Country Team sees major potential of CBMS in anti-poverty strategy of Tanzania

One of the weaknesses of the Tanzanian National Poverty Monitoring System is the lack of timely and disaggregated data at the local level that can facilitate targeting of development projects. The pilot test of the Community-Based Monitoring System (CBMS) in the Municipality of Dodoma was done to demonstrate how this gap can be addressed. If implemented in other parts of the country, the CBMS will facilitate the availability of these data which augurs well for the accomplishment of some of the objectives of the National Strategy for Growth and Reduction of Poverty (NSGRP). This was one of the conclusions made by the CBMS Team in Tanzania as it wrapped up its pilot testing of the system in Nala village and K/Ndege ward in the Municipality of Dodoma in October 2007.

What follows are some excerpts from their final report:

Context of Implementation

The Government of Tanzania has sought to encourage participatory bottom-up planning with a focus on the objectives of

Enumerators' workshop: Enumerators in Nala and K/Ndge share views after the household survey training exercise

Training of trainors

poverty alleviation since the country's independence was declared in 1961. Several measures were implemented toward this end which include: abolition of chiefdom in the 1960s, introduction of the Regional Decentralization Act of 1972, re-establishment of Local Government Authorities in 1982, formulation of the Local Government Reform Program of 1998 and the review of the Poverty Reduction Strategy (PRSP I) in 2003 and 2004 that led to the National Strategy for Growth and Reduction of Poverty (NSGRP).

In 2004, it developed the Opportunities and Obstacles to Development (O&OD) methodology which defines a process to be followed by the municipalities to achieve participatory planning and monitoring in the context of decentralization. The O&OD methodology is a holistic process which recognizes the role of the local communities in the identification, preparation, and implementation of development projects.

However, since it focuses on community groups, the methodology cannot address the socio-economics of individual people and households; hence, it becomes less applicable for poverty monitoring purposes.

The Dodoma Municipal Council appreciates the fact that good planning and decisionmaking requires a comprehensive municipal information system which captures pertinent data and produces meaningful reports. This can be seen in the Council's 2003-2007 Strategic Plan whereby the development of a statistical database for planning and monitoring purposes was identified as a priority item. The council therefore implemented a CBMS which concurs with the O&OD methodology but goes further to the household level to monitor the poverty status of the individuals in the selected pilot areas and incrementally replicate the same in all wards of the municipality.

Research Objectives

The general objective of the CBMS work in the Municipality of Dodoma is to develop a comprehensive municipal information system that captures municipal, ward and village level data, and produces reports and analyses that facilitate participatory planning and decisionmaking for poverty alleviation. Specifically, the following objectives were addressed:

* Excerpts from the Final Report of the Dodoma Municipal Council, Tanzania

- To improve the capacity of data collectors at the municipal, ward and village units for better processing and analysis;
- To offer grassroot level communities with simple and easy tools to collect data on poverty indicators, to asess the impact of strategies and to determine the trend of poverty;
- To provide policymakers with data to be used for prioritization of projects, effective planning and monitoring of developmental programs in various communities;
- To facilitate the preparation of poverty profiles and development plans;
- To strengthen the flow of information and dissemination of poverty data and information among the stakeholders in all levels; and
- To test a locally feasible data capturing, processing and dissemination system, without necessarily relying on central government resources.

Opening of Municipal Dissemination Workshop

Indicators Used
The indicators used for this work (Table 1) have been developed from four sources namely: (1) consultation with the stakeholders at the municipal level as well as at lower tiers of governance where the end users are found, (2) the parameters of the main sectors which were bench-marked in the Local Government Reform Program, that is, education, water, agriculture and livestock, roads and health, (3) the standard national poverty monitoring system in which the indicators are categorized according to the logical framework of the Poverty Reduction Strategy Paper (PRSP) of Tanzania and Millennium Development Goals (MDGs), and (4) the CBMS literature developed in other countries like the Philippines and Ghana.

Pilot Sites
The system has been pilot-tested in one ward (urban) of K/Ndege, which has approximately 2,396 households, and one Village (rural) of Nala, which has approximately 2,444 households. Both have autonomy in terms of planning and implementation indicating that the CBMS can fairly be adopted in their specific administration units. Meanwhile, the questionnaires were pre-tested on June 17-19, 2006 in Nala village and K/Ndege ward. The results were used for improving the questionnaires, interviewing approach and data compilation.

Data Collection and Verification
Data collection was done by means of three instruments: the household questionnaire, village/ward questionnaire and maps. The enumerators conducted the interviews with the assistance of community leaders and under the supervision of the CBMS team. A total of 4,901 households were interviewed (2423 in K/Ndege ward and 2478 in Nala village). The exercise of preparing spot maps was done by enumerators in the study areas to locate the households and public services. A GPS-supported exercise was also done for the same purpose to complete some parts of Nala village and K/Ndege ward.

