



**CBMS**

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# Implementation of Community-based Poverty Monitoring System in Tanzania

Rangya Kyulu Muro



Ministerio de Economía y Finanzas

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# **Community-Based Monitoring System (CBMS) Network**

## **Implementation of Community-Based Poverty Monitoring System in Tanzania**

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**By  
Rangya Kyulu Muro,**

**For CBMS Team, Dodoma Municipal Council, Tanzania**

## **1.0 Introduction**

The Municipal Council of Dodoma has adopted the Community-Based Monitoring System (CBMS), implemented in two pilot areas namely Nala village and K/Ndege ward under the auspices of PEP Network. The project started in May 2006 and is expected to be completed by this year 2007. Presently, the preliminary results have been released but there are some areas which are being reviewed in order to fine-tune the report.

## **2.0 Rationale for CBMS Work**

### **2.1 CBMS Development Objectives in Tanzania**

The general objectives of CBMS in Tanzania are:

- To develop a comprehensive municipal information system that captures municipal, ward and village level data, and produces reports and analyses that facilitate good planning and decision-making for poverty alleviation.
- To promote participatory planning and budgeting through the use of CBMS

The specific objectives for better interpretation of the general ones were identified as follows:

- To improve capacity of data managers at the municipal, ward and village units for better data collection, processing and analysis;
- To offer grass root level communities with simple and easy tools to collect data on poverty indicators that could be used to determine the impact of poverty reduction strategies and poverty ;
- To provide policy makers with data to be used for prioritisation of projects, effective planning and monitoring of developmental programmes in various communities;
- To facilitate the preparation of community, wards and district poverty profiles and development plans.

- To strengthen the flow of information and dissemination of poverty data and information among the stakeholders in all levels.
- To test a locally feasible data capturing, processing and dissemination system, without necessarily relying on central government sources.

## **2.2 Importance of Local Monitoring System – CBMS in Tanzania**

Local Monitoring System provides the grass root level communities with simple and easy tools to collect data on poverty indicators, to tell the impact of strategies and to determine the trend of poverty by themselves.

The Community Based Monitoring System (CBMS) is basically a monitoring tool albeit localized. Accordingly, application/implementation of CBMS will contribute to the Poverty Monitoring System in Tanzania that was established in 2001, to track changes in Poverty Reduction Strategy (PRS) priority sectors and impact on income and non-income poverty as described in the Poverty Reduction Strategy Paper (PRSP). The system has been crucial in generating data and information to Government and other actors for planning, monitoring, and policy making. This information has been used to facilitate policy dialogue, as evidenced in policy reviews at macro, sectoral and Local Government Authority (LGA) levels. The information has further been utilized and disseminated through various policy forums, in particular the Poverty Policy Week (PPW) which has been an annual event since 2002. This forum continues to be a key event for policy discussions and information sharing from the Monitoring System.

The original Poverty Monitoring System has been revised through a thorough consultative process to provide a national integrated approach to monitoring and evaluation utilizing the MKUKUTA as the guiding medium-term framework. This includes comprehensive outcome-focused monitoring which builds on lessons from the original Poverty Monitoring System. It also includes the consolidation and aggregation of outputs from Ministries, Departments and Agencies, and Local Government Authority based on their Strategic Plans, Annual Performance

Reports and Medium Term Expenditure Frameworks. The system is designed to monitor and assess changes during the implementation period of the MKUKUTA (2005-2010). It seeks to reveal reasons for successes and failures in order to inform corrective action and improvements.

### **2.3 Expected Results/Fulfillments of CBMS**

CBMS is expected to bring in place various results at local and national levels. At local level, the system can facilitate the production of Poverty profiles and maps, preparation of development plans, and enhancement of local capacity building. Simple tools and core indicators which are locally well-perceived for poverty monitoring are also developed. Articulating from national perspective, the Community Based Poverty Monitoring System stands to fulfill the following:

- Contribute in fulfilling the role of Local Government Authorities (LGAs) in generating data to feed into the National Poverty Monitoring System (PMS). There are three Technical Working Groups (TWG) under MKUKUTA Framework that are all contributing towards achievements of the goals of Poverty Monitoring System. These are: Research and Analysis TWG; Survey and Routine Data TWG; and Communications TWG. Thus, the current work will build capacity of local government actors on what type of data are needed to feed into the PMS and how these data could be.
- 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 availability of timely routine data to feed into the MKUKUTA PMS.
- 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 district level. This is because data are not available. Thus, there is a niche in this pilot work in contributing towards capacity building on data collection at Ward level and even Village level. These data could be deposited in TSED by Regions and lowest administrative units and these data could be used for comparative purposes, thus leading to informed targeting of development projects

- Capacity building for data collection and collecting data for monitoring poverty at local level is imperative given the fact that it will reduce the need of conducting costly national surveys such as Household Budget Surveys (HBS), Integrated Labor Force Surveys etc. This serves the cost of conducting large surveys.

