



# CAMBODIA DEVELOPMENT REVIEW

A Publication of the  
Cambodia Development Resource Institute

VOLUME 9, ISSUE 2

APRIL-JUNE 2005

\$4.00

## Towards a Community-Based Poverty Monitoring System in Cambodia

Nou Keosothea and Chan Sophal highlight the importance of the Community-Based Poverty Monitoring System in monitoring local poverty reduction, emphasizing institution and capacity building at the local level.\*

**C**ambodia is committed to a long process of decentralisation. The importance of local governance is well recognised, and many people are working to enhance the success of this reform. Commune councils need systematic and reliable information in order to effectively assess needs, plan, monitor and evaluate development projects. The Community-Based Poverty Monitoring System (CBPMS), which has been piloted in Cambodia, aims to provide commune councils with practical data for these needs. It also aims in the long term to create a sustainable system to monitor local poverty reduction over time. Therefore, the project emphasised institution and capacity building at the local level.

A total of 11,937 households in six communes of Battambang and Kratie provinces were surveyed from October 2003 to November 2004. These households represented two districts of contrasting socio-economic conditions. For a census at the commune level, knowledgeable villagers were recruited and trained to undertake the household interviews based on a five-page questionnaire. Data were processed manually under the management of the commune councils and under the technical supervision of the project supervisory team. As a result, the six communes were able to produce their own books of poverty statistics for planning and monitoring. The study examined the different CBPMS indicators reflecting the multidimensional nature of poverty: demography, education, housing and land, health, income and expenditure, assets, violence and security and order. However in this paper, we report mainly on the



*Fishing is an income source for rural people. Income is a CBPMS indicator for monitoring poverty.*

methodology for replication or expanding the project and the poverty rate result.

### The Research Issues

A CBPMS will complement decentralisation and contribute to the successful functioning of the newly decentralised state apparatus. Cambodia lacks a community-based poverty monitoring system, although there is a village database, collected through administrative reports under the Seila/PLG programme. For needs assess-

### In This Issue

Towards a Community-Based Poverty Monitoring System in Cambodia.....	1
From Peace Building to Human Security?.....	5
Economy Watch	
— External Environment .....	8
— Domestic Performance .....	10
— Economic Indicators.....	13
CDRI Update .....	16

\* This article is based on a technical report which was presented to a seminar on a CBPMS for Cambodia held in Phnom Penh on 18 November 2004. The seminar was funded by the International Development Resource Centre of Canada.

ments, planning, monitoring and evaluation of development projects, there is a need to establish a system and have it operated in a consistent manner by commune councils, with technical support from the provincial statistics office and other agencies.

Clearly, when there is local capacity to take over the CBPMS, it will be much more cost effective than sending enumerators from the capital, as is currently done in national and community-based surveys. Local involvement in and responsibility for the survey will contribute to local ownership and ensure local use of data.

The specific objectives of the pilot CBPMS were:

- to select appropriate indicators for community-based poverty monitoring and analysis;
- to provide practical, scientifically generated data to commune councils for their planning, monitoring and evaluation of development projects;
- to produce commune poverty monitoring reports based on the CBPMS results;
- to build the selected commune councils' capacities in survey methods and data processing, analysis and use;
- to promote links between commune and provincial/national level planning.

## Methodology

### 2.1 A Plan for Establishing a CBPMS

The project consisted of two phases over 17 months. Phase 1 lasted five months, from 1 August to 31 December 2003, and phase 2, a pilot CBPMS, lasted 12 months, from 1 January to 31 December 2004. The CBPMS comprises the following elements:

#### Identification of the area where the system is to be introduced

Six communes with about 12,000 households in two provinces were selected as the pilot CBPMS sites. Three communes (Prek Norint, Samraong Knong and Prek Luong) were chosen from Aek Phnom district of Battambang to represent a better off area, and three others (Snuol, Khsuem and Srae Char) from Snuol district of Kratie to represent a relatively poor area. Battambang is a province that has received relatively more financial support and capacity building from external sources in the past 10 years. Kratie is one of the more remote and poorer provinces. Such differences would provide insights into how the CBPMS could be conducted in areas of poor and better socio-economic conditions. As expected, the communes in Battambang carried out the tasks more smoothly than those in Kratie. It was easier to hire enumerators with a reasonable capacity in Battambang, while it was hard in Kratie to find enumerators with adequate literacy and willingness to take up the job. The communes in Kratie are isolated and poorly connected by roads, so it cost more for the enumerators

to travel. There were more errors in completed questionnaires in Kratie than in Battambang.

#### Contact: meeting with relevant institutions

The planning offices in the two provinces expressed interest in incorporating the CBPMS into their regular structures and programmes and provided a provincial office for computerised data processing because the project is in line with the national plan to strengthen local statistical systems. The National Institute of Statistics (NIS) has expressed interest in taking the pilot forward and gradually spreading it nationally. Importantly, this will increase the likelihood of an eventual nation-wide CBPMS. It is hoped that more resources from other agencies can be mobilised to expand the system.

