Analyzing the Living Conditions at the Local Level in Senegal[*]

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L ocated on the west coast of Africa, Senegal is bordered by Guinea-Bissau, Mali and Mauritania and encloses the confederated state of The Gambia. As of October 2003, the country's population is estimated at 10.3 million with a growth rate of 2.3 percent.

Since there is no existing system of monitoring the living conditions of households in Senegal, a community-based monitoring system (CBMS) has been implemented to address this information gap. The system will be used to monitor, in the long term, the living conditions not only of households but also of the local community, thus providing information on poverty at the local levels (commune, local district, and rural community). The information can then be used to evaluate the impact of economic policies on the living conditions of the population, particularly those of the poorest.

Methodology

Information has been gathered through two survey instruments: the community questionnaire and the household questionnaire. The community questionnaire allows the gathering of detailed data on the villages and neighborhoods of the local community. The main respondent is the village/district chief. A master chart has been devised to show the situation of the town or village in its various sectors (the existing infrastructure, the quality of the services provided, etc.) and the opinions of the heads of districts or villages on certain matters related to community life (the level of poverty and the way it evolves, and other pertinent information). Meanwhile, the household questionnaire enables the collection of specific information on the household and its members.

A bureau was assigned to the gathering and analysis of data while an orientation committee was established under the direction of the head of the local community who forms and groups all actors or participants in local development for validation and dissemination of results.

In terms of indicators, considered were ten areas covering the different dimensions of poverty: 1) population, 2) active population, 3) health and nutrition, 4) education and literacy, 5) comfort and ownership of households, 6) access to social services, 7) expenses and level of poverty, 8) market availability of basic necessities, 9) agriculture and natural resources, and 10) local public finances.

Inside

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Research Results

The system was implemented in the urban community of Tivaouane in the Administrative Region of Thies (about 90 kms. from Dakar), in the municipality of Wakhinane located in the urban community of Guediawaye in Dakar, and in the rural community of Ndangalma in the Administrative Region of Diourbel (about 110 kms. from Dakar). These sites were chosen based on their proximity to Dakar, the capital of Senegal. Likewise, they also possess characteristics that allow for the potential use of the data gathered i.e. strategy for fighting poverty, community development activities, among others. The survey ran for one month each for the three sites, Tivaouane in December 2002, Wakhinane in January 2003 and Ndangalma in March 2003.

Results of the Survey

The results of the survey, which was conducted to monitor the living conditions of households, shed light on certain socioeconomic characteristics of the survey areas.

Demography

The three survey sites are inhabited by a very young population with an average age of less than 25 years (Table 1). More than 70 percent of the inhabitants less than 35 years of age mostly fall under the bracket of 0 to 15 years old. Wakhinane records

that 40.5 percent of the population belongs to the age group of 15 to 34 years old. This phenomenon may be explained by the eventual emigration of the natives to Dakar.

In general, the households in the survey areas are big as everywhere else in Senegal. The average household size varies from 8 members in Wakhinane to 13 members in Ndangalma. The societal organization mode in Senegal which favors large families is the reason behind these large households. The number of big households, though, is decreasing because of urbanization.

In Wakhinane, 51.1 percent of the population consists of women. In both Tivaouane and Ndangalma, the proportions of women are the same (52.3%). The male ratios[1] in the latter areas are at 95.7 percent and 91.2 percent respectively.

Meanwhile, about 75 percent of the households in both Tivaouane and Wakhinane are headed by men. The

Mr. Momar Balle Sylla (right), CBMS Project Leader in Senegal, presents the provisionary report of the CBMS implementation in Senegal during the November 2003 PEP Meeting held in Hanoi, Vietnam.

proportion is higher in Ndangalma (94.3%).

Education

With regard to the level of schooling, four-fifth (4/5) of the adult population (15 years and above) in Ndangalma have never attended school. This figure translates closely into 5 out of 10 persons in Tivaouane, and about less than one adult out of 10 in Wakhinane. At the extreme opposite, about 58 percent of these adults have reached a higher level of schooling in Wakhinane against only 0.4 percent and 0.1 percent in Tivaouane and Ndangalma, respectively.

Household heads are also more educated in Wakhinane than in the two other localities. The proportions of those who have not attended school are 60.7 percent in Tivaouane, and 89.3 percent in Ndangalma. All of the household heads in Wakhinane attended school with 70.3 percent having a university level of education. The proportions of illiterates are 80.0 percent in Ndangalma and about 48 percent in the other two localities.