### **3.0 Design of the System**

#### **3.1 Institutional Arrangements**

##### Required human resources at the local level

The system requires human resources such as: local leaders and volunteers at mtaa, kitongoji, and ward levels in order to accomplish a continuous collection and interpretation of poverty data that can be used to develop and update the CBMS database. This forms a basis for preparation of development plans. Other involved parties include NGO's, CBO's, and Savings and Credit Cooperative Societies who can play the roles of information dissemination and data sharing. Local community has participated in developing the basic poverty indicators and tools.

To do this, capacity building was conducted on the approach, data collection and analysis whereby the involved participants were: Village Executive Officers, Ward Executive Officers, Extension workers and residents (retirees, local influential people).

### 3.2 Indicators

The indicators were generated through consultation of other development actors, Millennium Development Goals, the National Strategy of Growth and Poverty Reduction and national Poverty Monitoring System. The factors considered were: CBMS standard characteristics and local environment of application which focus on the outstanding problems and available resources. The developed indicators and their related sectors are summarized in the table below:

<b>Component</b>	<b>Indicators</b>
Demography	Age groups population
	Existing households
	Household size
	Marital status <b>(FT)</b>
Education	Primary school enrolment,
	Completion of at least standard seven <b>(FT)</b>
	Literacy rate by gender <b>(NSGPR)</b>
	Skilled folk
Health and nutrition	Infant mortality rate
	Morbidity cases
	Health Services (skilled and local) <b>(FT)</b>
	Prevalence of underweight
	Availability of malaria prevention facilities <b>(MDG)</b>
Water and sanitation	Prevalence of micro-nutrition deficiencies
	Access to safe water
	Access to latrine
	30 minutes go-collect-return water source <b>(NSGPR)</b>
	Availability of solid waste disposal facility
Agriculture and livestock	Major food and cash crops
	Average yield per hectare (bags)
	Availability of farming/livestock implements
	Availability of backyard gardens
	Crop storage facilities
	Number and type of livestock
Roads	Livestock and crop diseases
	Passable road to services
	2km Distance to passable road <b>(NSGPR)</b>
	Means of transport
Shelter	Housing type
	Housing ownership
	Land tenure
	Status (slum or planned area) <b>(MDG)</b>
Income and expenditure	Asset ownership (as proxy for income poverty)
	Proportion of working age population

	Expenditure for food and clothing
	Membership in Savings and credit co-operative societies <b>(FT)</b>
Participation	Membership in community-based organizations
	Registration to formal elections
	Attendance to meetings
	Leadership in the community groups
Peace and order	Crime incidences
	Violence rate around the neighborhood
	Women emancipation
	Cases of beating of wives/husbands, children
	Child labor <b>(NSGPR)</b>

Source: CBMS Dodoma, 2006

The indicators from Fomu ya Takwimu (FT), the National Strategy for Growth and Poverty Reduction (NSGPR) and Millennium Development Goals (MDG's) were added to the list of the indicators that was originally developed by the project as shown in the final list in the table

The compatibility of the indicators with other national statistics is reflected in Poverty Monitoring System (PMS) and Tanzania Socio-economic Development (TSED) which are linked through NSGPR (Mkukuta)

#### **4.0 Instruments and Training Modules**

##### **4.1 Designing data processing tools:**

Data processing tools have been developed for both manual and computerized processing. Manual processing was divided into three parts:

- (i) filling up of spreadsheet frames by the enumerators,
- (ii) tabulation of data to produce a pilot area statistics base, and
- (iii) aggregation of all the survey area data which were finally analyzed.

In addition, a data entry frame in Ms Excel was developed for computerized processing by the consultant in collaboration with the identified six processors. This was also used to verify the accuracy of manual processing.



A GPS (Geographic Positioning System) gadget was obtained as a gift from the City of St. Albert, Canada (a Partnership city with the Municipality of Dodoma). The gadget was used to locate and plot the houses (main) and some infrastructures on the maps which would later be processed in GIS environment.

#### **4.2 Data Collection**

The Census approach was employed for data collection which used household questionnaires, official questionnaires and Maps. The survey covered Nala village with 2,478 households and K/Ndege Ward with 2,423 households (100% of the households). The enumerators were selected from ward/village workers, retirees and local leaders using the criteria that, they reside from the pilot area; they are literate and can perform some basic calculations. These enumerators were trained by using the modules adopted from CBMS process document and interpreted in Kiswahili language.

#### **4.2 Consolidation and Processing of Data**

After the survey, all of the 4,901 completed questionnaires were checked and verified by the enumerators and 20 leaders from each study area. The leaders were there to clarify the answers to reduce the burden of going back to the field. About 1 percent of the questionnaires were found to contain some errors, which required the responsible enumerators to re-interview the households. Errors were mostly related to the household income and expenditure, and ownership of assets.

