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CBMS Design in Ethiopia

Abel Tewolde Mehari
Christian Feleke
Hayat Fentaw
Kassahun Mamo Geleta
Senayit Seyoum Yilma

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Challenges and Prospects of Entrepreneurship Development and Job Creation for Youth Unemployed: Evidence from Addis Ababa and Dire Dawa City Administrations, Ethiopia.

COMMUNITY- BASED MONITORING SYSTEM-ETHIOPIA (CBMS -12658)

Research Paper 1 – CBMS Design

Project Members:  Abel Tewolde (Project Leader)

Christian Feleke (Principal Researcher)

Kassahun Mamo (Principal Researcher)

Hayat Fentaw (Research assistant)

Senayit Siyoum (Research assistant)

Project Proponent: Haramaya University, Ethiopia

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Haramaya University
Ethiopia
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1. REVIEW OF EXISTING MONITORING SYSTEMS

So far, Ethiopia does not have a community-based monitoring system at the local level. The only monitoring system it has is at the national level which is controlled by the Central Statistics Agency (CSA). The CSA monitors various indicators at the national level and conducts a census study every 10 years.

In addition, the CSA has branches throughout the country and conducts sample studies annually and adjusts yearly figures between census intervals.

To date, the sites at both Dire Dawa and Addis Ababa totally lack data at the Kebele or Wereda level which we have confirmed through our preliminary visits to the area. For Weredas and Kebeles in Ethiopia, the main and sole source of data is the CSA whose basic problem is the less frequent collection of data, the quality of which is compromised with the political scenario.

The major mandates and responsibilities of the CSA, among others, are: (a) to collect statistical data through censuses, sample surveys, administrative records and registrations; (b) to process, evaluate, analyze, publish and disseminate the results; (c) to serve as the country’s information center; (d) to prepare short, medium or long-term national statistical program for the collection, processing, evaluation and analysis of data required for socio-economic development planning and upon approval execute the program and projects within the given budget; (e) to undertake studies and researches with respect to statistical methods and encourage the utilization of the results; (f) to provide appropriate capacity building through basic short-term training to personnel engaged in statistical activities (e.g., Federal Ministries, Regional States, NGO’s and Private Sector); (g) to issue directives and programs and see its implementation to improve the national statistical system and avoid duplication of statistical activities; (h) to lay down the system for the collection, compilation, classification and flow of statistical data; and (i) to determine the type and particulars of statistical data to be collected as well as the productivity, and monitor the execution of the same.
The CSA has accomplished a lot in making available a relatively organized and reliable data in the country. Specifically, when we see the accomplishments of the CSA over time, it shows a change of direction from the use of administrative records to compile data in external trade, retail trade, and other modern sector activities as well as from undertaking ad-hoc surveys and specific area censuses to broad-based scientific sample surveys and censuses. The 1980s and 1990s in particular signify an important period in the development of statistical work in Ethiopia. Under the umbrella of the National Integrated Household Survey Program (NIHSP), a number of rural and urban household surveys were conducted, producing essential information for economic and social management. During this period, three major censuses were also undertaken, namely the 1984 Population and Housing Census, the 1994 Population and Housing Census and the first-ever Ethiopian Agricultural Sample Enumeration undertaken in 2002.

The very peculiar characteristic of this agricultural sample enumeration was the ability to produce agricultural information for the nomadic areas for the first time. Among the new batches of surveys introduced in recent years include the Informal Sector Survey, Distributive Trade and Service Survey, Welfare Monitoring Survey, Continuous Labor Force Survey and others. The other big achievement made in the past decade was the increment of sample size for the surveys that contributed a lot to produce reliable estimates. When the NIHSP was first launched, CSA was able to collect information only from 500 Farmers Associations (FAs). Then, this figure was raised to 750 rural farmers associations. The demand on increasing coverage, particularly the need of statistics for urban areas increased the number to 900 rural FAs and 326 rural Kebeles and to 1,448 rural Enumeration Areas (EAs) and 542 urban Enumeration Areas in 1995 and 1998, respectively. These days, sample surveys conducted by the CSA cover about 2,072 rural EAs and 790 urban EAs.

The CSA has all along been striving to produce timely statistics of good quality in accordance with professional requirements. Concerning the timing of the release of information, in the last ten years, the release dates of a number of statistical series were advanced through speed-up streamlining of the data collection and compilation process. The declines in the time lag from about two months to two weeks on monthly Consumer Price Index (CPI) statistics, and the decline in the time lag between the fieldwork and release of Crop Production Forecast survey from about 6 weeks to 4 weeks, are some of the examples of CSA's improvement in providing timely statistics.