In Wakhinane, about 65.1 percent of school-age (7-14 years old) children are presently enrolled in school, 0.5 percent have dropped out, and 22.6

Table 1. Selected Demographic Data from the Survey

Indicator	Wakhinane	Tivaouane	Ndangalma
Total number of households (Sample)	264	264	264
Results after extrapolation			
Total number of households	2,678	3,172	2,015
Total population	21,093	34,214	26,619
% of female	51.1	52.3	52.3
% of male	48.9	47.7	47.7
Average household size	7.9	10.7	13.2
Average age of population	25.7	23.2	21.4

Source of data: CREA-MIMAP 2003

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[1] The male ratio refers to the number of men per 100 women.

percent have never attended school. School attendance of children in Tivaouane stood at 73.7 percent while in Ndangalma it is 43.5 percent. On the other hand, the proportion of children not attending school is significantly higher in Ndangalma (52.4%) than in Tivaouane (22.0%).

Among the children of this age group enrolled in school in Ndangalma, 2.7 percent, regardless of sex or gender have dropped out as against 1.0 percent in the other two areas. There is an interesting distinction between the dropout rates among boys and girls. The number of girls who drop out of school is relatively higher in Wakhinane and Tivaouane (with more than 1%) than in Ndangalma where the dropout rate is 3.3 percent among boys versus 2.0 percent among girls.

According to the survey respondents, the reasons for dropping out of school, in the order of importance, are the following: a) Lack of interest in schooling; b) Household chores or work outside the household; c) Failure at exams; d) Marriage; e) High costs of schooling; f) Great distances from home to school; and g) Sickness or pregnancy.

Meanwhile, gross rates of schooling (GRS) is high in Tivaouane and Wakhinane: 102.1 percent and 82.2 percent respectively. Ndangalma's rate (52.8%), however, has not even reached the national average. The education of girls at the elementary school level still remains low relative to that of boys. The discrepancies between the GRS are in the order 16.6 percentage points in Wakhinane, 3.6 percentage points in Tivaouane, and 3.1 percentage points in Ndangalma. The same trend is observed with respect to the net rate of schooling (NRS) at the elementary school level.

Table 2. Nutritional Status of Children Aged 0-5 Years Old (in percent)

Indicator	Wakhinane	Tivaouane	Ndangalma
Age-for-weight ratio	15.6	30.7	29.4
Age-for-size ratio	43.0	28.6	41.6
Weight-for-size ratio	10.1	24.2	18.9

Source of data: CREA-MIMAP 2003

Health and Nutrition

Four weeks prior to the survey, the proportions of sick persons were estimated to have been 18.3 percent in Wakhinane, 18.9 percent in Tivaouane, and 10.5 percent in Ndangalma. The proportions of sick persons who had consulted a medical practitioner and/or personnel were 80.3 percent, 69.9 percent and 88.3 percent, respectively. In the urban municipalities, more than 88 percent of the sick went to the public health center and the hospital to be taken care of. In the rural municipality of Ndangalma, a private health-care center (or clinic) attended to the needs of 38.8 percent of the sick, followed by the marabout and/or healer (19.1%). Also listed as health-care providers were the midwife or the nurse of the quarter (17.2%), and the health hut (10.8%).

Self-medication is practiced by most of the sick in Wakhinane (57.5%), Ndangalma (53.8%) and in Tivaouane (44.0%). The number of sick persons who had determined that their sickness is not serious enough to require a visit to the health center and/or a consultation with a health worker, is significant in Wakhinane (39.1%) and in Ndangalma (29.2%). High medical costs and consultation fees are mentioned by 3.1 percent of the sick in Tivaouane, 3.4 percent in Wakhinane and 4.9 percent in Ndangalma. Physical access seems to pose a problem only in Tivaouane where 31 percent of the sick have so stated.

Most of the women who had given birth during the last 12 months prior to the survey, had prenatal consultation. The rates exceed 92 percent whatever area of residence is considered.

Indicators measuring the nutritional status of children are the size-for-age ratio (stunted growth or severe chronic malnutrition), the weight-for-age ratio (weight loss), and the weight-for-size ratio (wasting and acute chronic malnutrition). The prevalence of stunted growth is high since it stands at 43.0 percent in Wakhinane, 41.6 percent in Ndangalma and 28.6 percent in Tivaouane (Table 2). Weight loss (or being underweight) is, however, higher in Tivaouane and Ndangalma which both have close rates. These results coexist with a level of wasting which is relatively low in Wakhinane (10.1%) and Ndangalma (18.9%). Nearly a quarter (25%) of the children are affected by acute chronic malnutrition and wasting in Tivaouane.