Data collection took 26 days in Nala village and 24 days in K/Ndege ward. The time spent was different due to the spatial variation of household distribution in the two study areas. Most of the enumerators could also accomplish only about 8 questionnaires instead of the anticipated 10 questionnaires because most of the prospective respondents were busy during day time (farming season). The village and ward leaders assisted the enumerators

Table 1. CBMS Core Indicators, Tanzania

DIMENSIONS	INDICATORS
Demography	Age groups of population; existing households; marital status; household size
Education	Skilled folk; completion of at least standard seven grades; primary school enrolment
Health and Nutrition	Infant death rate; availability of malaria prevention facilities; health services (scientific and traditional)
Water and Sanitation	Access to safe water; 30 minutes go-collect-return water source; availability of solid waste disposal facility; access to latrine
Agriculture and Livestock	Average yield per hectare (bags); major food and cash crops; availability of farming/livestock implements; crop storage facilities; livestock and crop diseases; number and type of livestock
Roads	Passable road to services; means of transport; 2km distance to passable road
Shelter	Housing type; housing ownership; asset ownership (as proxy for income poverty); status (planned/unplanned/serviced area)
Income and Expenditure	Asset ownership (as proxy for income poverty); expenditure for food and entertainment; food reserve
Participation	Leadership in the community groups; attendance in meetings; registration to formal elections; membership in community-based organizations
Peace and Order	Child labor (NSGPR); cases of beating of wives/husbands, children; violence rate around the neighborhood; crime incidences

Source of Data: Final Report, CBMS Tanzania

with geographical guidance and appointment arrangements. Meanwhile, the village/ward profile questionnaire which sought data about the resources, services and institutional aspects of the pilot areas, was filled in by the local leaders (village executive officer and ward executive officer).

Data Processing and Analysis

Preliminary processing, compilation and analysis of data were done by the trained processors at the ward and village levels. The information was keyed in the data board (which was produced manually).

This database serves as inputs for the preparation of the annual development plan of the ward and village. The summary form of the database was submitted to the municipal office for further analysis. The exercise took one month up to the end of August, 2006 to complete.

At the municipal level, the consolidated data from the ward and village formed the municipal database of CBMS results at the Municipal Planning Office. This was supplemented by other relevant official data from other development actors for various planning and investment purposes. A draft report of CBMS results was prepared and presented at the ward and village levels for validation.

Detailed data analysis was also done at the municipal level by a team of processors under the system administrator. All indicators were interpreted more comprehensively (as indicated in the section of findings) and the exercise of database computerization continued gradually in order to cope with time schedule.

The development of computerized datasets took a bit more time (up to September, 2006) to produce the final findings. The computerized data were very useful for verifying the manual results. The data also formed a basis for future updating and retrieval of information at the municipal level. Meanwhile, the manually developed database continues to be used at the ward and village levels due to unavailability of

computers.

Validation of Results

Validation of the results was an important step in which the communities in the pilot areas were informed about the CBMS survey through workshops. This activity also provided an opportunity to verify the findings, discuss the reasons for the identified issues and proposed possible interventions needed to address the problem areas.

Nala Ward Councilor Hon. Peter Samwel stresses a point in one of the validation workshops

Findings
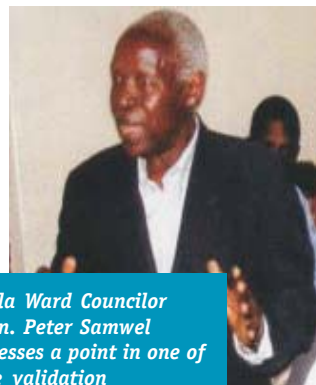
Time of Stay in the Area
In Nala village, all interviewed household representatives have been in the area for more than 10 years and are permanent residents. The case was different in K/Ndege ward where 40 percent of the households have been staying in the ward because they got houses for renting. This characteristic is common in all urban neighborhoods, implying a more dynamic socio-economic structure as compared with rural area.

Demographic Characteristics
The average household size is 5 persons in both study areas . Most households are headed by men and the ones headed by women averaged only 21.1 percent in average. It should be noted that most of the women who headed households are widows. The analysis of age groups shows that the populations of these communes are very young with 44 percent being less than 20 years old. Moreover, children less than 5 years old constitute the most vulnerable group (high mortality), representing 12 and 8 percent of the population in the rural and urban areas, respectively (Table 2).

Education
In Nala Village, the enrolment rate for

male students aged 5-15 years old is on average higher than the female students while the enrolment rate for female students aged 3-5 years old is lower than the male students (Table 3).

A point of concern here is that the illiteracy rate of females is much higher than for males. There are also more female dropouts in both areas, but the rural area out-numbers the urban area. From the standpoint of gender, and in terms of level of enrolment and literacy, the survey confirms the predominance of males in education not only in the study area but also in the entire municipality.

Employment
The main activities through which the people earn their living in the study areas obtained are presented in Table 4. Most of the people in Nala village are employed in crop farming and animal keeping.

The fact that these activities are taking place in a dry area with poor methods and tools calls for more extension service to realize the growth of living standard of the villagers. In K/Ndege ward, most of the household members are government employees.

Apparently, the private sector is substantially growing whereby about 19 percent and 22 percent of the households in Nala village and K/Ndege ward respectively, are employed in trade and minor craft work. Most of the people employed in these activities consist of youths and women.

