

IS BOTSWANA MAKING PROGRESS IN IMPLEMENTING THE POVERTY REDUCTION STRATEGY?

The answer depends firstly on whether or not the country has a poverty monitoring system to track changes from a baseline, and to measure progress over time and space.

Secondly, if it does have such a system, whether or not it is adequate and effective in tracing changes in poverty across space and time. A third consideration is whether or not the system enables officials to understand and/or explain the causes of slow progress, or a complete lack of progress, towards poverty reduction, and if it provides continuous feedback to policy makers.

Monitoring inputs, activities and outputs enhances effective implementation, but it is not enough to show development and welfare outcomes. Unlike the traditional M&E system where the emphasis is on measuring implementation effectiveness (input-activity-output relations), welfare monitoring, such as poverty reduction, focuses on the whole input-output-outcome chains, where the emphasis is on development and welfare outcomes.

The key components of a good monitoring system are the generation of information and its linkage to the decision-making process. The process starts with a knowledge of the conditions of poverty and the underlying causes, which then guides the formulation of policies and programmes, the development of relevant and objective indicators, the collection and analysis of data for evaluating performance and impact, and the flow of information to policy makers for action.

Recognising that progress on poverty reduction is not adequately monitored in Botswana, the Government has called for the institution of comprehensive monitoring systems to track progress on poverty reduction in its different dimensions. As articulated in the NSPR, such systems will particularly monitor progress on improving the well being of the poor in both income and non-income dimensions.

Instituting a poverty monitoring system is one of the priority areas of action for the RDC/MSCPR/RDCD. The current and planned activities under the poverty monitoring system include:

- Undertaking an inventory of existing welfare (poverty) monitoring systems, and describing the extent to which the current M&E systems incorporate and monitor the well being of the poor – the NSPR's primary target population;
- Developing core poverty monitoring indicators (on a continuous basis);
- Incorporating core poverty indicators into the M&E units of line ministries;
- Monitoring the integration of poverty indicators into existing M&E systems through RDCD;
- Promoting survey-based poverty monitoring and statistics.

This chapter has four sections. Section 4.1 deals with the recent poverty assessment and situation report. Section 4.2 highlights the process and main conclusions of the recently completed inventory of existing poverty monitoring systems in line

ministries. Section 4.3 presents the core welfare indicators developed to monitor progress on poverty reduction. Section 4.4 justifies the need for a multi-topic survey-based poverty monitoring approach.

4.1 RECENT POVERTY ASSESSMENT AND STATISTICS

Periodic poverty assessment is essential to: (1) establish the characteristics of the poor and identify them with great accuracy; (2) understand the underlying processes and causes of poverty; (3) develop policies and programmes that are responsive to the needs and constraints of the poor; (4) develop indicators for tracking progress in poverty reduction; and (5) inform policy makers and the public at large of the impact of policies and programmes on poverty reduction (or welfare improvement).

The prime data source for poverty assessment in Botswana is the nationally representative Household Income and Expenditure Survey (HIES). The first survey covering both rural and urban areas was undertaken in 1984/85. Subsequently, two national surveys were taken over a span of ten years, 1993/94 and 2003/04. The main objective of the HIES is to generate representative estimates of household income and expenditures at national and regional levels.

Table 4.1 shows the modules and the respective content of the 2002/03 HIES survey. It collects data on household demographics, labour force and employment, consumption expenditures and income. Prominent in the content of the survey are the details in household income from different sources and household food and non-food consumption expenditures.