#### Development of poverty-monitoring indicators

A set of core indicators for the pilot related to demography, education, housing, land, water, health, household expenditure, occupation and income, assets, livestock and domestic violence. It was drawn up through consultations with partners and the study of their working documents. A number of variables may duplicate those already contained in the Seila Village Data Book, which is filled out by the village chief. Since the CBPMS employed a census approach, and because of the critical importance of these variables, they were retained in the core set. The two sets of data can be compared and verified against each other for quality improvement. From this core set of indicators, a household questionnaire was designed. The number and complexity of the questions were severely constrained by the fact that data were to be processed manually and that local enumerators' capacities and experience were limited.

*When there is local capacity to take over the CBPMS, it will be much more cost effective than sending enumerators from the capital. Local involvement in and responsibility for the survey will contribute to local ownership and ensure local use of data.*

### 2.2 Development of Data Collection and Processing Tools

#### Designing household, village and commune questionnaires

A participatory approach was used to develop the data collection and processing tools. A questionnaire was developed, pre-tested and revised, in continuous consultation with the commune councils.

#### Pre-test

Following discussions with the CBPMS network leader in November 2003, the research instruments were pre-tested, although this was not planned initially. As a test, the household questionnaire and the tally sheets were developed and implemented in one village per commune. All the responsible commune council members, village chiefs and enumerators for the pre-tested village were trained to conduct interviews with all the households in the village.

The training took three days. The first day dealt with the purpose of the CBPMS and all the questions in the questionnaire. The second day was spent on

testing the questionnaire in the village. Each enumerator had to interview two households, one small and one large, to gain experience with households of different sizes. The third day was spent collecting feedback from the enumerators and clarifying or rectifying questions that were unclear or not applicable. The pre-test helped to improve training methods, questionnaires, interviews and data analysis.

### **Designing data processing tools**

Data processing tools were developed for both manual and computerised processing. Manual processing was divided into three parts: (i) filling out of spreadsheet frames by the enumerators, (ii) tabulation of data to produce a village statistics base and (iii) aggregation of village data to produce a commune statistics book. The commune statistics book was to be further analysed by council members for the production of a commune poverty report, which constitutes a major CBPMS output.

In addition, a data entry frame in SPSS was developed for computerised processing by the provincial statistics office. This was used to verify the accuracy of manual processing.

### **2.3 Selection and Training of Enumerators and Data Processors**

#### **Selection of enumerators and data processors**

When possible, members of the village development committee, which had become part of the voluntary commune planning and budgeting committee, and knowledgeable villagers were recruited jointly by the commune councils and the supervisory team. They were trained to become enumerators. Those with a good command of quantitative skills were also trained as data processors. Initially, the village chief was not considered for any substantial role in the survey. However, after consultations with the commune councils, it was clear that the village chiefs had much to offer and could play a more helpful role than as interviewers. The village chief guided the enumerators to every house to conduct a household census. He could be asked to guide enumerators to the right households, and if necessary would make appointments for the enumerators. He received a minimal allowance as part of the honorarium for commune council members.

#### **Training of enumerators**

A total of 122 people were trained by the CBPMS supervisory team. The questionnaire was delivered to all the enumerators before the training, and they were asked to study it in advance. During the training, the trainers discussed the questions one by one and made sure every enumerator understood them. A participatory training approach allowed all enumerators to express their concerns and share experiences, especially those who had participated in the pre-test. The most difficult parts of the questionnaire were the questions on household income and expenditure, which required a high level of analysis and people's willingness to respond. An additional training day was held in Kratie due to the weaker

educational background in this relatively poor province. The purpose of the training was to make sure that all enumerators could do their jobs effectively.

#### **Training of data processors**

In each province, data processor training was in two parts: manual processing at the village and commune level, and computerised processing at the provincial level.

About 60 participants were trained in manual processing, roughly two or three persons per village. They used calculators for addition and to calculate percentages. The problem in this step was errors caused by inexperience in dealing with too many large numbers, especially regarding farmland, income, assets and expenditure.

Ten officials at the provincial statistics offices were selected and trained to do the computerised data entry. An application frame in SPSS was developed and installed for them. It was useful to have the statistics officials involved in this work because some already had experience in data entry. Unfortunately, there were not enough computers with sufficient capacity to run the SPSS software.

#### **2.4 Conduct of Surveys**

Information was collected through two instruments: the household questionnaire and the village and commune questionnaire. A total of 84 enumerators conducted the interviews with direct assistance and supervision from 43 heads of village, 21 commune council members and two provincial partners. The enumerators interviewed 11,937 households.

All the enumerators reported difficulty in obtaining information about household income and expenditure and about domestic violence. Most interviewees tried to disguise their income or could not recall how much they earned monthly and annually. This occurred in all villages. As a result, income and expenditure in a household did not always match.

Some enumerators reported difficulty finding the head of the household for the interview because they were working far from home. Moreover, in some villages houses were located far from the village centre and were difficult to reach by road.

The village and commune questionnaires were completed by chiefs of villages and heads of communes. The village questionnaires contained questions about the village as a whole. The chiefs filled them out under the supervision of the commune councils. The commune questionnaires were completed by a commune council member.