Shelter, Fuel and Land Ownership
Regarding housing status, a house with a corrugated iron sheet roof, tile roof and concrete wall normally reflects a more comfortable living condition than a thatched house. Moreover, a household with access to electricity supply is one with a relatively better living condition.

Project Updates *Tanzania*

Table 2. Demographic Characteristics in K/Ndege and Nala

Age group(years)	Nala Village				K/Ndege Ward			
	Male	Female	total per group	%total	Male	Female	total per group	%total
< 5	11.2	13.4	1527	12.3	8.2	7.9	951	8
5 - 14	12.1	13.1	1,563	12.6	15.6	13.2	1,694	14.3
15 - 20	20.7	21.3	2,603	21	23.1	27.8	3,025	25.6
21 -25	18.7	20.1	2,406	19.4	19.2	21.1	2,389	20.2
26 - 60	35.8	29.9	4,061	32.8	32.2	27.8	3,532	29.9
>60	1.5	2.2	230	1.9	1.7	2.2	232	2
	100	100	12,390	100	100	100	11,823	100
Total population	**6,046**	**6,344**	**12,390**		**5,565**	**6,258**	**11,823**	

	Nala Village	K/Ndege Ward
No. of households	2,478	2,423
Marital status (%)		
married	67.3	47.9
informal union	1.3	5.3
divorced	3.6	5.7
widowed	24.6	4.9
never married	3.2	36.2

Source of Data: CBMS Survey 2006

"children less than 5 years old constitute the most vulnerable group in terms of mortality"

Table 3. Education Data-Nala Village

Enrolment (%)	Male	Female	Total per group	% of Total
Kindergarten (3- 5years)	4.3	3.2	463	8.8
P/school (5 - 15years)	15.6	13.2	1,781	14.4
High school	18.8	15.2	2,101	17.0
With skills/college	11.6	3.7	936	7.6
Illiterates	27.2	31.3	3,630	29.3
	77.5	66.6	5,281	47.7
Total population	6,046	6,344	12,390	

Source of Data: CBMS Survey, 2006

Health and Nutrition
The results on health and nutrition in the study areas are summarized in Table 6 where its shows that the disease rate is high especially for typhoid, trachoma and malaria. In 2006, more than 65 percent of the people had malaria and more than 50 percent had typhoid in both rural and urban areas. These diseases are very prevalent in Dodoma. Trachoma cases are also very common due to water shortage and lack of proper medication, especially in the rural areas where blindness is very common.

"in terms of level of enrolment and literacy, the survey confirms the predominance of males in education in the municipality"

Agricultural land is very valuable for rural livelihood but most of the households own less than 3 hectares which can not support a household of 5 people. The land is highly degraded and deforestation has led to wind erosion in most of the farming areas.

As for house ownership, Table 5 shows that 92.4 percent of households in the rural area own their houses, 6.0 percent live in their relatives' houses and only 1.6 percent rent the house. However, most of the houses are of poor building materials; hence, poor living condition. In terms of electricity, because it is very expensive in Tanzania, all households in the urban and rural areas use charcoal and fuelwood for cooking. Electricity is mostly used for lighting in the houses.

From this table too, only about 22 percent

Table 4. Employment

Activity (%)	Nala Village			K/Ndege Ward		
	Male	Female	Total	Male	Female	Total
crop farming	16.4	19.2	35.6	3.4	4.2	7.6
animal keeping	21.2	2.2	23.4	1.5	0.6	2.1
trading (shops, craft)	15.7	3.6	19.3	13.7	8.5	22.2
community services	9.2	4.0	13.2	6.3	5.8	12.1
construction	1.1	0.1	1.2	12.2	1.1	13.3
government employee	4.8	2.5	7.3	27.3	15.4	42.7

Source of Data: CBMS Survey, 2006

of the households in the rural area own more than 3 hectares of land; but in Dodoma, due to the low-carrying capacity of the land, a minimum land parcel that can support a household of 5 people is estimated to be 5 hectares. In the urban areas, people tend to hire land in the urban fringe in order to supplement their income.

The survey reveals that the rural community (compared to the urban community) experiences higher death rate, morbidity cases, underweight prevalence and micro-nutrition deficiency.

The main reason was reported to be poor health services and ignorance pertaining

to nutritional composure. The rural community is also affected by traditional rites of Female Genital Mutilation (FGM) which causes deaths and transmission of diseases through blood. This information was obtained through informal discussions with the female participants in focus groups.

Water and Sanitation
Survey results on access to water and sanitary facilities are shown in Table 7.