Module	Content
Demographic particulars (Module A)	Age, sex, place of usual living, parental survival, education (2 years or older), marital status (12 years & over), training (12 years & over), labour force and employment characteristics (12 years & over)
Source of household income (Module B)	Past 30 days and past 12 months
Housing, housing possessions and cattle ownership (Module C)	Dwelling, livestock ownership and other household possessions
Household enterprises (income generating activities) - Module D	Business ownership, employees, gross income, and operational expenses
Agricultural income and expenditure (Module E)	Crops, vegetables and fruits, and livestock (sales revenue, own produce consumed, major agricultural expenditures), and other agricultural income (wage income)
Employment earning and deductions during past 30 days (Module F)	Wage/salary (cash and in-kind), income from business (e.g. dividends) plus benefits/allowances less deductions
Transfers including publicly subsidised benefits (Module I)	Cash and in-kind transfers from private sources, and net benefit from public subsidies
Major household expenditure in past 12 months (Module G)	Major household durables, medical expenditure and educational expenditure
Regular monthly and annual payments (Module H)	

Note: A daily record (Book 2) is kept with sampled households for a period of one month to track daily household expenditure and other disbursements, own produce consumed, household business transactions, and household income and receipts.

Table 4.1:
2002/03
Household
Income and
Expenditure
Survey

Dimension of Poverty	Selected Agency	Policy Goal	Pathway for Poverty Reduction
Income/ consumption poverty	Ministry of Agriculture	<ul style="list-style-type: none"> • Increase agricultural output and productivity • Increase employment opportunities for the fast growing labour force • Diversification of the agricultural production base • Improvement in food security at the household and national levels • Conservation of scarce agricultural and land resources for future generations 	Employment creation, Productivity/ income growth
Food secured population	FSU/RDCD (coordinating the National Food Security Strategy)	<ul style="list-style-type: none"> • Assurance of food availability at national level • Providing economic access to food for households • Guaranteeing food safety and nutritional security 	Sustained food production, enhanced import capacity to ensure adequate food availability through trade, and improved access to food at household level (employment creation, low-cost access to market)
Social dimension of poverty (nutrition, health and education)	Ministry of Health	<ul style="list-style-type: none"> • Development of health service infrastructure • Improvement in the quality of health service delivery • Equitable access to essential health services 	Better nutrition and health, improved literacy, and enhanced human capital and productivity
Vulnerability to poverty	Department of Social Services	<ul style="list-style-type: none"> • Provision of social safety nets for vulnerable households/individuals 	Social assistance and protection to reduce income/consumption fluctuations

Table 4.2: Sectors Selected for Initial Assessment of Poverty M&E

The latest CSO report based on the 2002/03 HIES (CSO, 2004) provides descriptive statistics on household income and consumption expenditures (i.e. source of household income, level and distribution of household income and household consumption expenditures). However, the report does not provide details on poverty estimates, characteristics and causes of poverty, and changes in poverty. Since the 2002/03 HIES coincides with the official adoption of the NSPR in 2003, such detailed poverty statistics would be ideal for benchmarking progress on poverty reduction.

Even when the poverty estimates become available, they are only representative at regional levels. Recognising that the poverty estimates, when available, cannot be disaggregated at lower geographical levels, the CSO plans to undertake poverty mapping at the geographical level, representing small spatial areas that are sufficiently heterogeneous between areas but homogenous within areas.

Such mapping has the advantages of viewing in detail spatial variations in poverty, identifying areas that lag behind in growth performance or access to social services, identifying relevant interventions specific to geographical areas, and reducing errors in poverty targeting. The most efficient way forward is to increase the sample size to get representative poverty rates at district level.

4.2 REVIEW OF EXISTING POVERTY M&E SYSTEMS

The Process

The objective of this inventory was to assess the extent to which poverty M&E systems have been developed at policy and programme levels in different government agencies; or, to examine the extent to which the current M&E systems of the government agencies incorporate outcome indicators for monitoring the well being of the poor.

The first task of the inventory undertaking was to specify the criteria for selecting the initial clusters of the government agencies to be reviewed. Based on the consensus of the members of the Poverty M&E Reference Group, the following criteria were agreed on and followed:

- Identify government agencies (sectors) that represent the different dimensions of poverty (agencies dealing with income growth, food security, social services for human capital development, and vulnerability to poverty);

- Focus in particular on government agencies (sectors) where there are already functioning M&E systems or where there is known initiative towards establishing such systems soon;
- Emphasise sectors with a record of addressing the needs of the poor, such as the provision of basic social services (e.g. Ministries of Education and Health) or those with the potential for reaching a large segment of the poor (e.g. the rural poor through the Ministry of Agriculture);
- Focus on the availability of already existing poverty monitoring data and poverty statistics.