Water is a daily basic need for households, but it can also be a potential source of illness if made available to populations under conditions which do not fulfill basic health requirements. In Tivaouane and Wakhinane, the entire population has access to water less than 2 kms. away. In the rural community of Ndangalma, there remains 5.6 percent of the population who must travel more than that distance to fetch

water. However, there exists a discrepancy between having access to water, and having water that is fit for consumption.[2] In Wakhinane this discrepancy is 1.8 percentage points against 0.8 percentage point in Ndangalma.

Employment

The unemployment rates[3] in Wakhinane and Tivaouane are close: 31.2 percent and 29.8 percent, respectively. Ndangalma has lower rate of 7.5 percent (Table 3).

Regardless of the survey site, the majority of those working earn their income from an independent activity. These are people who work for their own account or who are self-employed (Ndangalma, 51.7%; Tivaouane, 45.0%; and Wakhinane, 40.0%).

Living Conditions

The evaluation of the quality of households' living conditions is based on indicators measuring access to certain services and commodities. Access to electricity and ownership of television set are two discriminating variables which concern rural households. In Ndangalma, households have very little access to electricity and ownership of tv set is scarce. However, nearly 9 out of 10 rural households in Wakhinane and Tivaouane have access to electric power. Seven (7) out of 10 households

in Wakhinane, and close to 2 out of 3 households in Tivaouane can watch the "small screen" at home.

Lessons Learned

The implementation of CBMS in selected localities in Senegal has unveiled a number of lessons which can help in improving the system:

On local capacity for management and implementation.

- For the mechanism to be effective and successful, it is important to have the support of the local population and the total involvement of local authorities. This can be done by presenting to them the objectives of CBMS and its impact on their living conditions.
- The existence of capacities for collection and treatment of information and the need for the reinforcement of capacities for analysis and application of data.
- Bureau personnel include locally elected officials with a fixed and limited term, a situation that puts the permanent establishment of the system at risk. There is a need to recruit qualified personnel who will continue the work despite a change in local administration.
- The question of whether local resources would sustain the financing of the system.

On the collection and treatment of data.

- Inclusion of tests in the recruitment of personnel.

- Need for a translator and translated texts during training as manuals are drafted in French.
- Revision of the questionnaire to adjust to local realities and conditions.
- Flexibility in the process of the data-gathering to integrate local conditions.
- Longer period of training for persons in charge of collection and treatment of data.
- Revision of control programmes in view of integrating new specifications.
- Upgrading the low salary scale at Dakar.

On localities retained for the test of the study apparatus.

- Conditions are considered good enough in terms of the availability of human resources and infrastructure, which is not the case in other parts of the country. It is necessary to extend the study apparatus to areas with unfavorable conditions.
- Requests for the adoption of the study apparatus in areas where there are poverty alleviation projects because local data for the effective evaluation of the interventions are absent.

On the absence of panel data.

- The repetition of the study survey to include a section on panel data and for a more complete and dynamic analysis of poverty. ✳

Table 3. Selected Employment Indicators

Activity Indicator	Wakhinane	Tivaouane	Ndangalma
Population aged 15 years and above	14,964	18,026	13,388
Activity status of persons aged 15 years and above (%)			
Active persons with employment	43.0	37.4	64.5
Unemployed	19.7	15.9	5.2
Inactive persons	37.3	46.7	30.3
Unemployment rate (%)	31.2	29.8	7.5

Source of data: CREA-MIMAP 2003

[2]Those households with drinking water get it from a tap in the house, a public tap, a protected well, or a cistern.

[3]The proportion of the unemployed in the active population. The active population comprises the employed and unemployed. The unemployed was defined in the survey as persons who had looked for work and were ready to work (but could not find jobs) during the 4 weeks preceding the interview.

...in Pakistan*

After several meetings with officials, two new districts have been selected for the CBMS: Toba Tek Singh and Rawalpindi in Punjab, replacing the old districts initially chosen. The CBMS aims to be a census of two union councils from two districts located in the Punjab province. At present, the CBMS-Pakistan Team is in the process of identifying one union council in each district in consultation with the district administration, keeping well-being and conduciveness as the main criterion.

Consultative Meetings
The proposal of the CBMS was sent to the National Reconstruction Bureau (NRB) for comments and possible collaboration between Pakistan Institute of Development Economics (PIDE) and NRB in the CBMS activities.