Table 7 shows that 62.2 percent of all households in Nala get their water from the boreholes. Given the fact that most of the villagers do not boil water for drinking, claiming that it loses taste, the prevalence of typhoid and other stomach-based illnesses can be attributed to it. The situation is even worsened by poor

Table 5. Shelter, Fuel and Land Ownership

	Nala Village	K/Ndege Ward
Shelter type (%)		
CI sheets and bricks	7.4	92.3
CI with mud and poles	58.6	7.7
Mud/thatch roof and mud wall	34.0	0.0
Fuel type (%)		
With electricity	3.2	99.2
Using charcoal	100.0	100.0
Using firewood	100.0	1.2
Shelter ownership (%)		
Ownership	92.4	36.7
Relative	6.0	19.7
Renting	1.6	43.6
Land ownership (%)		
Owning 3 ha parcel	22.2	0
Owning <3 ha parcel	67.8	83.5
Hiring >= 3 ha	5.3	11.3
Hiring <3 ha	4.2	5.2

Source of Data: CBMS Survey, 2006

Table 6. Health and Nutrition

Indicator	Nala Village	K/Ndege Ward
Infant death rate	7.4	2.6
Morbidity cases	13.2	7.3
Underweight prevalence	39.3	5.2
Malaria prevention facility(net)	11.2	83.8
Micro-nutrition deficiency	53.2	16.2
Most common diseases		
Malaria	68.7	75.3
Typhoid	57.4	52.3
Meningitis	15.3	2.5
Trachoma	85.6	23.5
Health provider consulted		
public medical facility	100	100
private medical facility	16.8	75.8
traditional healer	100	12.4

Source of Data: CBMS Survey, 2006

> **"the disease rate is high especially for typhoid, trachoma and malaria"**

rural areas in Tanzania, Table 8 shows that average expenditure of less than 30 USD on food per month and less than 5 USD on entertainment per month are considered to occur in poor households whereas in urban areas, said expenditures are estimated at an average of 90 USD and 30 USD, respectively.

sanitation, of which 15.6 percent have no toilets.

Further, it was noted that some villagers have latrines but they do not use them, attributing this attitude to some traditional customs of the Gogo Tribe. In K/Ndege, water availability is satisfactory but the question of safe water requires extension service from the health department. Waste disposal in K/Ndege poses a significant

problem of environmental pollution especially by the plastic bags which are very common in urban areas.

Income and Expenditure in Nala and K/Ndege
Income and expenditure were estimated by using the proxies related to asset ownership, food reserve and purchasing power for food and entertainment. For

Table 8 likewise shows that the majority of the households have no valuable assets and food reserve. Although this situation is more prevalent in Nala village, the urban ward appears to suffer the same. The standard of living is three times better in the urban area than in the rural area on the aspects of food and entertainment. This can be attributed to the availability of more employment opportunities in the urban areas.

Roads

The households that are well linked by roads to services were considered to have good living condition. Table 9 below summarizes the results.

More than 50 percent of the households in Nala village are not linked by road to the services. The survey also reveals that most of the residents go on foot to the service areas like market, dispensary, school and the like. The most vulnerable groups are women and children as they are directly involved in housechores.

Participation

The survey results (Table 10) show that participation of women in meetings and social group committees is low (12.6 percent) in Nala village as indicates compared with K/Ndege ward which is high at 65.2 percent. This indicates that most of the functions in the village are not formally organized as the villagers use clan approach.

Table 7. Water and Sanitation

	Nala Village	K/Ndege Ward
Access to water		
pipe - on site	0	72.3
pipe - off site (public point)	37.8	22.4
borehole	62.2	0
vendor	0	5.3
Access to latrine		
Water closet (WC)	0	68.3
Improved pit	12.2	31.7
Earth pit	72.2	0
No latrine	15.6	0
Solid waste disposal		
Collected	0	23.2
Buried on site	45.2	75.1
Crude disposal	54.8	1.7

Source of Data: CBMS Survey, 2006

> "**majority of the households have no valuable assets and food reserve**"

month in Nala village while for the urban areas, frequency was much higher. Also noted is a problem of harassment of children who in consequence tend to migrate to urban areas where they loiter in the streets. The blind people are also mistreated by their poor families, making them resort to migration to town.

Table 9. Roads

Link to services	Nala	K/Ndege
well linked	33.2	82.8
fairly linked	12.2	12.6
not linked	54.6	4.6
	100	100

Source of Data: CBMS Survey, 2006

Encountered Challenges

In the course of doing this study, various problems were encountered. The problems offer important lessons for improving future development of CBMS in other areas in Tanzania. These include the following:

1. The survey should be conducted during the non-farming period in Nala village. This would be around March up to May when most of the villagers are in their homes. This would avoid making re-appointments which entailed more costs.

2. Because of the difficulties encountered in using the NRDB mapping software, the findings have to be prepared using the MS Excel package. However, the NRDB program continues to be practiced by the team members who have followed the training so that it can be employed in the future project areas.

Table 8. Income and Expenditure in Nala and K/Ndege

	Nala Village	K/Ndege Ward
Assets ownership		
radio	41.2	97.4
television	0	12
bicycle	5.2	48.9
vehicle	0	15.2
stove	3.2	100
refrigerator	0	30.5
modern bed	2.3	81.2
plough	0	0
With food reserve	3.4	28.2
Expenditure per month		
On food	30 USD	90 USD
On entertainment	5 USD	30 USD

Source of Data: CBMS Survey, 2006

Peace and Order

The study also focused on incidence of violence and crimes in the neighborhood (theft, sabotage, fighting, sexual abuse to women in the households and the authority to ask for help when these problems occur). The results are summarized in Table 11.