Following the above set of criteria, the government agencies shown in Table 4.2 were selected for the initial stocktaking. As noted in the table, the selected sectors represent the different dimensions of poverty; these sectors also have a great potential to reach large segments of the poor population through the indicated pathways.

Following the selection of the agencies, the next task was to assess to what extent poverty reduction entered into all the stages of the outcome monitoring process: goal setting, target setting, choosing outcome indicators, information generation, and utilisation for policy making. The specific activities included:

- Describing the processes as currently practised in setting and operating welfare (poverty) monitoring and evaluation systems;
- Identifying key impact and outcome indicators currently in use, and evaluating their strengths and weaknesses;
- Assessing available data bases, data sources and the quality of data, including the state of poverty statistics and information; and
- Evaluating the current M&E reporting and channels of communication, including feedback mechanisms.

These activities should answer the primary question: How much of the existing M&E systems explicitly incorporate the overarching goal of poverty reduction, in setting goals, choice of indicators, and reporting policy outcomes?

Key Conclusions and Recommended Action

The following key conclusions and recommendations emerged from the review of the process and operation of the existing M&E systems in the selected agencies:

- Whilst poverty reduction is the overarching goal of the Government of Botswana, the policy and programme goals of the reviewed government agencies are neither derived from nor aligned to the objectives of the NSPR. In other words, poverty reduction is not yet mainstreamed into the NDP process. The MSCPR must work with line ministries to mainstream the NSPR in the development process, policies and programmes.
- Line ministries are at different stages of developing outcome M&E systems. Some of the agencies have outcome monitoring indicators that are consistent with the NSPR, such as the indicators for monitoring the attainment of basic education and health policy objectives (basic literacy, improvement in child

Disaggregating by socio-economic groups is necessary to capture the whole distribution of the poverty indicators.

nutrition, reduction in morbidity and mortality, etc.). But often the indicators are not sufficiently disaggregated to track the welfare of the poor in particular.

- Although the core MDG indicators are relevant to poverty monitoring, they are nationally-based. Disaggregating by socio-economic groups is necessary to capture the whole distribution of the poverty indicators, focusing particularly on tracking the well being of the poor.
- The RDC deals with rural as opposed to urban poverty, whilst the MSCPR should ideally deal with rural and urban poverty issues. While it should be acknowledged that poverty is more a rural phenomenon, this current institutional arrangement (RDC/MSCPR/RDC) may not adequately respond to urban poverty issues.
- Coordinating the poverty M&E resides with the MSCPR, which should have effective linkages with line ministries. However, the linkage between the MSCPR, which should be reporting progress on poverty reduction, with the line ministry M&E units is weak. The RDCD should work closely with the line ministries to institute welfare (poverty) monitoring indicators to ensure that their M&E systems monitor the well being of the poor.
- Within the RDCD, there are units coordinating the different dimensions of poverty: the Food Strategy Coordination Unit (monitoring food security), the Early Warning Technical Committee (monitoring vulnerability to food insecurity and poverty), and the Policy Analysis Coordination Unit. These units share common objectives and hence need to work closely together. The RDCD needs to develop a framework for integrating the activities of the relevant units of RDCD towards enhancing poverty monitoring in its many dimensions.
- The RDCD is not yet in a position to report progress on poverty reduction, because of an absence of identified core welfare indicators with the agreed level of aggregation and the frequency of data collection. The way forward is to develop core indicators that are disaggregated by socio-economic group, particularly income (expenditure), and to undertake survey-based monitoring that provides a comprehensive measure of household welfare over time and space.
- The MSCPR must lead in ensuring that existing and recommended indicators are disaggregated, based on relevant criteria (geography, demography and income/expenditure groups) to ensure that the M&E system tracks the welfare of the poor. It should collaborate with CSO and line ministries to ensure that the indicators are disaggregated and monitored at regular intervals.