In general, the CSA has done a remarkable effort to provide reliable and timely information on the
country’s social and economic sectors. The effort made by CSA to provide a strong and reliable statistical data for sound economic management can be said to be satisfactory and even better than a number of Sub-Saharan African countries. For this, the conduct of population census in the past 20 years, the availability of agricultural data from the 2002 sample enumeration and annual surveys, the regularly available consumer price indices and the Economic Establishment Census, whose results will be available shortly, are some of the evidences of the efforts and progress made so far.

2. Rationale for the development of a CBMS Ethiopia

The rationale of developing a CBMS in Ethiopia is to ensure that the youth are directly involved in the decision-making process and to make them responsible for their own development. It is hoped that the CBMS will enable the local governors to identify youth unemployment problems and entrepreneurship development issues within their communities so as to develop mechanisms to address the problems. Currently, there are no consistent and timely data on youth unemployment and entrepreneurship at the regional and sub-city levels. Our preliminary survey conducted in the two selected project sites has proven that the absence of any CBMS and information about youth unemployment in the area is completely true.

The establishment of the CBMS will therefore grant easy access to information which will be helpful in investigating problems regarding youth unemployment and entrepreneurial development in the area. Knowing that the area does not have any data or existing CBMS regarding youth unemployment and entrepreneurship, the pilot study will totally rely on the data bank (CBMS) that we plan to establish through this project.

All the figures and statistics in the proposal are based on the recent CSA reports of Ethiopia made in 2008 as a result of the 2007 census of the country. Lack of data makes it difficult for regions and sub-cities to identify the needs and challenges of the youth and address them sufficiently. Therefore, the community-based monitoring system could offer the sub-cities/kebeles/weredas opportunities to assess policies they have implemented at the local level, identify problems and basic needs at the community levels and see how best they can be addressed. As a result, the aforementioned gap will be filled effectively.

In addition to this, the project will specifically be helpful in identifying the existing youth workforce’s skill gaps (basic skills, soft skills, and work skills) to secure employment or engage in entrepreneurship in the current and future economic setting in the targeted sub-
cities/kebeles/weredas of Ethiopia. It is expected that the project will clearly determine the intervention areas for future government and nongovernment funding related to youth and workforce development.

Finally, it will provide a snapshot of the existing policies and institutional capacity (strengths, weaknesses, and gaps) in public and private organizations providing education, training and employment services to the youth in the target regions in Ethiopia.

3. OBJECTIVES OF CBMS-ETHIOPIA

The core rationale of the CBMS in Ethiopia is to establish a local multidimensional poverty monitoring system and fill the gap of official statistical data at the local or grassroot administrative level.

The major aim in establishing CBMS Ethiopia is:

- To develop and carry out the pilot test for the CBMS implementation in Addis Ketema sub-city wereda 10(Addis Ababa) and Kebele 01 & Gedenser rural kebele administration (Dire Dawa).

The specific objectives of the Community-Based Monitoring System (CBMS) Ethiopia include:

- Preparation of community poverty and household level poverty profile and maps of Addis ketema Sub-city Wereda 10 (in Addis Ababa) and kebele 01 city administration & Gedenser rural administration (in Dire Dawa).
- Provision of input for the preparation of local development plans to be made by local policy- makers in Addis Ababa and Dire Dawa based on CBMS.
- Preparation of a paper on the analysis of CBMS data to answer the pilot research objectives on the issues of youth employment, which is entirely based on the definitions of labor force, employment and unemployment in Ethiopia, and entrepreneurship.
• Provision of relevant information to governmental and nongovernmental institutions who could make use of the data to develop new policies.

• Recommendation and follow up of new policy directions to secure low rate of unemployment in the areas.

• Assessment of whatever new policy impact there is and of improvements, if any, in the life of the society.

4. KEY FEATURES OF THE CBMS

4.1 Poverty Indicators
The final list of indicators used in tracking poverty in the project sites includes around 13 with seven sectors. The poverty indicators included are, among others: Proportion of children under five years old who died in the last 12 months; Proportion of women who died due to pregnancy-related causes in the last 12 months; Proportion of household members who do not eat food three times a day; Proportion of households living in substandard houses; and Proportion of households who do not have their own private house. In addition, some of the sectors attached the core indicators of: Health and Nutrition, Housing detail, Sanitation and water supply, and Education. 