The figures may be lower than reality because many households seemed to hide some incidences. There were about 4 incidences of crime in the households per

Table 10. Participation in Community Activities

Participation	Nala Village		K/Ndege Ward	
	Male	Female	Male	Female
meetings	75.2	12.6	92.4	65.2
committees	17.3	6.2	52.2	21.3
leadership in community groups	25.5	10.7	52.5	18
elections	78.8	67.2	89.3	78.5

Source of Data: CBMS Survey, 2006

Table 11. Peace and Order

Monthly incidences	Nala Village	K/Ndege Ward
Crime incidences in the area	4	6
Violence at home	2	3
Humiliated women (abuse)	3	2
Humiliated men	0	0

Source of Data: CBMS Survey, 2006

3. A rate of 1,000 Tshs ($0.75) per household, which takes an average of one hour to interview, on the expectation that eight households could be interviewed per day, was appropriate for most villagers. However, this amount was not suitable for interviewers who surveyed the remote households and thus could interview less than the planned number of households per day. The people in Nala village are dispersed and poorly connected by roads. It therefore costs more for the enumerators to travel to the villages and households.

4. It was easier to find and hire enumerators with a reasonable capacity in K/Ndege due to the fact that the urban influence makes it possible to find more literate people who could follow the exercise quicker than those in the rural area. This factor might have led to more errors observed in the completed questionnaires in Nala village than in K/Ndege ward.

5. The most difficult parts of the questionnaire were the questions on household income and expenditure that needed a careful analysis and people's willingness to respond. During the interviews, all the enumerators reported difficulty in obtaining information about household income and expenditure, and domestic violence. Most of the interviewees could not recall how much they earned monthly and annually.

Recommendations

Based on the results of the pilot test, some important recommendations are presented to improve the implementation of the CBMS in Tanzania. The recommendations also consider the opinions obtained from the dissemination workshops at the municipal and national levels.

1. *Indicators*

    In order that the set of core indicators used in the pilot test becomes well linked to the present local government database, the national priority sectors should be explored more explicitly during the replication phase. These sectors include education, agriculture, health, infrastructure, water and lands. Moreover, integration of the present municipal database in the CBMS process will attract support from the ministry of local governments as the system will use the same key persons and equipment as per municipal budget.

2. *Data Collection Methodology and Instruments*

    The collection of household data, accompanied by a local leader, was a good idea especially to assist in identifying a relevant respondent. This approach can be improved by preparing a list of relevant respondents beforehand (also through the help of a local leader) to avoid a wrong choice by the interviewer when "rushing" to accomplish the exercise.

    The developed capacity of enumerators and database supervisors should be fostered in each geopolitical unit as the people involved are also the ones responsible for continuously updating the databases. The council should not deploy their transfer prior to having reliable replacement.

    Knowledge about the seasonal calendar of activities undertaken by the prospective interviewees is important in order to avoid their absence during the household survey. For rural communities, for instance, it becomes more convenient when the survey takes place during non-farming season.

    The use of GPS for plotting such objects as houses and other landmarks should be encouraged where available. This simplifies the exercise of mapping and computerization of the related data. Aerial photographs can also be useful tools in this exercise where the expertise is available.

3. *Data Processing and Instruments*

    Refresher training should

Representatives from the Ministry of Local Government (MLG), Ministry of Labor and Youth Development (MLYD), Ministry of Economic Planning and Empowerment (MEPE), Prime Minister's Office, Association of Local Authorities of Tanzania, Members of Parliament and Regional Administrative Secretariat pose during the National Workshop

frequently be given to the trained data processors so that they can assist in the replication of the CBMS process in other areas instead of relying on consultants. This will reduce the costs of implementation and promote local capacity.

A preliminary knowledge gained about the NRDB as a tool of processing the CBMS datasets has led to the need of promoting and propagating the program among the key persons dealing with the CBMS project. Sufficient capacity on this tool should be sought by the Municipality by linking possible backing arrangements with the CBMS Network.

4. *Data Validation and Analysis*

Participants to the validation workshops need to be selected carefully so that they can follow the results and can come up with the strategies for intervening the identified issues. When the council management team is involved, it also gives an opportunity of getting support from the upper tiers of local governments.

Computerized data analysis is highly encouraged as it saves time and gives more comprehensive simulation of results. The present efforts of the council to install computers in all departmental sectors are steps in the right direction.

5. *Database Building*

The strength of database building should principally start at the community level where data are captured. This can be achieved when the extension officers are frequently capacitated with tools and knowledge. The municipality holds a role of ensuring that the personnel and necessary tools involved in this activity are always available at local and municipal levels.

Conclusion

In conclusion, a thorough completion of the development of the Community-Based Poverty Monitoring System in Tanzania can address the following issues:

- Contribute in fulfilling the role of Local Government Authorities (LGAs) in generating data to feed into the National Poverty Monitoring System (PMS). The current work will build the capacity of local government actors on what type of data are needed to feed into the PMS and how these data could be collected.

- One of the weaknesses in the Poverty Reduction Strategy monitoring system was lack of timely routine data. The CBMS, if implemented in other parts of the country, will facilitate the availability of timely routine data to feed into the National Strategy for Growth and Poverty Reduction (MKUKUTA).

