THE EXPERIENCES OF MEASURING AND MONITORING POVERTY IN ETHIOPIA

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List of abbreviations

AAU	Addis Ababa University
CSA	Central Statistical Authority
CSAE	Centre for the Study of African Economies, Oxford University
CPI	Consumer Price Index
CWIQ	Core Welfare Indicators Questionnaire
DHS	Demographic and Health Survey
EEA	Ethiopian Economic Association
FSS	Forum for Social Studies
HICES	Household Income, Consumption and Expenditure Survey
HIPC	Heavily Indebted Poor Countries
IDS	Institute for Development Studies
IFPRI	International Food Policy Research Institute
IMF	International Monetary Fund
I-PRSP	Interim Poverty Reduction Strategy Paper
JSA	Joint Staff Assessment
M&E	Monitoring and Evaluation
MDG	Millennium Development Goal
MEDAC	Ministry of Economic Development and Cooperation
NGO	Non Governmental Organization
PD	Participatory Data
PPA	Participatory Poverty Assessment
PRS	Poverty Reduction Strategy
PRSP	Poverty Reduction Strategy Paper
WB	World Bank
WHO	World Health Organization
WMS	Welfare Monitoring Survey
WMU	Welfare Monitoring Unit

1. Introduction

The acceptance of poverty reduction strategy papers (PRSP) by low-income countries has increased the attention for improved poverty analysis, poverty monitoring and poverty impact evaluation.

The formulation and evaluation of poverty reduction strategies in low income countries is constrained by the inadequate capacity to carryout appropriate surveys, quick and timely poverty analysis, and effective poverty monitoring and impact evaluation of government policies.

Ethiopia prepared its Interim Poverty Reduction Strategy Paper (IPRSP) in November 2000. The preparation of the full poverty reduction strategy paper (PRSP) named as Sustainable Development and Poverty Reduction Programme (SDPRP) was finalized in August 2002. This programme is and will be the main the guiding document up to the fiscal year 2004/05. Tracking and mentoring of the SDPRP is crucial to achieve the objective stated in the SDPRP.

SDPRP is not a one time document, but a document that has to be constantly updated. Hence lesson learned from the present SDPRP preparation and monitoring needs to be evaluated so as to provide suggestions for the next SDPRP document to be prepared by Ethiopia as well as other countries.

Hence the objective of this paper is to review and evaluate the measurement and monitoring of poverty and the approaches followed in therein.

2. Background and context

The majority of people in Ethiopia are living in rural areas (83%) where poverty is more widespread than in urban areas. About 44% of the population is below the nationally defined poverty line in 1999/2000, while it is 45% for rural population and 37% for urban population. Poverty is also deeper and severer in rural areas than in urban areas. On the average, the income of the rural poor is 12.1% far from the poverty line, while it is 10.1% for the urban poor. The Ethiopian government has been constantly pursuing development

efforts addressing mainly rural poverty. Rural develop development strategy has been formulated long-time before the preparation of IPRSP and Full PRSP in order to increase economic growth and reduce poverty.

Ethiopia prepared its Interim Poverty Reduction Strategy Paper (IPRSP) in November 2000. The preparation of the full poverty reduction strategy paper (PRSP) named as Sustainable Development and Poverty Reduction Programme (SDPRP) was finalized in August 2002. The programme has been the main guiding document until now and it will be also the main guiding document until the fiscal year 2004/05. The core objective of the strategy paper, as stated in the document, is to reduce poverty and ensure food security through rapid economic growth, which is expected to be achieved via free market economic system. The development of the agricultural sector is the key to achieve this objective. Moreover, the agricultural sector is chosen as the leading sector in the country's endeavor to achieve industrialization.

The Ethiopian SDPRP is built on four pillars, namely (a) Agricultural Development-Led Industrialization (ADLI) and food security, (b) Justice System and Civil Service Reform, (c) Decentralization and Empowerment, and (d) Capacity Building in Public and Private sectors. Of the four building blocks, ADLI is designed to develop the agricultural sector, reduce poverty, ensure food security, and ultimately bring industrialization. The other three blocks are designed to enhance the effectiveness of ADLI in reducing poverty and ensuring food security.

The Ethiopian PRSP (called) SDPRP have identified key pro-poor sectors (agriculture, health, education, water, and road) among which agriculture is the most important element for reducing poverty of the mass of people leaving in rural areas. The health, education, water and the road sector plans are designed mainly to facilitate rural development.

The Ethiopian SDPRP assumes that there is plenty of unemployed and underemployed labor force; and the Ethiopian economy is constrained by shortage of capital and (in the Northern part of the country and in the central highlands) land. Hence faster growth in economy has to be achieved by increasing agricultural productivity through the use of labor-intensive and land-augmenting technological progresses. To this effect, the agricultural development, food security programs, and other sector

development programs (such as water, education, health, and road sectors) are the main parts of the Ethiopian Poverty Reduction Strategy Paper, commonly known as SDPRP.

PRSP process and its influence on policy in Ethiopia.

Various consultative forums have been organized at different levels in order to gathering useful information for the preparation of the Ethiopian Poverty Reduction Strategy Paper. The consultation process started at the *Woreda* (district) level followed by regional level consultations, which finally culminated with federal level consultations.

The organizational structure sketched in Figure 1 and it shows the PRSP process in Ethiopia. At national level there were a Steering Committee composed of ministers and a National Technical Committee composed of professionals drawn from poverty-oriented federal sector ministries/Government institutions as well as a Secretariat to carry out the daily activities. There was also a similar structure at the regional (state) level. The stakeholders chosen for consultative process at national level were Government institutions, private sector, the donor community, non-Government organizations (NGOs), and civil societies.

The 2002 SDPRP document (GOE, 2002) indicated that 117 Woredas were chosen for the Woreda/district level consultation involving about 6000 people. The agendas during the Woreda level consultations were:

- the nature and causes of poverty in order of their significance;
- trends in poverty over the past five years;
- factors that contribute to poverty;
- people's livelihood and associated problems;
- problems of socio-economic service delivery;
- cultural and individual practices contributing to poverty;
- administrative problems and other governance issues; and
- poverty reduction measures that need priority attention.

The regional/state level consultations were conducted with the objective of discussing the key findings of the *Woreda level* consultations and collect supplementary ideas. Finally the federal level consultation was conducted involving high-ranking

Government officials, sector regional bureaus, prominent people, journalists, religious leaders, and representatives of the donor community, NGOs, professional associations, and the business community.