Last month a meeting was held in the office of the NRB Chairman, Mr. Danial Aziz. Another NRB member, Mr. Naeemul Haq and a staff working on the National Reconstruction Information and Management System (NARIMS), also participated in the meeting. Three members of the CBMS-Pakistan Team—Dr. A. R. Kemal, Dr. Faiz Bilquees and Dr. G.M. Arif—attended the meeting. The NRB staff made a comprehensive and effective presentation on NARIMS while the CBMS team talked on the main features of the CBMS. In the gathering, the NRB lauded the CBMS project and made useful suggestions on the integration of CBMS and NARIMS. The choice of suitable districts for the CBMS was also discussed during the meeting.

Upcoming Activities: Development of a Questionnaire and the Addition of New Indicators
The questionnaire to be used in the census is now being designed. However, additional new indicators are being worked out for inclusion in the CBMS survey. This was in response to the demand of union administration and village councils for data on certain socioeconomic indicators. The questionnaire will be tested in the field before it is printed in final form.

...in Vietnam**

Implementation of Second Round of CBMS Survey
The second round of CBMS survey in Vietnam has already been implemented in 20 communes selected as national poverty observatories. The survey covered 4000 households in 12 provinces. Data is being processed and will be submitted to the National Program for Poverty Reduction and Job Creation.

Lending a Hand
Members of the CBMS Team have provided technical assistance to the Department of Labour, Invalids and Social Affairs in two provinces. The first is Ha Tay Province where the CBMS survey was conducted in 30 communes chosen by the province as poverty observatories. Data is being processed and will be submitted to the provincial administration. The second is Yen Bai Province where the survey was conducted in 10 communes picked out by the province as poverty observatories.

Regional Conference on Poverty Monitoring in Asia held in Manila

Selected country members from the CBMS Network together with the CBMS Network Coordinating Team recently participated in a workshop entitled Regional Conference on Poverty Monitoring in Asia. The event, which was hosted by the Centre for Poverty Analysis (CEPA), an organization based in Sri Lanka, together with Asian Development Bank (ADB), German Federal Ministry for Economic Cooperation and Development (BMZ) and German Agency for Technical Cooperation (GTZ), was held on March 23-26, 2004 at the ADB headquarters in Manila. The regional conference brought together a number of institutions across Asia and provided a forum for professional and policy dialogue among policymakers, researchers and practitioners working in the field of poverty monitoring.

CBMS-Bangladesh Team Holds a Workshop:
Methodology of CBMS Presented*

The Community-Based Monitoring System (CBMS)-Bangladesh Team conducted a workshop last April 23, 2004 at the Dr. Abdul Muyeed Conference Hall, Bangladesh Academy of Rural Development (BARD) headquarters in Comilla, Bangladesh. Firstly, the workshop aimed to get feedback on the design and methodology developed under the pilot phase of local level poverty monitoring system (LLPMS). Secondly, it endeavored to find out the data requirements of the nation-building departments for development and of the local government at Union Parishad for providing support and services to the people specially the disadvantaged. The LLPMS is a project being implemented by the BARD under the auspices of the International Development Research Centre (IDRC)-Canada through the CBMS International Network.

A total of 49 participants, composed of officials of nation-building departments and development partners in the local areas, local government functionaries and practitioners, and specialists in local government attended the workshop presided by Mr. Sikander Ali Mondal, BARD director-general and advisor of the research project.

Mr. Ranjan Kumar Guha, CBMS project leader and BARD assistant director, presented a paper entitled "Local Level Poverty Monitoring System: Indicators and Methodology." He pointed out that the goal of the project is to develop a cost-effective mechanism for poverty monitoring at the local level. To attain this, emphasis must be placed on strengthening the capacity of local government functionaries for introducing and monitoring local level planning by using information generated through the LLPMS. The local people must be trained on data collection as well as on data processing. He also presented some maps depicting the poverty situation of the locality. These maps were generated using a spatial database program called CBMS-Natural Resource Database (NRDB).

The members of the BARD research team—Mr. Md. Habib Ullah, director, Mr. Md. Abdul Quader, deputy director and Mr. Abdullah Al Mamun, assistant director—contributed to the workshop by sharing their experiences during the pilot phase.

Meanwhile, the participants suggested additional information that should be included in the survey questionnaire. They also indicated interest in the use of CBMS-NRDB for poverty-mapping in the local areas. Moreover, the participants gave recommendations and other inputs for the further development of the methodology such as frequency and strategies in data collection.