Table 1 shows the details of the core poverty indicators.

Table 1: Core Poverty Indicators
<table>
<thead>
<tr>
<th>Basic needs</th>
<th>Core indicators</th>
<th>Computation/formula</th>
<th>Disaggregation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health and Nutrition</strong></td>
<td>1. Proportion of children under five years old who died in the last 12 months</td>
<td>Total number of children aged 0 to less than 5 years old who died in the last 12 months divided by the total number of children aged 0 to less than 5 years old who died in the last 12 months plus the total number of living children aged 0 to less than 5 years old in the last 12 months</td>
<td>Kebele/woreda</td>
</tr>
<tr>
<td></td>
<td>2. Proportion of women who died due to pregnancy-related causes in the last 12 months</td>
<td>Total number of women who died due to pregnancy related causes in the last 12 months divided by the total number of children less than 1 year old plus total number of women who died due to pregnancy related causes</td>
<td>Kebele/woreda</td>
</tr>
<tr>
<td></td>
<td>3. Proportion of household members who do not eat food three times a day</td>
<td>Total number of households with all members who do not eat food three times a day past week divided by total number of households</td>
<td>Kebele/woreda</td>
</tr>
<tr>
<td><strong>Housing detail</strong></td>
<td>4. Proportion of households living in sub-standard houses</td>
<td>Total number of houses made up of items other than Stone, mortar reinforced concrete and Brick divided by total number of households.</td>
<td>Kebele/Wereda</td>
</tr>
<tr>
<td></td>
<td>5. Proportion of households who do not have their own private house</td>
<td>Number of houses which are rented divided by total number of households.</td>
<td>Kebele/woreda</td>
</tr>
<tr>
<td><strong>Sanitation and water supply</strong></td>
<td>6. Proportion of households who do not have access to own toilet facility</td>
<td>Total number of households who do not have access to their own toilet facility (none and open air, shared toilets) divided by total number of households.</td>
<td>Kebele/Woreda</td>
</tr>
<tr>
<td></td>
<td>7. Proportion of households who have no access to clean water facility</td>
<td>Total number of households with no clean water (other than piped line water) divided by total number of households.</td>
<td>Kebele/Woreda</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td><strong>8.</strong> Proportion of children aged 7 to 14 years old who do not attend elementary education in private school</td>
<td>Total number of children aged 7 to 14 years old who attend public school divided by total number of children aged 7 to 14 who are attending school</td>
<td>Kebele/Wereda</td>
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<tr>
<td><strong>9.</strong> Proportion of children aged 15 to 18 years old who do not attend secondary education in private school</td>
<td>Total number of children aged 15 to 18 years old who attend public school divided by total number of children aged 15 to 18 who are attending school.</td>
<td>Kebele/Wereda</td>
<td></td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td><strong>10.</strong> Proportion of households with income below the poverty threshold in the last 12 months</td>
<td>Total number of households with income below the poverty threshold in the last 12 months over total number of households.</td>
<td>Kebele/Wereda</td>
</tr>
<tr>
<td><strong>11</strong> Proportion of households with income below the food threshold in the last 12 months</td>
<td>Total number of households with income below the food threshold in the last 12 months over total number of households.</td>
<td>Kebele/Wereda</td>
<td></td>
</tr>
<tr>
<td><strong>Production</strong></td>
<td><strong>12</strong> Proportion of households who are engaged in economic production</td>
<td>Total number of households with at least one member who is engaged in economic production (agriculture industry, manufacturing industry, service industry etc) in the past 12 months divided by the total number of households.</td>
<td>Kebele/Wereda</td>
</tr>
<tr>
<td><strong>Social engagement</strong></td>
<td><strong>13.</strong> Proportion of households who participate in social engagements</td>
<td>Proportion of households who are engaged in social engagement activities (edir, ekub, mahber, etc) in the past three months divided by the total number of households.</td>
<td>Kebele/Wereda</td>
</tr>
</tbody>
</table>
4.2 Data collection Instruments
The main instrument or tool of data collection we used was a questionnaire. The project developed three types of questionnaires: Household Profile Questionnaire (HPQ), Youth Employment and Entrepreneurship (YEE) questionnaire, and Community Profile Questionnaire (CPQ).

All the questionnaires were not self-administered by the respondents but were enumerator-assisted, i.e., the respondents were not directly involved in encoding their responses on the instruments.