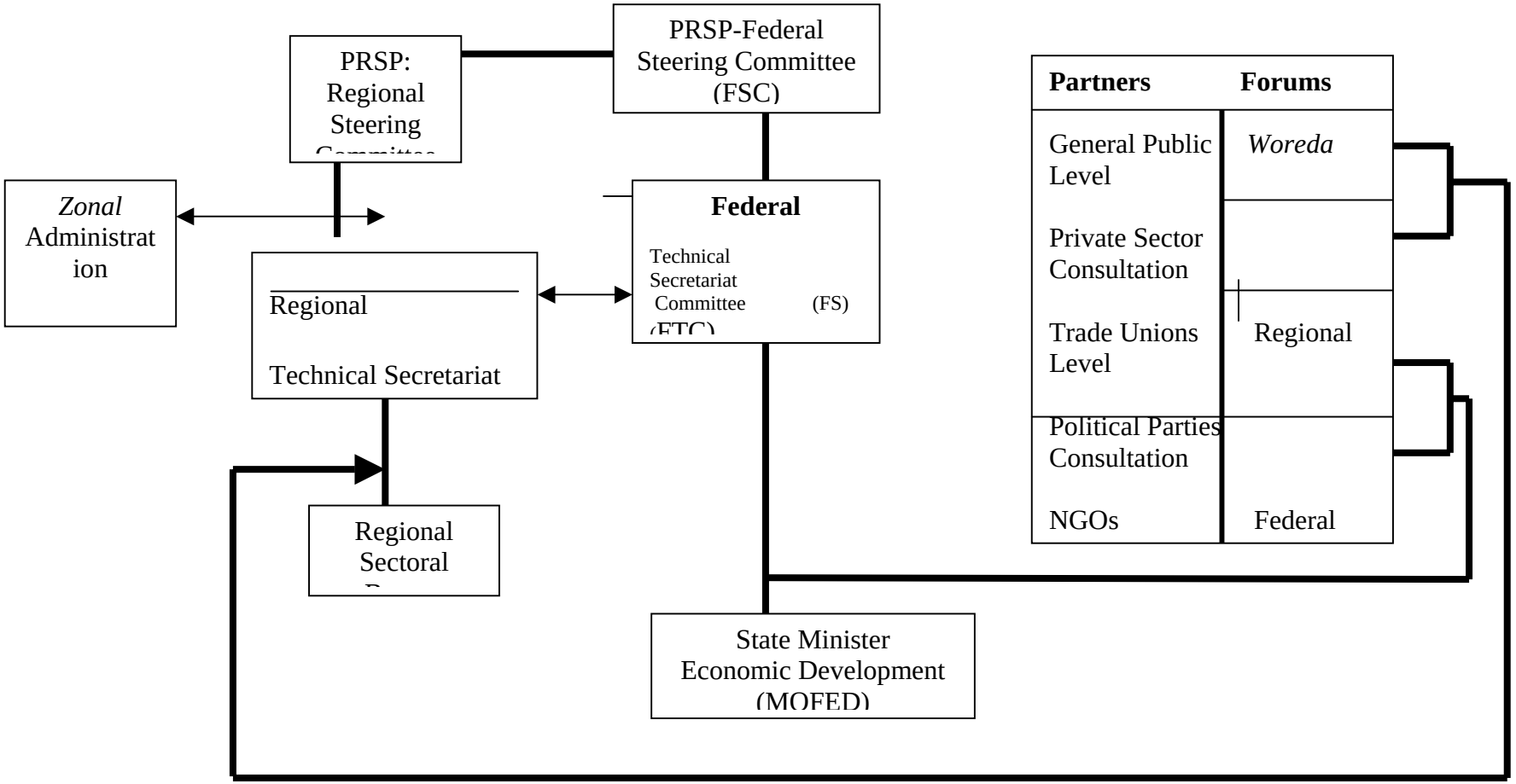
In addition there were other forums established by both the government (such as Pastoral Development Forum) and civil organizations (such Forum for Social Studies, the Ethiopian Economic Associations, and business communities).

The Joint IDA-IMF Staff Assessment indicated that the consultations have been held without government moderators, and thereby established a new set of expectations with respect to public debate of policy issues. However, the consultations served mostly to provide reactions to the government's existed policies and programs, instead of crafting new ones. This was tolerable by many people given this is a new process in Ethiopia, and that the government has already begun to place greater emphasis on issues that were raised during the consultations, especially private sector development reforms and decentralization.

The PRSP document has influenced the policy making and budgeting process. First the organization in charge of drafting the plan used PRSP document in drafting the budget. Second, the Ethiopian House of Peoples' Representative took training in pro-poor budgeting by the Addis Ababa University (AAU) in collaboration with the German Technical Cooperation (GTZ) training. The parliamentarians used PRSP document to evaluate the budget draft and suggest necessary amendment to the plan accordingly.

For the first time in history, the Ethiopian government influenced by the PRSP plan assigned one billion Birr for food security. The amount of budget allocated for the pro-poor sector was consistent with the budget indicated in the PRSP document. Many of the projects prepared by government and non-governmental organizations are mentioning PRSP as a rationale for their proposal indicating that PRSP has influence on policies, programs and projects.

Figure 1: The Consultative Process for the Preparation of PRSP (Ethiopia)



Institutions in charge of PRSP monitoring and implementation

The task of the PRSP Monitoring and Evaluation (M&E) System named as Welfare Monitoring System (WMS) is to bring together relevant information from different sectors and sources.

The Ethiopian poverty monitoring and evaluation system has been redrafted during the preparation of the Full PRSP (SDPRP) with the following objectives:

- To ensure that Government and other stakeholders have a good understanding of the nature and distribution of poverty (in all its dimensions) and are able to monitor changes in the level and incidence of poverty;
- To monitor the implementation of the actions contained in the PRSP and identify problems as they emerge; and
- To help assess whether implementation of the actions contained in the PRSP is having the intended effect on poverty.

The PRS monitoring system is not a new invention. Rather, it was built up on existed systems such as the Welfare Monitoring System Program.

The Welfare Monitoring System (WMS) of Ethiopia has been established since 1996, it has been revitalized to fulfill the monitoring and evaluation requirement of SDPRP. The Welfare Monitoring Committee (WEM COM) has been formulated comprising the key poverty-oriented sector ministries chaired by the Minister of Finance and Economic development. This committee guides the over all SDPRP implementation, monitoring and evaluation.

