of small farmers could not afford the hiked prices of farm inputs to increase farm productivity and received no change in the yield of paddy rice and lower net profits from their rice farming. While increasing demand and rising prices of agricultural produce opened up economic opportunities for many farmers in other areas of the country (Sophal, 2008) to produce surplus for sale, such opportunities were not cited by the village leaders and panel households in CBMS sites. Large majority of wet season rice growers, in contrast to dry season rice growers, received no gains from the rising price of the paddy rice

since most of them had to sell their produce immediately after harvest or before the price of rice started to rise in February 2008.

The common constraints to agricultural growth and development in CBMS sites, as well as Cambodian farmers, in response to the global phenomena of rising prices, are the unpredictable changes in prices of agricultural produce and farm inputs. High (good) prices and demands for farm produce are often short-lived while the increasing prices of farm inputs persist for a longer period. It is unsurprising since most farm inputs are imported from the neighboring countries that need to be adjusted due to the rising prices of fuels and transportation. In addition, farmers often lack savings and, therefore, have to take loan either from the microcredit institution or from the private moneylenders or traders to invest in their farming. The service of the microcredit institution, with affordable interest rate (3% per month), is still on progress and providing limited amount of loan to farmers. Therefore, many farmers in CBMS sites buy farm inputs on credit or take loan with 10-15% interest rate per month and promise to sell the paddy rice after harvest to their private credit providers, who in most cases are traders or merchants. In such cases, many small landholding farmers who often cannot afford increased production expenditure or just make very marginal gains from their production find it not worthy and those who have decided to sell out the small plots of their lands are evicted from the producer groups (Table 3).

**Table 3**  
*Percentage of Households with No Agricultural Land*

Village	2006	2008	% change
Svay Chrum	45	47	2
Reach Dounkeo	33	39	6
Samraong Outrea	45	50	5
Sdei Leu	35	38	3
Bak Amreak	44	40	-4
<b>Total</b>	<b>41</b>	<b>44</b>	<b>3</b>



### ***Impacts of Hiked Prices of Food Security***

In CBMS sites, about 56% of the total 1,132 panel households were farmers. The rest of households (44%) who are landless get their livelihood from off-farm income activities. Almost half (60%) of rice producing households, who are cultivating one hectare or less of land, produced rice only enough for 4-6 months' consumption. Therefore, they also become the net buyers of rice especially between May and October 2008. Only

about 21% of rice farmers produced enough rice for their household consumption; and another 19% of rice farmers produced surplus rice for sale with high prices (Table 4).

Nonetheless, about 77% of the households in CBMS villages, including landless households (44%) and small farmers (33%) who are cultivating less than one hectare and could not produce enough rice for consumption, were the net buyers of rice between May and October 2008. This net buyer group was the one who were more likely affected by rising prices of food and other necessary consumer items.

**Table 4**

*Average Yield and Total Production by Size of Landholding Households*

<b>Landholding Size</b>	<b>Households (hh)</b>	<b>% of Households</b>	<b>Yield (kg/ha)</b>	<b>Total Production (kgs/hh)</b>
<0.5 ha	272	43	3,181	820
0.5-0.99 ha	104	16	1,914	1,408
1-1.99 ha	136	21	1,828	2,195
2-2.99 ha	59	9	1,730	3,733
>3 ha	65	10	1,515	7,199
<b>Total</b>	<b>636</b>	<b>100</b>	<b>2,380</b>	<b>2,132</b>

Nonetheless, about 77% of the households in CBMS villages, including landless households (44%) and small farmers (33%) who are cultivating less than one hectare and could not produce enough rice for consumption, were the net buyers of rice between May and October 2008. This net buyer group was the one who were more likely affected by rising prices of food and other necessary consumer items.

### ***Increased Incomes and Household Food Security***

According to CBMS panel data, food expenditure or consumption accounts for about 63% of total household expenditure in 2008 which declined from the 73% of total household expenditure in 2006. This figure tends to suggest

general well-being improvement of people in CBMS villages. The proportion of food and non-food expenditure changes when households have better income. According to national survey of the impact of rising prices on food security conducted by CDRI in the mid 2008, an increase of about 47% of income is enough to offset the rising rates of food prices between 2007 and 2008.