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

The training of data processors by two consultants was conducted in two approaches namely:

- (i) Manual data processing that involved 2 teachers, 2 volunteers (retired officers) and 2 municipal workers (based in study areas) whom worked closely with the CBMS team for 2 days.

(ii) Computerized data processing at the municipal level that involved six processors including 2 statisticians and 4 were identified trained for 3 days: 2 from the CBMS team, 2 from the study areas and 2 from the council.

### **4.3 Data Processing**

The identified processors used the developed tools to analyze the collected data with respect to the list of CBMS indicators such that the magnitude of prevalence of each was interpreted to give the findings. Using a sketch map, an exercise of preparing a spot map was done by enumerators for one Kitongoji. Later on, this exercise will cover the whole village in order to locate every household. A GPS-supported exercise was also done for parts of Nala and K/Ndege to locate some households and services. Since that exercise appeared time consuming, it had to be conducted in a slow pace but finally the output will fairly be integrated in the digital maps in GIS using MapInfo software but more preferably the NRDB, as the capacity grows.

Presently, two important exercises are on progress: Generation of Poverty maps using MapInfo + GPS software, and installation of databases at each geopolitical level. The database will be maintained by the municipal workers who will be appointed as overseers in every geopolitical unit.

### **4.4 Data Validation**

Having obtained the findings concerning each indicator, it was important to make them public so as to pursue a community based validation. Therefore, a workshop of 30 participants including one processor, 24 enumerators, 2 local leaders and 3 council representatives from each study area was held with Ward Development Committee to validate the findings of the processed data. In K/Ndege Ward, the results were validated on 2<sup>nd</sup> October 2006 while in Nala Village it was done on 5<sup>th</sup> October 2006 through two local workshops mentioned above. One local leader from each of 4 villages neighboring Nala and 5 wards neighboring K/Ndege were also invited as a matter of awareness raising. Most of

them expressed the interest in developing the CBMS in their respective areas. The module for the workshops was adopted from the CBMS documents that exists in CD-ROM but was interpreted in Kiswahili for convenient understanding.

The presentation aimed at getting the reaction on data accuracy, gathering of possible explanations of the results and identifying the specific problems and relevant interventions that would lead to formulation of development plans.

The results of Opportunities and Obstacles to Development (O&OD) approach were also used to get information on general views from the villagers that could complement the household data. This was done during council meeting by voting and ranking when another team of a different project (Community Development Programme) by a local NGO was implementing some identified needs in Nala village during the survey period. Those needs were taken as an input to the problems identified in the validation workshop.

Among the identified problems were:

In Nala village:

Lack of safe and accessible water sources, lack of clinic, lack of one school, low school enrolment, school drop-outs, child labor, prevalence of malaria, trachoma and HIV/AIDS, poor agricultural practices, low household income, poor housing type, poor sanitation, poor transport, poor land use management, infant mortality, cattle diseases

In K/Ndege ward:

Poor waste management, prevalence of malaria and HIV/AIDS, low household income, inactive entrepreneurship, crime and insecurity, beggars, corruption, road accidents, proliferation of squatter housing in open spaces and farming in hazardous areas.

## **5.0 Uses and Applications of CBMS**

- Access to CBMS Data is relevant to all households, community groups and other development actors
- Data Dissemination process is still up-coming and will be done through:
  - Organizing of the workshops at ward, council and national level,
  - Distribution of copies of final report to various institutions,
  - Production of data summaries (CBMS database) at geopolitical levels
- The use of the data is also an upcoming activity. The data will be used for preparation of development plans, poverty profiles, resources targeting and project impact monitoring. Implementation of these activities will involve Ward/Village development committees in collaboration with the municipal council.

## **6.0 Status of Implementation and Next Steps**

The implementation of CBMS will become operational when the first release of the database is completed so that the preparation of plans and profiles can have a reliable basis. Other wards and villages have shown the interest in implementing the system but this remains the future potential for replication.

Other potential uses of CBMS in Tanzania include:

- monitoring of land use changes especially in the planned urban areas and
- monitoring of spontaneous unplanned settlements which are encroaching most of the open spaces and marginal areas.

## **7. Next Steps**

As stated earlier, the analysis done so far is at a preliminary level as there are more attributes to be explored to capture the implications of the investigated indicators. The following are the upcoming activities.

1. Finalization of the analysis and fine-tuning of the results
2. Production of poverty maps and study area profiles

3. Preparation of development plans of the pilot areas
4. Dissemination of the project results to the stakeholders at local, council/regional and national levels
5. Finalizing of the Technical Report as per format.

After the establishment of the CBMS process for the pilot areas, it will be replicated incrementally to other wards and villages and subsequently in the whole municipality of Dodoma. This piece-meal approach is thought relevant because a reasonable time is required to mobilize resources and commitment of in the local communities. It is expected that through the existing role of the Association of Local Authorities of Tanzania (ALAT) the CBMS process will be promoted at national level.