The WEM COM has also a technical arm called Welfare Monitoring Technical Committee (WEM TEC). The task of this committee is to supply information and technical advice to the WMU during its endeavor in monitoring and evaluation of the SDPRP. The head of the Economic Policy and Planning Department (EPPD) of MOFED is chairing the WEM TEC.

Key institutions in the WMS of Ethiopia are the Welfare Monitoring Unit (WMU) and the Central Statistical Authority (CSA). The Welfare Monitoring Unit in the Ministry of Finance and Economic Development (MOFED) is coordinating the monitoring system of PRSP. The unit is places in MOFED under the Economic Policy and Planning

Department. This Unit is responsible for compiling and analyzing data collected by other institutions, in order to provide performance reports on PRSP implementation in Ethiopia. It is also take a leading role in commissioning of relevant research and the dissemination of the findings. Plans for strengthening of the WMU and the Welfare Monitoring System has been refined, and Government is seeking coordinated support from its aid partners in further strengthening the welfare monitoring system program.

There are already actions for strengthening data collection systems, including integrating routine administrative data systems with the proposed program of surveys and censuses. Primary focus is on evaluating the extent to which HICE and WM surveys results serve the purpose they have been originally intended to developing multi-purpose welfare/poverty indicators of national scope that help inform policy decisions in the Government's endeavor towards broad based poverty reduction efforts.

The CSA is the main data collecting authority in the country. It has carried complex plan of surveys and censuses over the last fifteen years including population and agricultural census, the Household Income and Consumption Expenditure Survey, Welfare Monitoring Survey (WMS), the Demographic and health Survey (DHS), the Labor Force Survey.

The Central Statistical Authority (that one of the organizations involved in monitoring via data collection) has made a reform in order to develop its capacity in data collection. Recently CSA has completed its Medium Term National Statistical Program (MTSNP) for 2003-2008. A new department called Welfare monitoring has been opened recently to handle the surveys related to poverty measurement.

The population censes was a department under the CSA. However, recently it becomes a separate authority. This could relieve CSA from a difficult task and make concentrate on surveys directly related to poverty measurement. However, in the short run, the separation of population office from CSA may reduce the capacity of CSA as some of the senior staffs are assigned to the Population Census Office.

Alongside the CSA, the line ministries collect administrative data on various socio-economic issues required to monitor poverty. The sector s most relevant for poverty monitoring and evaluation are education, health, road, water, and agriculture and food security. The Ministry of Finance and Economic Development (MOFED) oversees

macroeconomic variables such as GDP, interest rate, level of poverty, investment and private and public expenditure.

3. Accuracy of measuring poverty

How poverty is defined in the PRSP documentation?

The SDPRP document adopts World Bank definition of poverty (World Bank, 2001). It uses the non-welfare approach and assesses the well-being of a person based on certain elementary achievement, such as being able to afford to be adequately nourished or clothed. It pays little or no regard to information on utilities of the individual.

The Ethiopian government defines poverty as multi-dimensional extending beyond the low level of income. The first dimension is material deprivation (lack of opportunity), which is measured by an appropriate concept of income or consumption. The second dimension is low achievement in education and health (low capabilities). The third and the fourth dimensions of poverty are vulnerability (and exposure to risk or low level of security) and voicelessness (and powerlessness), respectively.

There were no many discussions on the approaches and measurements of poverty to be used in the PRSP. The poverty measures used by the PRSP were defined by experts by looking at the literature rather than through consultative process. For the income dimension of poverty, poverty line was defined based on the minimum calorie required for subsistence (2200 kcal) and essential non-food expenditure. The official poverty line is 1075 Birr in 1995/96 constant national average prices (Table 1).

Table1. Poverty line used in the 2002 SDPRSP

	Food poverty line in Birr per adult per year in 1995/96 constant prices	Kcal per adult per day	Total poverty line in Birr per adult per year in 1995/96 constant prices
Poverty line	647.81	2200	1075.03
Moderate poverty line	809.76	2750	1343.78
Extreme poverty line	485.86	1650	806.27

Source: MoFED, 2002

Since these poverty lines are estimated at national average basket goods, it is good to revise these poverty lines. Moreover, it would be helpful to assess the validity of these poverty lines for the people of Ethiopia as a whole through PRSP consultative process or participatory poverty assessments (PPAs) .

The main data sources used in the measurement of poverty in the country

The main data sources used for measuring poverty in Ethiopia Household Income and Consumption expenditure Survey (HICES) and Welfare Monitoring Survey (WMS) conducted by Central Statistical Authority (CSA) of Ethiopia.

The HICES is conducted mainly to provide data on the levels, distribution and pattern of household income, consumption, and expenditure can be used for the analysis of changes in the living standard (poverty) of household over time for various socio-economic groups and geographical areas. It provides information on the consumption of food and non-food item, household expenditure, payments, receipts and income, and household characteristics such as family composition, education and occupation. This survey is used to measure the income dimension of poverty.

The WMS is conducted mainly for the purpose of assessing non-income dimensions of poverty such as education, health[1] and vulnerability. It provides extensive information on different dimension of poverty and deprivation such as access to education and health facilities, achievements in education, anthropometric measures, and underlying asset bases of the poor and on the opportunity available to households.

The experience with household surveys over the past decade or so

The experience of CSA in conducting household surveys for poverty monitoring is not more than 10 years. The WM surveys were conducted in 1995/96, 1997, 1998 and 1999/2000 and two HICES data were collected in 1995/96 and 1999/2000. WMS covers household that are covered by HICE plus addition households. Hence HICES is a sub-sample of WMS. While WMS represents administrative zones, HICES represents rural and urban regions and major urban areas. In 1999/2000, the WMS collected data from 25,917 households and HICES collected data from 17,332 households. Both surveys match for about 16,672 households. In other words, the 16,672 households appeared in both WMS and HICES. This has enabled to combine the HICES and WMS data and

[1] Demographic and Health Survey (DHS) has also collected similar data on malnutrition. This does not mean that DHS can substitute WMS because DHS focuses only on health issues while WMS focuses on health, education, road and other services deliveries.

analyze[2]. This year both the WMS and HICES will be conducted. Apart from these surveys, there are other surveys that can be used for poverty monitoring. These surveys include labor force survey (1999), agricultural Sample Census (2002), and Household Demographic Survey, HDS, (1999/2000), crop survey (see Table 1 for details of the survey conducted in Ethiopia).