All landholding groups dramatically increased their CPI over 2006 and 2008. Nonetheless, only about 23% of CBMS households with more than one hectare of land have enjoyed an average annual growth of CPI of more than 50% a year. The landless and land poor, owning one hectare or less have experienced lower annual growth rate of CPI in a range of 29% to 40% or lower than the level that is enough to offset the rate of increase in food prices.

The respondents were also asked whether they have earned enough to meet the need of household expenditure; and whether they have ever faced any food shortage in the last eight month prior to the survey period in September 2008. The answers are summarized by landholding group in Table 5. The responses again confirmed that the increased income of landless and small landholder is not

sufficient to offset the rising rate of food prices over the last eight months prior to the time of the survey. The rising food prices pushed 33% of CBMS households into food insecurity. The larger proportions of landless and small landholding accounted for about 41% and approximately 30% respectively, have faced the food shortage since most of them rely heavily on unreliable income from selling labor.

**Table 5**

*Enough Income to Secure Household Expenditure and Food Security by Landholding Groups with the Last 8 Months Prior to the Survey Period in September 2008 (% of 1,132 panel households)*

Landholding Size	Income for Household Expenditure				Food Shortage		
	Enough	Not enough	Some saving	Total	Yes	No	Total
Landless	13.5	86.3	0.2	100	41	59	100
<0.5 ha	15.4	84.2	0.4	100	33	67	100
0.5-0.99 ha	24.0	75.0	1.0	100	30	70	100
1-1.99 ha	39.7	60.3	0.0	100	21	79	100
2-2.99 ha	39.0	61.0	0.0	100	15	85	100
>3 ha	53.8	44.6	1.5	100	14	86	100
<b>Total</b>	<b>21.7</b>	<b>77.9</b>	<b>0.4</b>	<b>100</b>	<b>33</b>	<b>67</b>	<b>100</b>

### ***Impact on Poverty Reduction at the Village Level***

While hiked prices between late 2007 and October 2008 have affected every angle of life, the poor are the hardest hit group since majority of them are either classified as landless or land poor group who owned one hectare of land or less with limited ability to earn income enough to offset the increased rates of food prices. There is no official poverty data available in 2008. The Cambodia Socio-Economic Survey 2004 results (<http://www.nis.gov.kh/index.php/statistics/surveys/cses/cses2004result>), however, shows that 27% of households in Battambang were considered poor in 2004. With 1% rate of poverty reduction (World

Bank, 2006), the poor households should reduce from 27% in 2004 to somewhat around 23% in 2008. About 42,775 poor households or a total of about 269,217 populations in this province are poor. They are more likely to get negative effects by rising prices between January and October 2008.

Table 6 shows the proportion and changes in poor households of the five CBMS villages between 2006 and 2008. CBMS villages have experienced 15%, on the average, of poverty reduction over this three-year period. With regard to poverty reduction, CBMS villages have different experiences. Four out of five study villages have experienced poverty reduction, by 4% in Reach Dounkeo, 27% in Samraong Outrea while Svay

Chrum has experienced poverty increase by 16% (Table 6). In 2008, about 43% of the total households in CBMS villages, or higher than the

provincial average statistics, are poor and more likely to be hard hit by rising prices.

**Table 6**

*Poverty headcount and Village Characteristics, 2006-2008*

Village	Households	Poverty Headcount		Change (2006:2008)	Village characteristics
		2006	2008		
Svay Chrum	216	28	44	16	Close to the market centre, rice farming and petty trade are main source of income
Reach Dounkeo	150	72	68	-4	Remote village, wet and dry season rice farming and fishing
Samraong Outrea	343	63	36	-27	Good road access and connection to market, rice farming, fruit trees and petty trade
Sdei Leu	234	61	38	-23	Cash crop and wet rice farming
Bak Amraek	189	66	40	-25	Wet and dry season rice farming and fishing
<b>Total</b>	<b>1132</b>	<b>58</b>	<b>43</b>	<b>-15</b>	

Table 6 also suggests that the degree of impacts varies according to the location of CBMS villages. People living in the village closer to the market center tend to suffer the most from the rising prices due to increase in number of poor households in Savy Chrum village. Agriculturally-dependent villages such as Sdei Leu and Bak Amraek tends to gain well-being improvement from rising food prices through the sale of their farm produce and in turn are able to improve household consumption; and therefore, have experienced higher rates of poverty reduction. In contrast, rising prices tend to slow down poverty reduction in the remote village of Reach Doumkeo.