4.3 INITIAL CORE POVERTY MONITORING INDICATORS

In response to the recommendation for adopting core poverty monitoring indicators, the MSCPR adopted the sets of indicators shown in Table 4.3. These indicators are consistent with the goals of the NSPR, i.e. to focus on tracking the well being of the poor in different dimensions.

The table includes the policy goal associated with each poverty dimension. The majority of the indicators are consistent with existing welfare monitoring indicators (e.g. MDG indicators, early warning food security indicators, health and education sector specific indicators).

The poor are generally vulnerable to risks, such as unemployment, illness and family separation.

The listed indicators are outcome indicators, assuming the various ministries are effectively tracking the input and output dimensions leading to these outcomes.

The outcome indicators in Table 4.3 are separated into impact and intermediate outcome indicators. The impact indicators are realised over a long period of time and hence not amenable for frequent monitoring. The intermediate outcome indicators are, however, related to the impact indicators in causal-chain effects, and are important for monitoring progress towards attaining the impact welfare outcomes.

Table 4.3 also recognises that the poor are generally vulnerable to risks, such as unemployment, illness and family separation. Currently, there are different indicators for monitoring vulnerability arising from climate (e.g. the indicators included in the current Early Warning Monitoring system), agricultural production, child nutrition and rate of destitution, HIV/AIDS and epidemic prone diseases. These indicators are all captured in the Table.

The initial sets of indicators are subject to validation and revision as more empirical evidence emerges on the relationships between the indicators and welfare outcomes. Continuous evaluation is necessary on the relevance, objectivity, measurability and sensitivity of the indicators to policy change. Moreover, a participatory approach to selecting indicators must be adopted to ensure that all key stakeholders are represented and are committed to the M&E process.

Dimension of Poverty	Policy Goal	Impact (final) Welfare Indicators	Intermediate Outcome Indicators
Income poverty	Reduce/eliminate poverty	Head count and high-order poverty measures	Productivity growth (in sectors where the poor are concentrated) Unemployment amongst the poor Wages for unskilled labour (rural, urban) Asset ownership (e.g. housing)
Food security and nutrition	Reduce/eradicate food deprivation Reduce malnutrition	Head count and high-order food poverty measures (e.g. calorie-based) Improved physical growth and cognitive development	Food production and supply (food balance sheet) Adult malnutrition (body growth and change) Child malnutrition (change in height and weight)
Basic health	Improve healthy life expectancy Reduce disease burden Reduce HIV infection Reduce mortality rate	Increased life expectancy (reduced mortality rates) Improved child survival (early childhood development)	Access to health services Prevalence of diseases (major communicable diseases) HIV prevalence rate
Basic education	Education for all	Literacy rate	Access to basic education Primary completion rate Literacy rate
Vulnerability to poverty and food insecurity	Reduce risk of falling into poverty or deepening poverty	Reduction in consumption or income variance	Change in level and spatial-temporal distribution of weather variables Change in natural resource conditions (vegetation, rangelands, and water availability) Agricultural production and change (crop and livestock –physical growth, yields, market off-take) Wildlife production and distribution Variability in food prices Rate of temporary destitution Attendance in public works (if not rationed) Weight for height for children Incidence of epidemic prone diseases Orphanage rate (AIDS orphans)

Table 4.3:
Expanded
Poverty
Monitoring
Indicators

4.4 A MULTI-TOPIC HOUSEHOLD SURVEY

The mandate of the MSCPR is to monitor the well being of the poor; this includes income poverty, food security and nutrition of the poor, basic health and education services for the poor, and vulnerability to poverty and food insecurity.

The majority of the indicators as currently practised are nationally based. It is thus difficult to gauge how the poor are faring as compared to the 'average' welfare outcomes (the last row in Table 4.4). A recommended approach is to disaggregate the indicators by socio-economic groups to track the welfare of the poor within the context of the whole distribution of the indicators (for example, comparing the lowest quintiles with the other quintile groups in Table 4.4).