- The Tanzania Social Economic Database (TSED) has been established as a depository for poverty-related data/indicators. These data are organized by sector. As much as it is the wish of the TSED team to disaggregate data to the lowest possible level, this has not been possible below the district level. This is because data are not available.

Thus, there is a function for this pilot work in contributing toward capacity building on data collection at the Ward- and even Village levels. These data could be deposited in the TSED by regions and lowest administrative units as these data could be used for comparative purposes, thereby leading to informed targeting of development projects. ✳

Local Level Poverty Monitoring System (LLPMS) generating face of poverty in Comilla

Children aged fourteen and below comprise 38 percent of the Comilla population

Filling information gaps has always been a research challenge. And with this view in mind, the Bangladesh Academy for Rural Development (BARD) experimented on a monitoring system that will generate grassroots level information about poverty. The research team - Ranjan Kumar Guha, Md. Abdul Quader, Abdullah Al Mamun and headed by Deputy Director Mr. Mohammed Mir Kashem-enjoined the help of the local government and stakeholders into developing a user-friendly and cost-effective monitoring system named as "Local Level Poverty Monitoring System (LLPMS). The system was conducted from 2003 to 2005 at Muhammadpur (west) Union of Daudkandi Upazila, Comilla under the auspices of IDRC-Canada and the CBMS International Network, Philippines.

The LLPMS follows five core principles: community participation, involvement of local government as key actor, quick dissemination of information, validation of information, and creation of a sense of ownership in gathering information. Clearly, the LLPMS seeks to empower the grassroots level by providing them with data pertinent for poverty monitoring and targeting of development plans.

The implementation mechanisms of LLPMS involve four general components addressing the multidimensionality of poverty. These are: (1)Participatory Poverty and Development Monitoring (PPDM) whose indicators are socio-economic in nature; (2)Resource Profile Mechanism (RPM) which identifies resources and potential use of such resources; (3)Ward Development Planning (WDP) which uses information generated from the PPDM and RPM; (4)Dissemination of Information (DI).

Muhammadpur (West) is one of the 15 unions in Daudkandi Upazila under the Comilla district which registers a total land area of 14.91 square km. away from the Upazila and district headquarers. Almost every year, the people of the Union Parishad experience flooding affecting the majority of the residents especially those who are primarily engaged in agriculture.

During the August 26, 2006 National Workshop held in Dhaka, development professionals, academicians and research practitioners gathered to listen to LLPMS findings (experimental phase) of the project which tested the methodologies and poverty indicators of the whole villages of Sreepur Union of Choudagram Upazila, Comilla.

Two of the major outputs include the creation of a Ward Information Book and Ward Plan Book that will be used for area-specific programs.

From that workshop the relevant findings presented were:

Demographic Characteristics

The total population of Comilla district is 21,411, with a total number of 3,761 households (each household averaging 5.69 in size). Nearly 38 percent of the population belong to the age group 0-14 years old and around 4 percent belong to the age group 65 years old and above. These indicate that more than two fifths of the population are economically dependent on the three fifths of the active labor force.

Most households are headed by male (98.3 percent), with Comilla having an average household size of 5.69. Moreover, 91.3 percent are Muslims.

Professions of the Heads of Households

Around one fourth of the household heads depend on farming as their means of livelihood. Agricultural and nonagricultural laborers constitute 18 percent of them. Household heads engaging in business register at 15 percent while those involved in service and rickshaw pulling comprises 8 percent. Household

Household and Population Characteristics		
Number of Households		3,761
Sex of HH Head	Male	98.3
	Female	1.7
Population		21,411
	Male	11,223
	Female	10,188
Average Household Size		5.69
Sex Ratio		110.15
Religious Status	Muslim	91.3
	Hindu	8.7

Age Structure of the Population			
Age groups	Male	Female	Both Sex
0-4	1,178	1,219	2,397
5-9	1,335	1,340	1,675
10-14	1,546	1,397	1,943
15-49	5,715	5,151	10,866
50-64	944	780	1,724
65 and above	505	301	806
Total	11,223	10,188	21,411

Profession of Household Heads		
	Number	%
Farming	943	25.07
Laborer (Agri and Non-Agri)	691	18.37
Business	570	15.16
Service	310	8.24
Rickshaw Pulling	296	7.87
Remittance Earner	213	5.66
Hereditary Profession	141	3.75
Professional	126	3.35
Others	471	12.52
Total	3,761	100

Source of Data: LLPMS Survey, 2005

heads employed outside the country (contributing to the family as well as the national economy through remittances) register at 6 percent, followed by those with professions such as barbers, washers, fishermen, and closely followed by teaching, medicine and legal pro-fessionals.

Health and Poverty

The study showed that per thousand live births, the Infant Mortality Rate is 8.84 and the Maternal Morality Rate is 2.52. They are seen lower than the national

Participatory Planning: Setting the boundaries of the village is the first step

average. In most cases of delivery, newborn babies are handled by untrained Traditional Birth Attendant (TBA) whereas only 30 percent of the newborns are delivered under the supervision of health assistants or trained TBAs.