The HPQ was 16 pages on paper. This instrument has around 100 questions formatted to consist of the entire questions to cover the core poverty indicators.

The YEE questionnaire consisted of around 30 questions addressing all indicators related to youth employment and entrepreneurship.

The community profile questionnaire consisted of questions related to village level education, aid, health sector, natural disaster and crime issues. It has around 4 pages and 20 questions.

4.3 Data collection approach

Data enumerators were selected on the basis of their experience and skills related to tablet utility. Those who gathered the data were pre-identified. For the Dire Dawa project sites, university students were used while for the Addis Ababa project site, university graduates were used.

The total number of data enumerators who handled the case of Addis Ababa and Dire Dawa was 12 (seven for Addis Ababa and five for Dire Dawa).

According to the data obtained from the Dire Dawa city administration, the total population size of Kebele 01 is 13,715 while that of Gedenser rural Kebele is 820. Their household size is 3,117 and 186, respectively, for Kbele 01 and Gedenser rural Kebele. Moreover, the total population size of Addis Ketema Sub city Wereda 10 is 13,007 with a total number of households of 2,710. In deciding the size of enumerators, the size of the population...
from where the census data were collected (Addis Adaba and Dire Dawa) became crucial. Hence, for the seven enumerators at Addis Ketema, each one was expected to handle the gathering of data from 2,710 households (comprising around 4.8 family sizes per household) within 3 months of data collection. Similarly, the 10 enumerators proposed for Dire Dawa at an individual level were to gather data from 3,303 households (comprising around 4.4 family sizes per household) within 3 months of data collection period.

Household level and community level questionnaires were prepared based on the indicators. The questionnaires are not limited to explicitly declared indicators. Further, through time while the project is in progress (conducting preliminary assessment), additional indicators have been built in. Therefore, initially proposed questionnaires were subjected to frequent changes. Initially, the enumerators have taken house number from the sub city or Kebele administration and area demarcation notifications were also provided for both selected sites at Addis Ababa and Dire Dawa under the guidance of supervisors from the project team members.

Meanwhile, regarding the above mentioned point and other important issues related to the project, orientation has been given to all enumerators and supervisors.

4.4 CBMS DATA PROCESSING

Both descriptive and inferential statistics have been used. Frequency distribution tables which show indicators’ corresponding percentage figures have also been used.

In addition, the poverty and inequality profiles of the selected areas were analyzed. For the analysis of poverty and inequality, Foster, Greer and Thorbecke (FGT) (Foster et al., 1984) and Gini-coefficient were used. (World Bank, 2005). The former was used after the determination of the poverty line; if the household spends below the line, a household is considered poor because that expenditure is insufficient to meet the food and other basic needs requirement that is considered as a minimum subsistence level. The mathematical notation of poverty can be expressed as:
The commonly used values of $\alpha$ are 0, 1, and 2. When we set $\alpha$ equal to 0, $P_0$ indicates the headcount ratio, which measures percentage of population that falls below the stated poverty line for their living.

On the other hand, when we set $\alpha$ equal to 1 and 2, we obtain the poverty gap and severity of poverty index, respectively. They are also denoted by $P_1$ and $P_2$. The latter two, unlike the headcount measure, have the advantage of giving more weight for the poorest segment of the group.

Gini-coefficient is the most widely used single measure of inequality (World Bank, 2005). It is an extension of the Lorenz curve analysis of inequality. Gini-coefficient provides a numerical value of the quotient of area A and the summation of area A and B i.e. $\frac{A}{A+B}$. The higher the value means the farther the curve from the perfect equality line that indicates there is unequal income distribution for the group or the country. Its graphical representation is discussed in the discussion part.

For the descriptive and inferential analysis of the study, the STATA statistical package was employed.
4.5 CBMS DATA VALIDATION

Data validation workshops with key stakeholders have been organized after the data have been collected and processed. During this consultation activity, CBMS results were presented and the participants confirmed/validated the research outputs. Causes and reasons for the results as well as identified problems and priority areas were discussed during this activity. The validation activities in both the local community of Wereda 10 of Addis Ketema sub city of Addis Ababa and of Gedenser rural Kebele & Kebele 10 of Dire Dawa Administrations have already been conducted.