The CSO undertakes single-topic household surveys at fixed intervals. These include: (1) Household Income and Expenditure Survey (1993/94, 2002/03); (2) labour force survey (1995/96, 2005/06); (3) demography survey (1998, 2006); (4) family

Expenditure Group	Unemployment Rate	Income Growth (e.g. Household Consumption per Capita)	Food Consumption Level (extent of undernourishment)	Malnutrition Rate (e.g. child malnutrition)	HIV/AIDS Prevalence Rate	Educational Attainment
Quintile 1 (lowest)						
Quintile 2						
Quintile 3						
Quintile 4						
Quintile 5 (highest)						
Average						

Table 4.4: Selected Welfare Indicators by Expenditure Group

health survey (1996); (5) Botswana AIDS impact survey (2001, 2004); and (6) literacy survey (1993, 2003).

The contents of these surveys are detailed but narrow in poverty dimensions. Unlike the single topic surveys, the collection of data on different dimensions of household welfare (e.g. consumption, nutrition, health, education) from the same households should enable the reader to:

- Estimate complete (comprehensive) household welfare levels;
- Establish important relationships and identify the determinants of household welfare; and
- Assess the impact on poverty of government programmes and policies.

A typical multi-topic household survey contains the modules indicated in Table 4.5: (1) household demography, migration and housing characteristics; (2) labour force participation, employment and remuneration; (3) education (schooling); (4) health and fertility; (5) anthropometry; (6) consumption; and (7) income.

The typical multi-topic survey does not capture information on household vulnerability to shocks, coping strategies, and parental survival. Such information is relevant in the context of Botswana.



Table 4.5:
A Typical
Multi-Topic
Household
Survey

A preferred approach is a multi-topic survey based poverty monitoring system (not a substitute for single-topic household surveys). What is required is to undertake a multi-purpose (integrated) household survey that builds on the core HIES survey and includes modules on parental survival and child fostering, nutrition, health, education and vulnerability.

Module	Content/Subject (example)	Location in Botswana Surveys
Household demography, migration and housing characteristics	Relationship, age, sex, marital status, place of residence (current, past and reason), housing (type of dwelling, housing and utility expenditures), source of water and energy, etc	Commonly found in the CSO household surveys and census (see, for example, the 2006 Botswana Demography Survey in the annex)
Labour	Labour force participation, search effort, occupation type, length of employment, remuneration	Detailed in the Botswana Labour Force Survey (Table A3)
Education (schooling)	School attendance and completion, school expenditures, literacy	Household demography module in all the surveys, Botswana literacy survey every ten years, and expenditures in HIES survey
Health and fertility	Illness type and episode, use and costs of health care, disability, fertility (birth history, child survival, type and duration of child feeding)	Botswana Demography Survey (Table A4) and Family Health Survey (Table A5)
Anthropometry	Height and weight measurements of all household members	The Botswana National Nutritional Surveillance for under five years of age
Consumption	Food expenditures, consumption of home production, nonfood expenditures including housing and durable goods	Household Income and Expenditure Survey (Table A2)
Income	Household income from self-employment, wage employment, asset income and transfers	Household Income and Expenditure Survey (Table A2)
Credit and savings	Indebtedness and source of financing	

4.5 CHAPTER SUMMARY

Instituting a comprehensive poverty monitoring and evaluation system is the highest order of priority for monitoring progress towards poverty reduction.

The first step has begun, with the identification of core welfare indicators, which are subject to evaluation for their relevance, objectivity, responsiveness to policy change, and manageability for data collection and analysis.

The MSCPR calls on all sectors to incorporate the core indicators into their M&E systems. It recommends the CSO to take the lead in undertaking a comprehensive multi-topic household survey built on the existing HIES, and followed by light surveys at an agreed frequency.

4.6 REFERENCES

CSO. 2004. *Household Income and Expenditure Survey 2002/03 – Main Report*. Gaborone.