The measure of income poverty used in the PRSP process

Measures of income poverty, poverty indices, are calculated using Foster, Greer and Thorbecke (1984) P_α-measures of additively decomposable poverty measures.

The poverty analysis document used consumption expenditure to measure poverty. Consumption expenditure is deflated by temporal and spatial price indices to reflect spatial and temporal price differences. The consumption expenditure is also converted to adult equivalent to reflect the nutritional need of individuals. Age and gender based equivalent scale developed by WHO is used. The consumption expenditure is measured at household level via the Household Income and Consumption Expenditure Survey. A unit value obtained from the HICES and an independent price survey is used to calculate price indices. Expenditure share obtained form HICES was used as a weight in computing the CPI by the CSA.

Income data was also available from the HICE Survey, but it is underestimated. Expenditure data are good in general and can be used as a proxy for household income. For example for about 70% of the sample income is less than consumption expenditure. This means individuals under-report income data or households have negative saving. But it is difficult to say that about 70% of the households are dis-saving.

The household consumption expenditure and income is measured based on a half-weekly recall for food, drinks and tobacco and six months recall for non-food expenditure. The non-food expenditure includes household durable goods. Households were visited for 16 times over eight weeks. The first eight visits were conducted in the

[2] In the 1999/2000 poverty analysis report, the two data sets (WMS and HICES) were combine to analyze the correlation between consumption quintiles on the one hand and enrollment, malnutrition and service

months of June and July when the food availability is very low. The second eight visits were done in four weeks between January and February when the food availability is better than in June and July. All households in the HICES were visited over these two periods for 16 times. The seasonality has been taken into account to some extent since the two periods (June/August and January/February) represent to extreme situation of food availability. Research might be important to estimate the magnitude of error introduced in using two-period survey to account the seasonal consumption variation.

About 252 food and 600 non-food consumption items were covered. Consumption items produced at home and obtained from a community resources such as fuel wood and water are imputed and included in the household consumption expenditure. Local price is used to impute the home produced and obtained from community resources.

The food group item are cereals; pulses; oil seeds; cereals preparations; bread and other prepared foods; meat; fish; milk, cheese and egg; oils and fats; vegetables & fruits; spices; potatoes and other tubers; coffee, tea and buck thorn leaves; salt, sugar and others; food taken away from home and milling charges. Non-food item groups are beverages; cigarette and tobacco; clothing and footwear; house rent, construction materials, water, fuel and power; furniture, furnishing, household equipment; medical care and health; transport and communication; recreation, entertainment and education; personal care and effects; and miscellaneous non-food goods.

Availability of price data

There are at least two main sources of price data in Ethiopia. The first source of price information is internal price computed from the HICE survey data (CSA of Ethiopia call it standard price). In the HICE survey, households report both quantity and expenditure for most food items and for a few non-food items. Dividing expenditure by quantities gives unit values. These unit values can be easily affected by quality choices, but our experience showed us that the spatial variation of unit values is closely related to the actual price variation faced by households.

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deliveries on the other hand (MOFED 2002).

The second source of price information is an independent price survey conducted by the CSA in selected markets (a mix of small and major towns) using price questionnaire. The CSA reports the prices of food and non-food items for each zone and major towns in Ethiopia both quarterly and every year. The problem with this kind of price information is that it is difficult to match price from the survey (price report) with the expenditure pattern of households in the HICE survey. There will be many households whose nearest observed price is too far away to be relevant. However, this price source is the preferred source when quantities of items are not collected from each household. For most of the non-food items and for food taken away from, where quantity observation is not possible in principle, the independent price survey of selected market is the only source of price information.

Hence the poverty analysis in the PRSP document used internal prices, which are computed from the HICE survey data, to calculate the price index for all food items and few non-food items. When internal price data are missing (for few food items and for most non-food items) in the HICE data, they used the price data from the independent price survey conducted on selected small market comprising of small and major towns all over Ethiopia.

Ethiopia is a large country where transportation is not easy, is expensive in certain regions and distribution systems for most consumer goods are less integrated. States and community are located geographically widely apart. Hence price variation could explain much of the difference in measured consumption expenditure. Consequently, spatial price variation is large in both relative and absolute prices. To account for these differences in measured consumption expenditure, spatial price indices (called regional price indices) were calculated. People who live in different parts of the country pay different prices for similar goods.

Ethiopia is also mainly an agricultural country that depends highly on rainfall. Due to the frequent rain failure (drought), there is a large variation in both agricultural output and prices. The variation in agricultural price affects the income of people and hence affects the price of non-food items. Hence it was very important to account the temporal price variation in the calculation of poverty indices. To use consistent poverty

line across regions and time, the poverty analysis involved construction of price indices over time and regional relative to national average price.

Using the relative price index, nominal consumption expenditure is deflated so as to get real expenditure at a base year constant price. While the base for the relative spatial price index is the national average, the base for the temporal relative price is 1995/96. The temporal price index is calculated based on fourth months only (i.e, the survey months: June and July 1999, and January and February 2000).

The poverty analysis document employed Laspeyres price index that is simple to calculate. They found it transparent and simple which is easily explained to policy makers.

HICES data (of 1999/2000) include, among others, expenditure on various food and non-food items. While all food items have both quantity and expenditure figures most of the non-food items have only expenditure figures, but not quantity figures. The food items included in the HICE data set are categorized into 15 groups of food items and 10 groups of non-food items

Absolute poverty line is defined on the basis of the cost of obtaining the minimum calorie requirement for subsistence, which is 2200 kcal per adult per year following Ravallion (1998), taking the diet of the lowest income quartile households. The calorie share of the diets to the minimum calorie required for subsistence is calculated to arrive at the level of calorie and quantities of items of food group items that gives the 2200 kcal. The quantities of the food item groups are valued at the national average price obtained from the 1999/2000 HICE data, which are used to calculate the regional price index. The values of these groups of food items are added to obtain food poverty line. The total poverty line is obtained after adjusting for non-food expenditure using the average food share of the lowest income quartile households. The poverty line is deflated by the temporal price index to express it at the 1995/96 constant prices.