Nearly 88 percent of the tube-well water are contaminated by arsenic. While there are arsenic-free tube wells in the Union, but people are nonetheless used to fetch their water from the tube wells nearest their doorstep, which may happen to be contaminated. Hence there are efforts to expand access to safer drinking water in the area.

Education and Poverty

There are nine primary schools in the area but no secondary school. There are, however, nine madrasas (religious schools), a kindergarten school and two non-formal schools in the union being run by BRAC. Literacy rate for 7 year-old and 15-year old youths egister at 46 percent and 51 percent, respectively.

Dropout rates for the poor both at the primary and secondary levels of education are higher if compared with the non-poor, earning 1.53 percent and 9.48 percent ratings in primary and secondary schools, respectively.

Ownership of Assets and Living Environment

The average area of owned land and operated land is 0.7 acres. One third of the total poor and one fourth of the total non-poor are renting in 0.55 and 0.84 acres of land, respectively. More than one third and 83 percent of thehouseholds rear, on an average, 1.33 cows and 10.04 poultry. More poor households rear poultry while more non-poor households rear cows. Shortage of fodder due to lack of grazing lands and regular flooding and stealing of cows in the area hinder the people from rearing poultry or cows on a higher intensity.

Most houses are made of CI (corrugated iron) sheets or cement (99 percent). This is a sign of well-being in the households in the area. More than one-fourth and nearly four-fifths of the households have radio and television sets respectively. Mobile phones are used individually or commercially by 5 percent of the households.

Employment and Income

Labor force participation rate stands at 72 percent, with a 75 percent for poor and 69 percent for the non-poor. Unemployment and under employment registered a high 19 percent. On an average, 1.5 percent of children 5 to 14 years old are found to be involved as child laborers.

Problems Encountered

As with any process, the implementation of LLPMS in Bangladesh also encountered problems. One major problem is sustainability. The lack of staff workers threaten the continuation of the project. Since maintaining the Ward Book is tedious, it requires staff willing to continue doing the job.

Another problem is the lack of technological skills to work with the computer for data processing. A decision has already been taken to train some local people who have computer background.

Poverty monitoring at the local level is gaining importance theoretically and practically. Many service delivery agents and stakeholders have realized its importance. Apart from any other technical learning, poverty monitoring as an experience shows that cooperation, especially in this field, is invaluable. ✳

CBMS Core Indicators, Bangladesh

BROAD AREAS	INDICATORS
Demographic	Number of Households (HH); Number of Population; Average Household Size; Sex Ratio (males per 100 females); % of HH in Different Religion; Age Structure of the Population
Income Poverty	Head Count Rate under Self Perception Method; Head Count Rate under Villagers Perception Method
Health	Infant Mortality Rate (per 1,000 live births); Maternal Morality Rate (per 1,000 live births); % of HH not using sanitarylatrine; % of tube wells contaminated by arsenic; Parentage of deliveries bot by Trained Birth Attendants or in health centers
Education	Net Enrolment Rate (Primary); Net Enrolment Rate (Secondary); Drop out Rate (Primary) ; Drop out Rate (Secondary) ; Literacy Rate (7 years and above); Adult Literacy Rate (15 years and above); % of People having SSC or above qualifications (15 years and above)
Productive Asset (Land)	Average owned land per households (acres); Average operated land (acres); % of HH involved in renting-in land; % of HH involved in renting-out landlAverage of rented-in land (acres); Average of rented-out land (acres)
Productive Assets	% of HH having oxen; Average number of oxen; % of HH having cows; Average number of cows; % of HH having goats; Average number of goats; % of HH having duck/poultry Average number of duck/poultry
Housing	% of HH having houses made of CI sheet or pucca building; % of HH having electricity
Household Assets	% of HH having tape recorder or radio; % of HH having television; % of HH having mobile telephones; % of HH having chair; % of HH having cot; % of HH having cupboard; % of HH having sewing machine; % of HH having table
Employment and Income	Labor Force Participation Rate; Unemployment Rate; Under Employment Rate Child Labor; Per HH per month average income (Tk.); Per HH per month average expenditure (Tk.); Wage Rate
Access to Development Organization and Credit Market	% of HH involved in development organizations; Average number of people per HH involved in development organizations; % of HH having taken loan; Average number of loanees in HHs
Vulnerability	Nature of Crisis; Crisis Coping Mechanism

Census data collection in Tana River district to push forward

The Local Poverty Monitoring System (LPMS) in Tana River district in the Coast Province of Kenya will proceed to collect data in the three pilot sites of Tarasaa, Laini and Walesorrhea sub-locations in June 2008 after its postponement due to political unrest.

Starting May last year, the African Institute for Health and Development (AIHD), together with the Kenyan government and various organizations designed the LPMS. It aims to determine specific causes of poverty in Tana River district and seeks to establish a process through which the communities can identify the poorest among them for support.

Qualitative data were collected through survey from the three pilot sites in February this year, as well as through focus group discussions (FGDs) and in-depth interviews. Enumerators were trained in data collection, transcription of FGDs, and construction and analysis of seasonal calendars.