Mr. Mondal extended his appreciation to all the participants for their comments and said that BARD had benefited enormously from the discussion. He assured them that BARD would accommodate and act on the suggestions made by the learned participants. ❋

Mr. Md. Sikander Ali Mondal (far left), BARD director-general addresses the inaugural session of the CBMS Bangladesh Workshop.

*This article is an excerpt from a report prepared by the CBMS-Bangladesh Project Team.

Palawan CBMS Updates

The CBMS Network Coordinating Team recently visited Palawan to conduct two activities aligned with the continuing technical assistance being provided by the team to the CBMS implementation in the province.

Validation in Kemdeng

The team visited Barangay Kemdeng in San Vicente, Palawan on April 27, 2004 to conduct a validation exercise. The activity was held in the barangay hall with selected barangay officials, CBMS enumerators, representatives from the municipal government, community leaders and volunteers in attendance. A representative of the indigenous people (IP) living in the barangay also attended.

Major findings of the 2000 and 2002 CBMS surveys were presented to the community for validation, and the reasons for the findings were discussed.

CBMS Database[1] Training

Assisted by the Provincial Planning and Development Office (PPDO) of the provincial government of Palawan and the Southern Palawan Planning Information Center (SPPIC), the local CBMS Team conducted a two-day training on CBMS Database last April 28-29, 2004 at the computer laboratory of the Holy Trinity College in Puerto Princesa City. The training was attended by officials and representatives from 18 municipalities in Palawan.

The objective of the training is to empower the municipalities in creating, maintaining and updating their own CBMS databases. This will help the PPDO to expeditiously download data which usually takes a lot of time to process. ❈

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[1]The CBMS database uses the Natural Resource Database (NRDB) software developed by Mr. Richard Alexander.

MIMAP-Management Meeting in Canada

Dr. Celia M. Reyes, CBMS Network Leader, attended the MIMAP-management meeting in Ottawa, Canada last March 28-April 3, 2004.The meeting, attended by IDRC officials and PEP network administrators discussed the management of the various MIMAP Projects including the Poverty and Economic Policy (PEP) Project, of which the Community-Based Monitoring System (CBMS) network is a component. Also tackled were upcoming publications and future activities of the network. ❈

Briefings for Potential Partners

In line with the objective of sharing the CBMS methodology and experience to various stakeholders, recent requests from national government agencies and interest groups for briefing were accommodated by the CBMS Network Coordinating Team.

Bureau of Agricultural Statistics

The briefing done for the Bureau of Agricultural Statistics (BAS) was held last March 15, 2004. As the major agency of the country for agricultural statistics, BAS aims to collect, compile, analyze and disseminate timely, accurate, and reliable statistical information in response to the needs of planners, decision and policymakers in both government and non-governmental organizations as well as those of researchers and academics. Concerned BAS personnel are developing a monitoring system to generate information on the conditions of the agriculture-based population and they have used some of the features of the CBMS in the system that they are piloting.

ARMM Social Fund

The presentation done for the Autonomous Region of Muslim Mindanao (ARMM) Social Fund for Peace and Development Project (ASFP) was held last March 19, 2004 at the Angelo King Institute for Economic and Business Studies. This World Bank-supported project aims to foster lasting development in ARMM, which is at the center of the

armed struggle in Mindanao, by reducing poverty and by supporting activities and approaches that promote a peaceful and safe environment in the conflict-affected areas.

Present during this meeting were key persons involved in the implementation of the project.

POPCOM Management Conference
The CBMS briefing for the Commission on Population (POPCOM), a clearinghouse and information resource center on population and family planning, was made part of the Senior Management Conference held on April 23, 2004 at the POPCOM headquarters in Mandaluyong City. The meeting, led by POPCOM Executive Director Tomas Osias, was attended by the POPCOM Regional Directors and Division Heads of the Central Office.

The invitation was extended to the CBMS Network Coordinating Team in pursuit of the need to organize or systematize the gathering, analysis and utilization of micro data to ease population and development (POPDEV) integration into plans, policies and programs at both national and local levels, as well as, support other advocacy efforts. ❋

The conference ran in plenary and small parallel sessions on specific themes, which were based on presentation and discussion of thematic papers from across the Asian region. The country papers, which were presented in plenary, were based on selected Poverty Reduction Strategies and Monitoring in six selected countries in the Asian region. Meanwhile, the thematic papers, which were presented in smaller parallel sessions, tackled these relevant topics:

- Practices in poverty impact monitoring
- Institutional arrangements and micro-macro linkages in poverty monitoring
- Methodology and techniques for poverty monitoring
- Information and Communication Technology (ICT) tools in poverty monitoring. ❋

Editorial Staff