Poverty figures are highly consumed by the government in distributing budget subsidy for regions. The subsidy formula has always incorporated an element to discriminate in favor of less developed regions. Following revisions, the current formula has four indicators: population (55%), poverty (10%), expenditure need (20%) and revenue raising effort (15%). However, it is only the head count index that is used by

policy makers and media and other agencies. The use of poverty gap, poverty severity index is very minimal.

4. Monitoring poverty

4.1. Periodic surveys

As indicated above, HICES and WMS are the main source of data for monitoring of poverty In Ethiopia. These major surveys are conducted by the Central Statistical Authority (CSA) of Ethiopia.

The WMS has been conducted in 1995/96, 1997, 1998 and 1999/2000, while two HICES data sets were collected in 1995/96 and 1999/2000. HICES is a sub-sample of WMS and it enumerated the same households. This enables to combine both data sets and make further correlation analysis between variables of WMS and HICES. However, such opportunity has not been exploited except in the national poverty analysis (MOFED, 2002). While WMS represents administrative zones, HICES represents rural and urban regions and major urban areas. HICES can be conducted every year because it is very expenses as it measures income and consumption. Hence the CSA has collected WMS for consecutive years to and get a trend of school enrolment, health malnutrition and service delivery measures. Although not exploited, conducting WMS every year could have enabled to estimate consumption poverty every year (poverty trend) using the information obtained from HICES on the correlation between assets and household characteristics and consumption.

The coverage and quality of the 1999/2000 HICES has improved compared to the HICES conducted in 1995/1996. The 1995/1996 HICES covered 12,342 households and represented 11 regions/states (including a group of zones in Amhara, Oromia and SNNP), 11 major urban areas, and one reporting level for other urban areas. In total it has 32 reporting levels. The 1999/2000 HICES covers 15 major urban areas, 11 rural regions and 11 other urban areas. The 1999/2000 HICES improves on the coverage of urban areas, but it does not improve on the coverage of rural areas. Moreover, the 1999/2000

WMS has improved the coverage of both urban and rural areas. The number of sampled households in 1995/96 and 1999/2000 was 11,569 and 29,512, respectively. As there the change in the design of the survey is not much, the impact on the comparability of the two surveys is small except in urban areas. Much of the change in the survey design is more for urban areas than for rural areas.

HICES and WMS data have basically certain weaknesses. WMS and HICES cover the sedentary population of Ethiopia. They exclude the non-sedentary population of Afar and Somalia. Residents of collective quarters, homeless persons, and foreigners are not covered in the surveys.

Income data are underestimated. Expenditure data are good in general and can be used as a proxy for household income. For example for about 70% of the sample income is less than consumption expenditure. This means individuals under-report income data or households have negative saving. But it is difficult to say that about 70% of the households are dis-saving. This implies that household level saving is potentially difficult to monitor from survey data. However, a proxy for saving can be obtained from sources of consumption such as interest rent, *equb, ider,* bank saving information which one can get from the HICES data. Also it will be possible to infer from the ownership of cattle of rural households.

WMS do not include the level of owned and cultivated land. However, other assets are recorded. Information on the availability and use of credit is not included in HICES and WMS. This makes HICES and WMS data set less useful to assess the impact of credit (micro finance and other types of credit) on consumption smoothing and poverty alleviation.

These drawbacks have been corrected now. The new HICES and WMS have already included new variables such as amount of land cultivated, the amount of credit obtained, the level of assets and livestock owned and many other variables that were missing from the previous surveys.

Usually poverty report based on HICES data is robust at regional rural urban levels. The sub-regional levels of poverty estimate were not robust and the results are

very difficult to explain. For example, poverty in Wag Himra was lower than South Wollo, Oromia and North Shoa Sub Regions, which is unrealistic.

At present CSA does not plan to collect the WMS and HICES either annually or simultaneously. WMS is planned to be collected every three years while HICES is planned to be collected every four years. It has been found that conducting HICES and WMS simultaneously is expensive. The exact plan of CSA is to conduct these two surveys in the above mentioned time frame and Core Welfare Indicator Questionnaire (CWIQ) in between the WMS periods. There is no intention of combining HICES and WMS and conducting Living Standard or Integrated Survey for the reason of cost. These two surveys (WMS and HICES) are used to monitor poverty, but using different dimensions. The different dimensions are interrelated, in that it is useful to know how, for example, wasting, stunting and enrolment rates vary across income quintile. This is only possible if both surveys are conducted at the same time and at the same frequency.

These two surveys are cross section. No effort has yet been done so far to collect a panel data of HICES and WMS. This makes the data sets weak to monitor vulnerability and see the income dynamics at micro level.

The Demographic and Health Survey is another potential survey that can be used to monitor the non-income dimension of poverty such as health and malnutrition aspects of poverty. The Demographic and Health Survey (DHS) was conducted by CSA in 2000. The Ethiopia DHS is a nationally representative survey of 15,367 women between the ages of 15 and 49 and 2,607 men between the ages of 15 and 59. It is the most comprehensive and representative population and health survey conducted in Ethiopia. It was implemented as a part of the world wide DHS. It includes information on fertility, family planning, child health, maternal health, breast-feeding, HIV/AIDS and women's status. This survey facilitates monitoring of most of the health-related millennium development goals (MDGs). It gives statistics on malnutrition (wasting (weight for height), stunting (height for age), and weight for age); primary and secondary net and gross enrolment rates; adult and maternal mortality rates; infant and under-five mortality rates; maternal and child health; immunization; infant feeding and childhood and maternal nutrition; housing characteristics; use of health services and malaria bed nets; utilization and source of drugs; educational attainment of women and men; literacy;

exposure to mass media; employment; occupation; fertility rate; teenage pregnancy and motherhood; knowledge of HIV/AIDS and related diseases such as sexually transmitted disease; knowledge of condoms; knowledge and use of contraceptives and other family planning methods. It also gives the gender and the regional dimensions of the above mentioned indices.

There are other independent surveys that are not official, but useful for poverty monitoring. Among the surveys, those carried out by Addis Ababa University in collaboration with Oxford University and IFPRI surveys (for rural surveys) and Gothenburg University (for urban surveys). These surveys focus on issues of importance for the analysis of household behavior. These data have provided an important source of evidence for trends in poverty, as well as providing particularly rich information on patterns of land ownership and other assets, health behavior, and intra-household issues. A substantial amount of research has been published using this data, and there has been a series of linked village profiles drawing also on participatory evidence. While the rural survey is not statistically representative, it draws on a variety of agricultural zones and provides results which appear broadly consistent with the HICES. These surveys have been relatively low-cost and it is recommended that they continue. Furthermore, these surveys are panel and their attrition rate is very low.