4.6 CBMS DATABASE BUILDING

The project has the intention of sharing the data with concerned bodies (development agencies, government sectors, academicians etc…) who work for the benefit of the society through a website with the prior knowledge of the CBMS international network. The task of building the CBMS database and website has been given to Mr. Birhanu Mengiste who is head of the computer science department in Haramaya University. He has gone through more than half of the journey regarding this task. During our first workshop held in October 2014, he presented the database/website framework of CBMS Ethiopia to the steering committee members as well as to all the attendees of our workshop.

4.7 CBMS DISSEMINATION/USE OF DATA

The results drawn from this study have been made available for the institutions and policy makers who are currently involved in the programs devoted to support the community effort in fighting poverty in each respective project sites. The dissemination strategy of the output of this research has covered activities at the regional states, national and international levels. Important dissemination activities will be undertaken at the regional and national levels such as dissemination through workshops and conferences to present final research reports to a wide range of policy makers, academics, civil institutions, NGOs and interested publics targeted in this study. These conferences played a crucial role in ensuring that research results feed into the policymaking process. These occasions will also be used to expose planned future research activities with a view to informing and receiving input from regional and national stakeholders.
At the local level, the information about the CBMS project has been disseminated to all stakeholders through local audio visual media.

At the international level, we have disseminated the results of this study through working papers, participation in international conferences and workshops, and publication of scientific papers in specialized reviews. Lately, one of our research papers has been published in the *European Journal of Business and Management*. 
4.8 Key Players

The key players in initiating and implementing the CBMS were higher officials, in particular, the mayors of the project sites. CBMS Ethiopia has established a Steering Committee to participate in each and every activity of implementation of the grassroot level data collection and analysis.

Moreover, at the grassroot level, the education bureau, health bureau, trade bureau, micro and small enterprise bureau will play key roles.

4.9 Expected Outcome

The project is expected to be followed by policy review by local and federal bureaus. It has forwarded ideas on the way to stimulate the youth in job creation and self-employment. The federal government (who has autonomy in the study area) may take the research output as an input to craft sound policies which will be helpful to deal with the problem of youth unemployment.

In addition, community level and household level poverty mapping has been generated. The mapping will help to track the most underdeveloped areas of the project sites. Consequently and more importantly, the research output of the project may serve to influence in the formulation of local development plans.

4.10 Poverty Indicator system and other related indicators

CBMS Ethiopia has designed and believed that poverty issues could be tracked using basic indicators like education, death rate, food poverty, income poverty, house ownership, etc. In addition, indicators were set for the pilot testing paper of Youth Employment and Entrepreneurship (YEE).

4.11 Training and Capacity building

Training has been provided for the enumerators, supervisors and team members of the project. This capacity building training has granted an opportunity for the enumerators, supervisors and project members to acquire better skills in data collection, analysis and reporting. Prior to the implementation of the CBMS, the team has arranged an awareness creation conference for both internal and external stakeholders of the proponent Institution.
5. Uses of CBMS in the local context

The basic reason for implementing the Community-Based Monitoring System is to fill the shortage of data at the grassroots level. Absence of data at the grassroots level makes decisions adopted at this level more illogical and unfair. This has been clearly explained as the rationale for the CBMS implementation in Ethiopia. As has been stated, the country has one round of data collection which is conducted on a ten-year time interval. Moreover, these data are general than specific and do not address the basic questions of poverty indicators in detail. The CBMS system starts from core indicators which thus justifies the use of CBMS specific to Ethiopia.

6. Prospects for Institutionalization

Basically, the question of continuity is a matter of concern for the CBMS implementation. CBMS Ethiopia has created big linkages with mayors and directors of the specified project sites. The team has so far conducted a number of workshops believed to have the power to convince or persuade the relevance of grassroots level data or statistics. Mayors have promised to mobilize resources from education, health, social protection, small and micro enterprises and others and collect data on some of these sectors’ indicators.

7. Resource requirements and institutional arrangements for implementation

The necessary resource is basically financial mobilization. Each project site has sectoral offices such as Education Bureau, Health Bureau, Trade Bureau, and Social Affairs Bureau, among others. As per the validation conducted and prior contact made with the officials of the project sites, we learned that they will pool financial and experts resources from each of these sectors and the team will discuss and develop questionnaires and try to update the grassroots level poverty data.

8. Recommendations

The following are important recommendations about the continuous implementation and effectiveness of CBMS:

- Have frequent contact with the mayors of the local administration
- Provide continuous training to those selected individuals who are willing to be involved in similar activities (regarding how to use Tabs for data collection and data analysis)
- Involve large number of stakeholders to have more valuable impact
REFERENCES