Review of Existing Monitoring Systems
All data relating to poverty are traditionally gathered by the Kenya National Bureau of Statistics (KNBS). However, the data are usually collected in aggregates and released after long periods of time. Other monitoring systems use clusters as a representation of the whole population, thereby making it hard to identify individuals who need support.
The LPMS adopted the Comunity-Based Monitoring System (CBMS) to fill this gap.

The Study Sites
The study focused on Tana River district which is characterized by underdevelopment, poor infrastructure, poor communication facilities and social marginalization characteristic of conflict prone areas. It is also inhabited by people of different ethnic backgrounds.

The study focused on the district's three sub-locations representing three different livelihood zones: pastoral, mixed farming and marginal mixed farming zones. The three sub-locations are also representative of the three divisions making up the district: Hola, Bura and Garsen.

CBMS Core Indicators, Kenya

VARIABLES	INDICATORS
Health	0-5 children's deaths; women deaths due to pregnancy related causes; households accessing health services; including FP, when required; household members who have been sick in the last two weeks; household members suffering from preventable conditions e.g. malaria and diarrhea; household members with disabilities
Nutrition	children 0-5 years old who are malnourished; households who had at least 3 balanced meals a day in the last one month
Family size and type	dependents; polygamous families; male-headed households
Shelter/housing	households living in makeshift housing; households who are squatters
Water and sanitation	access to potable water supply; access to sanitary toilet facilities; average distance covered by women in search of water
Basic education	children aged 6-12 years old who are not in elementary school; children aged 13-16 years old who are not in secondary school; youth aged 15-24 years who are not literate
Income proxies	households that experienced food shortage in the last 3 months; livestock; farm land; households that lost farm produce in the last 12 months
Employment	persons who are employed; youth aged 15-24 years who are engaged in income generating activities
Peace and Order	households with persons who experienced conflict in the last 12 months
Gender Equity	women who experienced gender violence in the last 12 months; women with access and control of land and other resources; women who can bargain for safe sex; women with power to decide family size
Political Participation	eligible members to vote and who voted in the last general election

Source of Data: A Local Poverty Monitoring System (LPMS) for Tana District, Kenya

Ethnic Conflicts
The year-long political unrest in 2007 has had significant effects on the timetable of the study. However, the qualitative data collection conducted in February yielded results that would be utilized for the census questionnaire. Identified were drivers of poverty, primary of which were: ethnic and human-wildlife conflict, high illiteracy levels, poor infrastructure, seasons of drought and communal land ownership.

Between the Orma and the Wardei, politics has had a hand in their conflict. For a long time, the Wardei leaders have dominated the politics of the pastoral community. But surprisingly, in the last election, an Orma won parliamentary seat. In 2007, a year-long conflict erupted resulting in deep resentment between the two communities.

The lack of pasture and water supply during dry spells plays a big part in the ethnic conflict between the Pokomo and the pastoralists (Orma and Wardei). To illustrate, a major conflict erupted in 2001 between the two which lasted for three months.

Taking into account the big role that conflict and ethnicity play in Kenya, indicators based on the CBMS core indicators were designed for the LPMS.

The CBMS Kenya indicators will be used to provide evidence for the initiative needed to mitigate poverty in Tana River district. The data set will also be useful for organizations already working in the area such as the Kenya Agricultural Productivity Project (KAPP), Kenya Red Cross Tana River, OXFAM, Catholic Relief Services (CRS) and others in gauging the impact of their interventions.

Pre-testing
A pre-test was conducted for the household questionnaire in May 2008. The three pre-test sites selected were areas with similar characteristics as the pilot sites.

The enumerators who took part in the pre-test exercise were all residents of Tana River district.

The chiefs and village headmen were also involved in sensitizing the people about the exercise. They provided guidance to the enumerators in locating households and ensured community acceptance of the enumerators.

Although the pre-test exercise was largely successful, most enumerators said that the questionnaire was too long which would require a lot of time is spent on interviewing one respondent.

Another difficulty found during the pre-test was getting hold of respondents since the pre-test was carried out during the

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planting season.

Some respondents were also attending church services since the pre-test was done on a Sunday. Thus the number of Muslims interviewed was more than the Christians.

Data on income were also difficult to get, especially those from self-employed respondents. Demographic data were also difficult to gather, especially in polygamous families.

The findings from the pre-test helped in the revision of the questionnaire, thus making Tana River district more ready in its data collection phase this June. ✱

Philippines

NAPC Lead Convenor heads monitoring team visit to Eastern Samar

Secretary Domingo F. Panganiban, Lead Convenor of the National Anti-Poverty Commission (NAPC), looks on while Mayor Gil Norman Germino of Can-avid, Eastern Samar samples the water from a Level 1 Water System Project funded under the CBMS-UNDP Development Grant Program.

The project was conceptualized and submitted to the CBMS Network Coordinating Team for possible funding in 2007 after the data generated from the CBMS Survey in 2006 revealed that 1,122 or 31 percent of households in the municipality have no access to safe drinking water. Secretary Panganiban headed a monitoring team composed of representatives from the Department of Social Welfare and Development (DSWD), the Department of the Interior and

Local Government (DILG) and the CBMS Network Coordinating Team which visited three project sites in the province on May 28-30, 2008 to assess the impact of UNDP-funded projects on the beneficiary communities. ✱

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