There are two sources of prices in Ethiopia: the independent price survey and internal price obtained by dividing consumption expenditure by quantity figures for food items only. The second type of data is more plausible and relatively accurate. When CSA conduct HICES they ask the quantity of items consumed. They weigh it ask how much they buy in order to estimate the expenditure on the item. Therefore, the internal price reflects the price faced by the household actually. In the independent survey, on the other hand, prices are collected from selected small and big markets for each Zones (sub-region) and major cities every year. The internal price seems to better reflect the price paid by the poor. Prices in the independent price survey may reflect the price paid by people who leave close to markets, not those people who leave far from market (more likely to be poorer than those who leave closer to market). Furthermore, price in the independent price survey do not take quality into consideration. It is the internal price

that is used for the poverty analysis for food items, but for non-food items it is the price obtained from the independent survey that is used.

4.2. Between surveys

There is any attempt so far to get estimates of poverty between surveys. HICE survey is conducted every five years. Welfare monitoring was planned to be conducted every year, but the plan is not yet materialized and the actual survey was conducted after four years. . If government has to wait for these surveys to get poverty estimate, there is no way of assessing the impact of programs and policies before five years. Hence there is a strong need to prepare annual estimates of poverty trends.

MOFED is currently involved in a research project trying to establish macroeconomic model that enables to forecast macro variables by linking macro models with micro outcomes. When this project is finalized MOFED is able to produce annual estimates of poverty trend.

Ethiopia has not yet conducted any Core Welfare Indicators Questionnaire (CWIQ) survey so far. CWIQ was supposed to be conducted this year, but it is postponed for next year because as it is not much different from the WMS, which will be conducted in June-August 2004.

5. Mixing qualitative and quantitative approaches to poverty assessment

Past experience with Participatory poverty assessment

Major participatory exercises in Ethiopia include the participatory poverty assessment carried out by the World Bank in collaboration with the government in 1997 and the document 'Consultations with the Poor" prepared by the Forum for Social Studies and published by the World Bank in 1999, as well as the village profiles prepared in connection with the AAU/Oxford rural household survey (mentioned above). Small PPAs studies made in 1997 sponsored by the World Bank include studies in selected sites of SNNP, Tigray, Oromia, Amhara and Addis Ababa Regions.

The two major participatory and consultative studies on poverty in Ethiopia (both sponsored by the World Bank) are listed in Table 2. The more recent of them, undertaken in 1999, made a serious attempt to quantify people's perceptions about changes in welfare. The sampling for both surveys attempted to reflect diverse conditions, some favorable, others not, but is not statistically representative. Much useful anecdotal information is included, which provides insights on poor people's concerns and their interaction with government. While PPA has limitations, and could certainly not substitute for traditional quantitative forms of data, there is scope to make more use of such assessments than has been done so far. It may be particularly relevant to employ such techniques for local and Woreda level reviews, where rigorous quantitative surveys are not always practical. More recently, additional insights will be available from the consultations conducted from Woreda level up for the PRSP itself.

Young Lives Project (an international study of child poverty) finalized the first phase of its survey. It is a survey of child poverty in the millennium, and it has been conducted by collaboration between EDRI, Save the Children UK and Reading University. The project uses sentinel site surveillance approach to study how children born in poverty behave. This project has already produced a video footage of children speaking their poverty and evaluates their environment. The survey will continue for the

next 15 years with the objective of assessing the impact of PRSP on children welfare. Village profiles prepared in connection with the AAU/Oxford rural household survey is also one of the qualitative data that is available.

The preparation to conduct participatory poverty assessment (PPA) is finalized. The PPA will be conducted by MOFED in collaboration with the Central Statistical Association sponsored by the World Bank. This assessment will be the first of its kind to be done in a more organized way and with the objective of linking the qualitative survey with the quantitative surveys (HICES and WMS).

Table 2: Selected Welfare Monitoring Data

Source	Survey type	Coverage (time)	Coverage (place)	Reporting Levels	Collection/Analysis
A. Nation-wide official data					
Welfare Monitoring Survey (WMS)	Cross-section household data	1995/96, 1997, 1998, 2000/01	Nationally Representative	National, Regional, Zonal, Urban/Rural	CSA, WMU
Household Income, Consumption and Expenditure Survey (HICES)	Cross-section household data	1995/96, 2000/01	Nationally Representative	National, Regional, Zonal, Urban/Rural	CSA, WMU
Demographic and Health Survey	Cross-section household data	2000	Nationally representative	National, Regional, Urban/Rural	CSA
Health and Nutrition Survey	Cross-section household data	1998	Nationally representative	National, regional, zonal in some cases, socio-economic background and gender	CSA
Census	Household and individual data	1994	National	National down to Woreda	CSA
Data from Health Sector Development Programme	Administrative reporting	Yearly	National	Currently National down to Region **	Min of Health
Data from Education Sector Development Programme	Administrative reporting	Yearly	National	Currently National down to Region **	Min of Education
Agriculture Sample Census	Cross-section farm-level data	2002, then every ten years: to be ready by mid-2003	National	National, regional, zonal, Woreda	CSA
Crop surveys	Cross-section farm-level data	Each season (twice a year)	National	Regional, zonal	CSA
Labour force survey	Cross-section individual-level data	1999, then planned every five years	National	Regional, zonal	CSA
Numbers eligible for food aid	Administrative reporting	yearly	Aggregation from administrative data	Region, Zone, Woreda **	DPPC
B. Independent quantitative sources					
Ethiopian Rural Household Survey – subsample	Panel household data (i.e. same households)	1994, 1994b, 1995, 1997, 1999, 2000	15 Villages *	Villages (reflecting livelihood diversity, not statistically representative)	Economics Dept, AAU with Oxford University
Ethiopian Urban Household Survey	Panel household data	1994, 1995, 1997, 1999	10 major towns, 1,400 households	Main towns	Economics Dept, AAU with Gothenburg University