In addition, the provincial partner as well as the commune council members took part in supervising the enumerators. Members of the supervisory team carried out spot checks to ensure the quality and smooth conduct of the survey.

#### **2.5 Consolidation and Processing of Data**

The 11,937 completed questionnaires were checked and verified by 20 council members from the six communes.



Less than two percent contained errors that required the responsible enumerators to re-interview households. Errors were mostly related to household income, expenditure and assets.

After data cleaning, the enumerators for each village performed manual data entry and tallying. In some communes where enumerators lacked numeric skills, council members assumed responsibility for processing the data. The council members responsible for the project also checked and validated the data processing.

The councils were responsible for processing, aggregating and tabulating commune-level statistics, which would be used for the writing the commune poverty report. Meanwhile, the provincial statistics offices undertook computerised data entry.

### 2.6 Analysis and Validation of Survey Results

The biggest challenge 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 per capita consumption expenditure, in line with the national definition. However, based on the preliminary results, the poverty line of 1,200 riels per person per day, adopted from the commune poverty report of the government, seemed too low, mainly because of the inflation that has occurred since 1998, when the commune poverty line was established. After consultations with the enumerators and commune councils, this line was raised to 1,500 riels (US\$0.38). The main argument here was that the intent of the CBPMS is primarily to measure poverty over time. If the poverty line is adjusted for inflation, it can serve to measure any changes in the number of households below the poverty line.

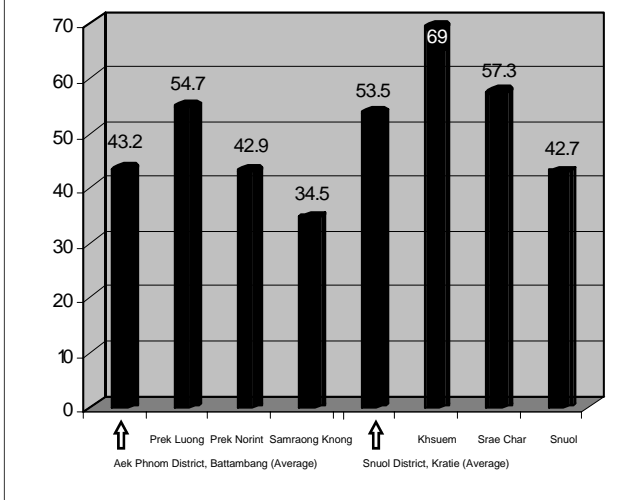
### 2.7 Dissemination of Results

The CBPMS results were disseminated at national and local levels: through a national workshop for all partners and relevant government and non-government institutions, and through two workshops for all communes in the two districts. All commune heads who participated in a workshop expressed keen interest in developing the poverty monitoring report in their communes, and they began to ask questions of the council members who had experience from the pilot CBPMS. The CBPMS results should be presented also to other districts or provinces if funds are available. However, it is expected that provincial authorities will disseminate the pilot experience to other communes through their regular meetings.

### Poverty Rate Results

The study examined the different CBPMS indicators reflecting the multidimensional nature of poverty: demography, education, housing and land, health, income and expenditure, assets, violence and security and order. However, in this paper, we report only the poverty rate result. The poverty rate was assessed through household expenditure. The poverty line was set at US\$ 0.38 per person per day in rural areas. Household expenditure represented the value of the following items: rice, other food, sweets and similar items (noodles, cakes, desserts,

Figure 1. Percent below poverty line in three communes in Aek Phnom and three in Snuol



drinks, refreshments), alcohol, cigarettes, education, health care, other expenses (ceremonies, clothing, soap, water, electricity). Productive expenditures were excluded.

Figure 1 shows the poverty rates by commune in the study areas. In Aek Phnom district, the average poverty rate in three communes was 43.2 percent and in Snuol district 53.5 percent. Thus Snuol is poorer than Aek Phnom. Characteristics of the poorest villages include remoteness, poor roads, no school, no hospital, no market, no irrigation system, no formal credit, flooding and little agricultural land.

### Local Capacity Development and Linkages

The CBPMS has helped to develop the capacity of local authorities to plan, manage and mobilise and allocate resources. The six communes in the study areas can now have commune poverty monitoring reports broken down by village, and the local authorities have the capacity to conduct the CBPMS in their communes. Commune council leaders in the study areas requested continuation of the CBPMS in their presentations to the district and national workshops. They declared that they would use CBPMS data for their commune three-year rolling plan as part of the decentralisation facilitated by Seila programme. They also shared the information from CBPMS regarding health, education and agriculture with the NGOs in their districts.

CBPMS data from the pilot project have built a link between commune, provincial and national planning. As part of successful advocacy work for the pilot CBPMS, the Ministry of Planning hosted a National Forum on Pre-Identification of Poor Households on 28 February 2005, which was a worthwhile effort to discuss approaches for identification of poor households.

### Conclusion

The pilot CBPMS has been tested. It provided valuable results, describing the different facets of poverty in six

(Continued on page 7)