

THE KENYA INTEGRATED HOUSEHOLD BUDGET SURVEY PROJECT 2004/5

PROJECT BACKGROUND

The Central Bureau of Statistics is currently planning to undertake the Kenya Integrated Household Budget Survey (KIHBS), which is a key component of the strategic plan for the National Statistical System. The survey is to provide numerous indicators for the formulation, monitoring and evaluation of key social and economic indicators for the country at large.

A principal objective of the Strategic Plan is to design and conduct household surveys in an integrated framework that take into consideration the timing of surveys and sampling design. By developing an integrated framework, the Strategic Plan emphasizes the dual goals of providing regular updates of key indicators to be monitored (e.g., measures of poverty and well-being, aspects of national accounts) and supplying specific data that would allow examination and evaluation of some specific programs and policies (e.g., impact of free primary education). The first stage of the integrated framework entails the Integrated Household Budget Survey (IHBS) to be fielded over the course of 12 months. This survey is a key component of the Strategic Plan. Within the integrated framework for household surveys, the KIHBS is the first component and one of the largest projects in scope. As such, timely and successful completion of this project will be critical for the overall success of the vision for household surveys in the Strategic Plan.

This survey is in tandem with the Government's widespread commitment to the principle of evidence-based decision-making in Kenya, which sets the agenda for the need for improved statistics to inform the design, implementation and eventual

evaluation of various development programmes for economic recovery and national development. The integrated framework is also in line with the strategic plan's dual goals of providing regular updates of key indicators to be monitored, and supplying specific data that would allow examination and evaluation of some specific programmes and policies. In addition to these, the KIHBS will also provide information on other development initiatives being undertaken by the Government such as investment in infrastructure, school feeding programmes, and pension and health insurance coverage, among other things.

Plans for the survey started in October 2003 and arrangements are now ready to start the field work on 11th May 2005.

GOALS AND OBJECTIVES

The 2004/05 KIHBS is designed to provide necessary information for updating the urban CPI and establishing the rural one, measuring and monitoring poverty and living standards, compiling national accounts statistics and updating employment statistics. The survey is also aimed at providing data on socio-economic aspects of the Kenyan population including education, health, energy, housing, water and sanitation. This information will be essential for:

- Measuring, monitoring and analyzing living standards and poverty in Kenya.
- Compiling national accounts statistics and updating employment statistics. The System of National Accounts is for monitoring overall macroeconomic growth. It is to provide data on type and cost of household consumptions for computing Gross Domestic Product (GDP).
- Providing data on socio-economic aspects of the Kenyan population including education, health, energy, housing, water and sanitation.

- Providing necessary information for updating the urban CPI and establishing the rural one. Updating of the urban Consumer Price Index (CPI) and establish the rural one has the basic objective of:
 - Measuring inflation, Comparing price movements, Deflating incomes and consumption/expenditure for estimating changes in real incomes
 - Indexing: license fees, pensions and social benefit payments, agricultural wages; setting tax allowances/tax thresholds,
 - Providing a point of reference for evaluating changes in wages and salaries

The KIHBS will also serve as a baseline survey for continued monitoring of key poverty and welfare indicators in the country. It will also help to meet the rapidly increasing demand for statistical data to support evaluation of development programs for economic recovery and national development.

The need for improved statistics to provide information on the design, implementation and eventual evaluation of various development programs for economic recovery and national development is another motivating factor for the survey. A major aspect is the evaluation of the government's "Economic Recovery Strategy (ERS) for Wealth and Employment Creation" which provides a framework for national development and poverty reduction and lays out the actions needed to set policies and monitor progress. The survey is also aimed at providing information for monitoring the steps towards meeting the Millennium Development Goals (MDG's).

COVERAGE

The KIHBS will be based on the National Sampling in which the whole country is divided into clusters. Each cluster has about 150

households. The project will cover a sample of 1,343 clusters, with 10 households being selected per cluster and this leads to a total of 13,430 households to be interviewed.

With the proposed sample size, the task will be already quite difficult, since the operation will engage around 190 field staff for a full year. A larger sample would greatly stress the costs and managerial requirements of the project, but it would almost certainly decrease, rather than increase the precision of the survey, because it would bring about much larger non-sampling errors.

More importantly, due to the complexity of the survey and the vulnerability to substantial *non-sampling errors*, strong managerial measures (particularly, by careful selection, training and supervision of the interviewers) were and will be instituted.

The proposed allocation of the sample clusters into districts and Urban/Rural intends to arbitrate between two constraints that are not complementary. On the one hand, it tries to make the total sample descriptive of the unequal distribution of the Kenyan population into districts, by visiting more households in the more populated districts. On the other hand, it strives to produce estimates that are comparable between districts. Specifically, the sample is such that a minimum of 170 households are selected in each district.

DATA COLLECTION METHODOLOGY

The survey will require that the 1,343 clusters are visited for a period of 12 months. Seasonal variations will be captured by randomizing the visits to selected clusters within each district throughout the year.

The 10 households selected in each cluster will be visited over a period of only 3 weeks in the year, but the survey instruments will

strive to capture the total annual consumption, expenditures and incomes of each household by combining the factual observation of food consumption (and some other frequent expenses) with diaries during a two-week period and the purchases of other items by recall, with reference periods ranging from 3 to 12 months.¹

Before initiating its factual observation by diaries, food consumption over the past 7 days will also be captured by recall at the beginning of the survey. The combination of both methodologies intends to provide a much needed empirical basis for their comparison, and will be the basis for the formulation of simplified survey instruments for poverty monitoring in the future.