Source	Survey type	Coverage (time)	Coverage (place)	Reporting Levels	Collection/Analysis
C. Qualitative data collection and analysis					
Participatory Poverty Assessment	Multiple qualitative methods	1997	10 specific communities, 6 rural and 4 urban	Diverse communities, but not statistically representative	World Bank in collaboration with Government
Consultations with the Poor	Multiple qualitative methods	1999	10 specific communities (drawn from Addis Ababa and two regional woredas)	Poor villages, not representative beyond specific communities	Forum for Social Studies/World Bank
Destitution study	Qualitative and quantitative method	2002	Three zones in Amhara	zone	IDS and SC-UK sponsored by DFID
Young Lives	Qualitative and quantitative	2002-2015	20 sentinel sites; 2000 children	Sentinel sites	Reading University/SC-UK/EDRI sponsored by DFID
Participatory Poverty Analysis (will be launched recently)	Multiple qualitative methods	Planned for 2004/2005	53 woreda 2600 households plus 112 communities	Regional rural urban	World Bank and MOFED

***** For 6 communities (350 households) data go back to 1989; for 4 communities data (500 households) data extend to 2001.

****** Reporting levels are a statistical issue for survey based data (i.e. the lowest level of geographical disaggregation at which the results can be reported without compromising statistical representativeness). For administrative data, we give the reporting levels typically used in publications and data bases.

(Source: MoFED, 2002).

The way poverty is defined by the PRSP document and by the poor people is not much different. PRSP defines poverty as multi-dimensional (material deprivation, lack of capability, vulnerability or lack of security, and voicelessness or lack of empowerment). Consultation with the poor (World Bank, 1999) and listening to the poor studies defines poverty using similar, but not identical terminologies. Consultation with the poor study done inform the World development Report (2000/01) defines poverty as having no future, feeling of hopelessness and desperation, and being in hunger and food insecurity. Having no future is expressed by the poor using the following phrases: life is from hand to mouth; we live only for today; it is life of no thought for tomorrow; we envy the dead. The feeling of hopelessness and desperation is expressed by phrases: we are between life and death; waiting to die while seated; we are full of debt; we have neither a dream nor an imagination. Terminologies that indicate hunger and food security are: we eat when we have the means and we go to bed hungry when we don't; we leave on coffee, we live as dependent on others, we are pitiful.

On a panel discussion held by Forum for Social Science (called listening to the poor) registered poor peoples' view on the meaning and characteristics and cause of poverty. Four people were interviewed and they characterize poorness as lose of respect, trust and hope, to give up on life itself and being suffered from social exclusion (Table 3). The same document indicates that the representative of poor people believe that the causes of poverty are (1) lack of employment opportunities and employable skills, (2) large family size and the inability to practice family planning, and (3) lack of access to education.

Table 3: Poor peoples' perception of poverty

	Sex and age of the Person	**Poor peoples' description of poverty (in Addis Ababa)**
1	Man, 24 years old	Poverty is characterized as malignant disease. To be poor is to lose hope, to give up on life itself and being suffered from social exclusion.
2	women 24 years old	Describe poverty as a lose of respect and trust. Poor are considered the lowest of low. They are looked down upon, not trusted, not respected. Poor play marginal role in a community.
3	man 25 years old	Poverty leads to break up of families; to social conflict and marginalization. To be poor is to loose the trust of one's neighbor and to be dehumanized.
4	woman 22 years old	Poverty is the inability to work and earn a living because of the lack of access to economic assets, in particular money. To be poor is to lose one's humanity

Source: Extracted from FSS(2002).

Destitution study on Northern Highland comprising of three Administrative Zones in Amhara Region (North Wollo, South Wollo, Wag Himra) defined destitution based on people's perception. According to this study, poor people are those who do not have enough to eat. Specifically the terminologies used to explain poverty are: those with problems, completely poor, those who are starving, those who have lost everything, those who have nothing, people who pass the night fasting, those who cook water etc, all related to material deprivation (Table 4).

Some of the qualitative studies mixed quantitative questions such as wealth ranking, farm size, family size, etc, while some of them use qualitative questions only. Destitution study and Young Lives use both qualitative and quantitative questions, while, consultation with the poor study uses qualitative questions only. When we look at the formal surveys conducted by the CSA, only WMS include some qualitative questions such as whether their living condition is improved or not.

Table 4.. Local terms and phrases for the poorest group in the community

Local (Amharic) term	approximate translation
chegeregnoch, cheger tegna	*those with problems*
Cherso deha	*absolutely / completely poor*
chigaregnoch	*those who are starving*
deha	*Poor*
(ye) mecheresha deha	*the last poor*
(ye) menate	*extremely poor*
meTer deha	*the poor who've lost everything*
minim yelalew	*those who have nothing*
mulich yale	deha *the poor who have nothing*
Tsom-adari	*people who pass the night fasting / go to bed hungry*
wuha anfari	*those who "cook" water*

Source:Destitution Study by IDS (2002).

There is some inconsistency between the qualitative surveys and quantitative surveys regarding the dynamics of poverty. The qualitative studies in general indicated an increase in the proportion of people who are poor (IDS, 2002; FSS, 2002, World bank, 1999), while the quantitative survey indicate that there is no change in the proportion of people who are poor (MOFED, 2002). However, poverty analysis based on the quantitative survey conducted by the Addis Ababa University in collaboration with Oxford University and IFPRI indicated that poverty has decline from 1989 to 1994 and 1997.

The reason for such discrepancy in poverty result across these surveys/studies is the sampling design and the choice of welfare measures. The difference between the ERHS and HICES is partly due to the sample design and coverage. The ETRHS represents the highland Ethiopia and the poverty analysis used income instead of consumption. The ERHS uses different months/period when conducting subsequent surveys which affect the comparability of data across surveys. On the other hand the MOFED poverty analysis used HICES and WMS which is more representative of the sedentary population of Ethiopia. HICES was conducted in the same time period/months in both the 1965/96 and 1999/00 and there is no much comparability problem.

The difference in the dynamics of poverty between MOFED's (2002) study and the PPAs is mainly due to the choice of welfare measures. The PPAs picked up a particular poor area and talk to poor people. The result of such kinds of study is a case study that explains how poor people perceive about poverty. The results of PPA are more exaggerated and care should be taken in comparing results from PPAs studies and from HICES based poverty analysis. Furthermore the areas to which these different studies refer are not the same.

Basically PPAs should be used to complement quantitative surveys in making an in depth study on causes and consequences of poverty. In this regards, the current plan of MOFED to conduct PPA study in areas where HICES is conducted is a marvelous idea.