Good road access and connection to market for selling farm produce and petty trading help reduce poverty reduction faster in Samroang Outrea. This study also marks the important role of infrastructure development, such as the recent construction of road and irrigation, in establishing rural livelihoods against the negative impacts of rising prices of consumer goods through agricultural intensification and diversification, trading and labor migration. This argument is supported by the movement in and out of poverty as summarized in Table 7.

**Table 7***Movement In and Out of Poverty of Penal Households, 2006 and 2008 (% of 1132 households)*

Village	Stayed non poor	Moved out of poverty	Falling into poverty	Stayed poor	Total
Svay Chrum	47	10	25	18	100
Reach Dounkeo	9	23	19	49	100
Samraong Outrea	27	36	9	27	100
Sdei Leu	35	27	4	34	100
Bak Amraek	25	34	9	31	100
<b>Total</b>	<b>30</b>	<b>27</b>	<b>13</b>	<b>30</b>	<b>100</b>

Percentage of households who have moved out of poverty between 2006 and 2008 is found to be higher in the villages with good road access and market connection such as Samraong Outrea and villages with irrigation for dry season rice growing and cash crop production such as Bak Amraek. In contrast, in the villages that large proportion of household income come from off-farm activities and buying foods from market such as Svay Chrum and remote village of Reach Dounkeo, proportion of people falling into and remaining stuck in poverty is relatively higher.

## HOUSEHOLD COPING STRATEGIES

### *Increasing Child Labor as One of the Household Coping Strategy*

In the CBMS sites, 128 households (or 11% of the panel households) withdrew their children from schools to help earn income to cope with rising cost of living. It is surprising that among the villages under study, increased incidence of child labor is high in areas where there is fast growth and development. The number of migrants in search of employment in other urban area or along the Cambodia-Thai border or inside Thailand is on an increasing trend since the late 1990s. It is gradually becoming more important and dominant source of household income for the CBMS villages in 2008.

According to village leaders consulted during the survey, the number of households who often encouraged their children to take time off from school to help the family run the business or collect edible items from the common fields could be higher than 11%. Since more and more people are trying to search of work elsewhere outside the villages, the labor shortage for farming also has occurred, which are often replaced by either elderly and/or child labor. The wage labor for translation and ploughing are two or three time more expensive than two or three year ago while at the same time farm inputs such as fertilizers or chemical pesticide are also high. In order to save some money, children and elderly now become more valuable assets; meaning that every household member have to work hard to cope with rising food prices. The situation is even worse for the poor children whose parents are mobile laborers. The rising food prices has further limited the ability of poor children to benefit from the government's free universal education for all and food for poor children at school since they are brought along with their parents to the working destinations. All respondents and village leaders interviewed wishes for a decrease in prices of food stuffs.

### *Credit Access and Use*

Rising prices of food and producer goods have pushed many CBMS households into

indebtedness. About half of CBMS penal households took loan from microcredit institutions and/or relatives in the last eight months prior to the survey period in September 2008. About 53% of the poor households and 48% of non-poor households reported to have outstanding loans. Among the reasons given by 565 households who took loan within the eight months prior to the time of the survey, 51% used the loan to support business accounts, 29% used for buying food and 17% used for health care purposes.

Table 8 further shows a breakdown of who uses the loan in the poor and non-poor households: either the male (MHH) or female (FHH) heads of the

household. During hiked prices of food and other necessary consumer items, both the poor and non-poor spent most of their loan to sustain their businesses to retain their consumer satisfaction, especially when the demands for their services went down. Among the non-poor households, the proportion of male head households who uses the loan for buying food and health care is relative higher than their female neighbors. This may be since there are fewer female earners and females have lower incomes. However, in the poor groups, only a little difference has been observed between the male and female headed household.