Each cluster will be covered by one or two interviewers in approximately 3 weeks (including the two-weeks of diaries,) according to the schematic schedule shown in Table2. The interviewer will visit each household every other day, to verify the proper filling-up of diaries, and to apply the other modules of the questionnaire.

Capturing Seasonality in Consumption

The KIHBS is designed to collect information from 13,343 households located in 1,343 clusters over a period of 12 months during which each household (and each cluster) will be interviewed for about three weeks. Thus, over the 12 month period, data will be collected continuously during the course of 17 three-week cycles. Geographically, the sample has been designed to produce District-level estimates, albeit it at times with somewhat high sampling errors. Moreover, geo-temporally, the sample is designed such that at least one cluster is being visited in every District during every three-week cycle. This allows for analysis and correction of seasonal effects in consumption, expenditures

¹ The randomization of visits to the clusters over the 12-month period of data collection ensures the proper capture of seasonal variations in average consumption and expenditures required by the estimation of budget shares for the Consumer Price Indexes and for National Accounting. However, the fact that food consumption will be observed at different times in different households will require special care in the analytic endeavors that require comparisons between households, particularly in poverty analysis.

and poverty measurement. While the sample does not allow for District-level estimates of mean expenditures per three-week cycle, it does allow for nationally representative and Urban-Rural wise estimates per cycle. This is sufficient to allow for the analysis of whether and how the level and composition of the mean consumption basket and household expenditures vary across the year (per three-week cycle). Assuming that consumption, on average, exhibits a seasonal pattern across rural and urban Kenya, this will also allow for construction of seasonal consumption expenditure weights. These will also be useful when analyzing data from future surveys not collected year-long.

SURVEY INSTRUMENTS

The KIHBS instruments are based on the model questionnaires which have been designed to address the multiple objectives of the survey. There are three questionnaires:-notably the main Household questionnaire, the community and the market price questionnaire. Input has been sought from a variety of organizations that are expected to use the resulting data. A pilot survey was conducted and provided valuable insights to the survey organizers and experience that was used to modify the survey instruments accordingly.

The household survey instruments will consist of several modules. The key information to be obtained from the modules of the main questionnaire includes:

- *Information on the household members.*
- *Housing conditions and amenities:*
- *Consumption and Expenditure.*
- *Sources of Income for Household.*
- *Community Questionnaire.*
- *Market Questionnaire:*

The household questionnaire was translated into 12 main Kenyan languages to facilitate quality data collection countrywide. The questionnaire was translated in such a way as to maintain the concepts in English. This would allow the interviewers to convey the same message by reading the questionnaire rather than attempting to translate on their own.

RECRUITMENT AND TRAINING

CBS has recruited two levels of staff; team leaders and interviewers and data entry clerks. Recruitment of research assistants was done by a committee that evaluated the qualifications and experience of prospective field staff and data entry clerks. Additional staff have also been recruited to allow for attrition during the fieldwork. Emphasis was placed on recruiting sufficient numbers of candidates with language skills to cover the languages anticipated. Among the enumerator and data entry clerk candidates recruited, the top recruits identified during training were made team leaders. At least two research assistants have been recruited from each district.

There are in total 41 field teams comprising of a team leader, and at least three interviewers, one data entry clerk and a driver. The District Statistical Officers (DSO) will assist the core team of coordinators from headquarters in monitoring data collection progress in each team. There will be 15 coordinators in total and each coordinator will be in charge of 2-3 field teams.

Training for the KIHBS was conducted at two levels involving training of trainers (TOT) and training of the research assistants. The research Assistants participated in a three week training course that was devoted to review every questionnaire section and to field practice. Training included classroom lectures, mock interviews, and practice interviews in the field. Twenty (20) trainers conducted the training of enumerators and this took place in four

simultaneous classes in one venue in order to ensure consistency in interpretation of protocols.

EXPECTED OUTPUTS

Four major outputs will include information for measuring poverty by setting a poverty line for Kenya, data on National accounts, the consumer price indices as well as evaluation of economic initiatives. Specifically, the outputs will include:

- Measure of flow of goods and services
- Purchases from small-scale retailers and service providers
- Information on payments for domestic workers, services received in-kind and payments for licenses and fees.
- Estimate of household savings.
- Estimate of the number of small-scale household enterprises.
- Information on Poverty which includes:
 - ◆ **Headcount poverty:** Absolute poverty indicating prevalence of absolute poor in terms of total consumption (food and non-food) relative to basic needs (poverty line).
 - ◆ **Poverty gap:** Severity of poverty (Food and absolute) gauging the depth of poverty and its severity
 - ◆ **Food poverty:** those individuals with food expenditures below the food poverty line.
 - ◆ **Hardcore poor:** those individuals who cannot afford the basic food requirements.
- Establishing Income Inequality Indices and income distributions (deciles by area and socioeconomic groups)
- Evaluation of the Social Economic Dimensions of Income Poverty: poverty status classified by socio economic factors such as employment groups, education classes, health status, household amenities, water source etc (at the national, provincial, and district levels)

- Proxy indicators correlated with consumption levels (and thus poverty status), e.g. ownership of certain assets, education levels and type of dwelling.
- Information on initiatives such as infrastructure investments, school feeding programs, pension and health insurance e.t.c. to provide data for policy relevant socio-economic analysis.