6. Accessibility of data to researchers

Despite a wide variety of surveys available in Ethiopia, the accessibility of data to researchers and other users is extremely limited. The CSA does not provide data to individuals and local researchers the full raw data of surveys conducted in the past. Only donors and international institutions such as the World Bank, DFID and USAID can get data. CSA provides only area specific raw data for local researchers provided that they can produce document from their organizations. CSA also provides publication consists of tabulations and cross tabulations of survey variables. The main reasons often stated for not providing full raw data for all local researchers is national security and the data may

abused by irresponsible researchers. Because of such limitations researcher often spend substantial resource to collect their own data.

Improving the accessibility of data to researchers a whole would help to reduce resources committed for data collection. More analysis could have been carried out that may help government to formulate and monitor poverty reduction programs.

7. Concluding observations

The preparation of the full poverty reduction strategy paper (PRSP) named as Sustainable Development and Poverty Reduction Programme (SDPRP) was finalized in August 2002. This programme has been the guiding policy document since its preparation. Hence tracking and mentoring of the SDPRP is crucial to achieve the stated impact.

The Ethiopian SDPRP is built on four pillars of (a) Agricultural Development-Led Industrialization (ADLI) and food security, (b) Justice System and Civil Service Reform, (c) Decentralization and Empowerment, and (d) Capacity Building in Public and Private sectors. Of the four building blocks, ADLI is designed to develop the agricultural sector, reduce poverty, ensure food security, and ultimately bring industrialization. The other three blocks are designed to enhance the effectiveness of ADLI in reducing poverty and ensuring food security. The health, education, water and the road sector plans, among others, are designed mainly to facilitate rural development and industrialization in the country.

Various consultative forums have been organized at different levels in order to gathering useful information for the preparation of the Ethiopian Poverty Reduction Strategy Paper. The consultation process started at the *Woreda* (district) level followed by regional level consultations, which finally culminated with federal level consultations. The consultations were held without government moderators, and thereby established a new set of expectations with respect to public debate of policy issues. However, the consultations served mostly to provide reactions to the government's existed policies and programs, instead of crafting new ones.

The PRSP document has influenced the policy making and budgeting process. Both MOFED (organization drafting the budget) and the parliamentarians use the SDPRP to evaluate and amend the budget in 2003/04.

Welfare monitoring Unit (WMU) of the MOFED is the responsible organization for preparing, evaluating and monitoring of SDPRP. The unit is places in MOFED under the Economic Policy and Planning Department. The Welfare Monitoring Committee (WEM COM) and Welfare Monitoring Technical Committee (WEM TEC) are committees that oversees and provide technical advice to the over all SDPRP monitoring and evaluation system. The CSA is the main data collecting authority in the country. The Authority has collected several surveys in the country including HICES and WMS. Moreover sector ministries collect administrative data on education, health, road, water, and agriculture and food security.

The SDPRP defines poverty as material deprivation, lack of capability, vulnerability and voicelessness (World Development Report 2000/01). Ethiopia is relatively good in collecting data although it has to work hard in releasing the result quickly. Of all the surveys, two main surveys are used to measure poverty in Ethiopia: Household Income and Consumption Expenditure Survey (HICES) and Welfare Monitoring Survey (WMS). Consumption expenditure is used to calculate the income dimension of poverty. Poverty line is set based on the minimum calorie required for survival plus expenditure required to cover essential non-food items. The poverty line is set to reflect the condition of people at the lowest income quartile. While there is under reporting of income in the survey, consumption variable from which poverty indices are calculated is measured relatively accurately.

Many of the official surveys conducted in Ethiopia are quantitative. Only studies conducted by the World Bank are qualitative including the Consultations with the poor. Other independent surveys are also available which uses both qualitative and quantitative surveys: for example, Young Lives (an longitudinal international study of child poverty), and Destitution study. Equally important for poverty monitoring is the Rural and Urban Household Surveys conducted by the Addis Ababa University (AAU) in collaboration with Oxford University, IFPRI and Gotenberg University.

Ethiopia is relatively rich in the availability and adequacy of price data. CSA has independent price survey from which prices of food and non-food items are published quarterly. Internal price is also possible to get when HICES is conducted. This price is reflected to the prices faced by poor households.

While the official quantitative surveys indicate that poverty (income poverty) has not changed much, the Rural and Urban Household Surveys of AAA indicate that poverty has declined since 1989. On the other hand the qualitative surveys show that poverty and destitution increased over the last ten years.

Except the independent surveys namely Ethiopian Rural and Urban Household surveys, all data in Ethiopia are cross section implying that it is difficult to measure the dynamics of poverty and impact of polices on vulnerability and poverty. Hence, efforts ahs to be made to make HICES and WMS generate a panel data by follow individuals repeatedly for few years.

Cross-section data has limited the capacity to assess the impact of policies on individuals. Quantitative surveys are still important to look at the income and non-income dimension of poverty, but it has limited capacity in identifying the causes of poverty and poor peoples' perception of poverty. Therefore, strengthening WMS of the country to conduct Participatory Poverty Assessment and Participatory Poverty Monitoring is crucial. Most importantly, building the capacity of the Ethiopian WMS is crucial to enable quicker analysis of surveys so as to make CSA provide timely information for policy makers.

In general, Ethiopia performs relatively well in the relevance and adequacy of data to monitor policy except panel data are lacking, but much has to be done to improve processing, analyzing and dissemination of survey results. The incorporation survey results for policy making and resource allocation should be further enhanced. The use of poverty gap and poverty severity indices should be encouraged in stead of using head count index in budgeting subsidy.

Currently HICES and WMS are conducted every year. There is no either any plan to conduct the surveys annually.. As a result, annual estimate of poverty trend is difficult to get unless some kind of forecasting is done which is usually inaccurate. Higher frequency of WMS and HICES are required, therefore, to provide annual estimates of

poverty trend. If conducting these surveys annually is going to be expensive, the country has to think on using a CWIQ questionnaire, designed using poverty correlated derived from HICES and WMS.

CSA data are very difficult to access by academicians and Researchers. There are no public-use tapes generally available to Ethiopia researchers except hard copy of tabulation and cross tabulation survey variables. The inaccessibility of data has limited researcher to undertake useful researches. Hence incentive should exist for researchers to carryout studies using existing data.

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