**Table 8**

*Uses of Loans by Poor and Non-Poor Households in the Last 8 Months (% of 565 households with outstanding loans)*

	Non poor			Poor		
	MHH	FHH	Total	MHH	FHH	Total
Farming	4	2	3	4	7	5
Support business	52	47	51	52	48	51
Food	18	23	19	30	29	30
Health care	21	24	22	11	12	11
Study	3	3	3	0	2	1
Resolving conflicts	1	0	1	0	0	0
Other	1	2	1	1	2	2
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

The survey also suggests lower proportion of female headed households borrowing money for sustaining business than their male labor during the hiked prices. In rural area, women play critical roles in running small businesses and are better with regards to financial management for the family. This may be the reason why the female can somehow manage to use their savings to sustain business before taking a loan. A critical point to note here is the recent growth of microcredit institutions in the last two or three years. Those institutions are more active in providing loan with affordable 3% interest rate per month to the poor and been cited

as of great help in at least the time of rising food prices. About 67% of the poor have access to loans from microcredit institutions for both productive and consumption purposes with much lower interest rates than what is charged by the private money lenders of about 10-15% or even higher per month if they borrow cash or in kind from them.

### ***Selling Lands***

About 4% of CBMS households decided to sell their land or their other assets within eight months

prior to the survey as the result of rising prices to repay loan or set up or sustain a business. In addition, about 10% of households have to seek additional jobs or work harder in order to earn enough money to buy food. Nonetheless, 24% of the poor and 21% of the non-poor became worse off while around 71% of the poor and non-poor were able to sustain their livelihoods. Only 5% of the non-poor and 2% of the poor households were able to improve living during the hiked prices while about 4% were uncertain whether they remained in status quo or not.

## CONCLUSION AND POLICY IMPLICATIONS

A number of findings from CBMS have confirmed a number of key lessons learned about people's experiences in responding to the recent phenomena of rising prices of food and other basic commodities. First, the prices of food and other basic commodities still remained relatively high after they peaked at double digits in the history of inflation since the mid 2000. Although CBMS villages located the rice producing surplus area of the Battambang Province, only about 23% of the CBMS households characterized as large rice farmers, petty traders and/or money-lenders can seize the opportunity generated by rising prices to produce surplus for sale or increase income. In contrast, about 77% of the households, including the landless and land poor with one hectare of land or less, are and/or become net food buyers during the hiked food prices. Many of them did not earn enough income to offset the rates of price increase and to meet basic household expenditure, and had to work harder to earn money to buy food. Therefore, food security for many became worse.

Second, in response to rising prices, many children has been taken out from school to help the family cope with this abnormal phenomena of hiked cost of living. Village-out migration is also adopted as a coping strategy for many. Children and the elderly have to work harder to sustain household income for food and other basic

household expenditure. Another coping strategy in response to rising prices is access to loan for supporting business, purchase of food items and health care purposes. Rising prices in many cases has contributed to the acceleration of landless households in the CBMS villages.

The more striking impact of rising prices on poverty are not just increasing food insecurity of many people but it also make the poor become poorer; push many rural people into debts that is difficult to recover. Rising prices has further changed human capital with regard to education and poor health and loss of productive assets as well as deteriorated capability of the small landholders and the poor to cope with any future shocks or crises. This requires a stronger social safety net program to support the smaller farmers to remain in producer group, poor children to stay in school, and better targeting policy intervention to support the poor and the vulnerable. The social safety net program, however, would be implemented effectively through involvement of local authorities or if the capacity of commune council can be further enhanced and strengthened for pro-poor and good governance and implementation of national policy.

Third, like other rural villages, the CBMS farmers and villagers are gradually connected, or are no longer isolated, to any change in global and international market. That is because the CBMS villages are located in one of the fast growing and developing Battambang province. Located at the North-West of Cambodia, aside from having remarkable infrastructure development, there is also cross-border integration of trading activities, especially through formal and informal trades with Thailand. Inter-country connection has been remarkably taking place. The agricultural producers should seize this lucrative opportunity to increase production. The critical constraints to agricultural growth, however, persisted in CBMS villages with lack of agricultural know-how, irrigation and effective extension services. The growth of microcredit institutions so far has been highly appreciated by CBMS villagers for both productive and consumption purposes. The amount

of loan and availability of services have been effective enough to respond to the needs of small farmers and business entrepreneurs in the rural area. Long term strategy and intervention should be in place to build the capacity of small farmers to overcome the barriers to production such as high cost of fertilizer, labor shortage, poor irrigation and road access.

## NOTE

<sup>1</sup> Quoted from Chan Sophal and Phim Rounsarith's Presentation at CDRI, 12 August 2008.

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