



LSMS GUIDEBOOK

April 2019

Food Data Collection in Household Consumption and Expenditure Surveys

Guidelines for Low- and Middle-Income Countries

Prepared by

The Inter-Agency and Expert Group on Food Security,
Agricultural and Rural Statistics

and endorsed by

the forty-ninth session of the
United Nations Statistical Commission,
New York, 6–9 March 2018



WORLD BANK GROUP



Food and Agriculture
Organization of the
United Nations

Food Data Collection in Household Consumption and Expenditure Surveys

Guidelines for Low- and Middle-Income Countries

Nathalie Troubat and Alberto Zezza

2021-04-20

1	Preface	1
2	Introduction	3
2.1	Background and Motivation	3
2.2	Objectives and audience	4
3	Review of the Evidence and Summary of the Main Issues	7
3.1	Recall Versus Diary and Length of Reference Period	7
3.2	Seasonality, number of visits	8

1 Preface

The measurement of food consumption and expenditure is a fundamental component of any analysis of poverty and food security, and hence the importance and timeliness of devoting attention to the topic cannot be overemphasized as the international development community confronts the challenges of monitoring progress in implementing the 2030 Agenda for Sustainable Development.

In 2014, the International Household Survey Network published a desk review of the reliability and relevance of survey questions as included in 100 household surveys from low- and middle-income countries. The report was presented in March 2014 at the forty-fifth session of the United Nations Statistical Commission (UNSC), in a seminar organized by the Inter-Agency and Expert Group on Food Security, Agricultural and Rural Statistics (IAEG-AG).

The assessment painted a bleak picture in terms of heterogeneity in survey design and overall relevance and reliability of the data being collected. On the positive side, it pointed to many areas in which even marginal changes to survey and questionnaire design could lead to a significant increase in reliability and consequently, great improvements in measurement accuracy. The report, which sparked a lot of interest from development partners and UNSC member countries, prompted IAEG-AG to pursue this area of

2 Introduction

2.1 Background and Motivation

Food is an important component of many fundamental dimensions of welfare, such as food security, nutrition, and health. It comprises the largest share of total household expenditure in low-income countries, accounting for about 50 percent of the average household budget (USDA, 2011) and accordingly it is key for consumption and poverty analysis. Low levels of food access play a role in explaining why around 815 million individuals were estimated to be chronically undernourished in 2016 (FAO, WFP, IFAD, UNICEF, and WHO, 2017). Data on food consumption and expenditure underpin the most widely used measures of poverty and of food security. The collection of high-quality food consumption data is, therefore, central to the assessment and monitoring of the well-being of any human population, and is of interest to governments, international agencies, and anyone concerned with monitoring and understanding trends in social, economic, and human development.

BOX 1 — THE CONCEPTS OF FOOD

CONSUMPTION Food data collected in HCES can be diverse, and often refer to diverse concepts. Even the term “food consumption” lends itself to multiple meanings. When the focus of the analysis is expenditure, the term “consumption” can designate the purchase of foods, disregarding the end-use of what was purchased. At the opposite end, analyses and surveys that focus on nutrition use the term “food consumption” to designate the intake of a food, possibly net of unusable parts. Throughout this document the term “food consumption” is used in a general sense and encompasses concepts or data that include food consumption, acquisition, expenditure, and intake. Additional descriptive are specifically used in places where their specific meanings are addressed or contrasted, or for details that relate to that precise terminology

Data on food consumption are needed, for example, to build the indicators and monitor some of the targets set for Sustainable Development Goals 1 and 2 (ending poverty and hunger). Similarly, data on food consumption are needed to assess and guide the mandate of FAO to help eradicate hunger, food insecurity, and malnutrition and the twin goals of the World Bank to eliminate extreme poverty and boost shared prosperity.¹ Even more importantly, national and local governments and non-governmental organizations need high-quality food consumption data to guide local and regional analysis and policy, as the

survey design can end up reflecting priorities of donors rather than those of countries and detract from the comparability of data across countries and with other surveys within the same country.

Fourth, by identifying areas in which the consensus is based on a limited evidence-base, the guidelines can be used to chart the way for an internationally agreed survey methodology research agenda. Importantly, the guidelines can be an entry point for sustaining an interdisciplinary dialogue for the advancement of this agenda, which can bring together statisticians, economists, food security analysts, and nutritionists to contribute to an effective repurposing of HCES that can increase the surveys’ “value for money.”

...and so forth...

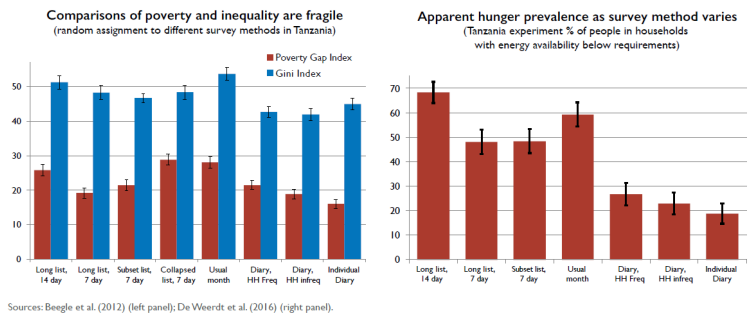


Figure 2.1: Differences in poverty, inequality and hunger measures associated with different survey design options

3 Review of the Evidence and Summary of the Main Issues

A comprehensive review of the different uses of HCES is provided in Smith et al. (2014). Among those uses are poverty measurement, informing food security assessment, providing inputs in the compilation of food balance sheets, providing information for the planning and monitoring of nutrition interventions, informing the compilation of national accounts, and collecting data for compilation of CPI. As a result of the different uses, and the constituencies of users associated with them, the demands from the data vary, and depending on the exact nature of HCES being designed, there are going to be different sets of constraints and opportunities for repurposing. Any attempt at adjusting the design of a survey needs to take into account the analytical needs of the different users. In this document, the main uses considered in setting the criteria for guiding survey design are food security assessments, poverty measurement, and nutrition policy and programming.

Some key issues in the measurement of poverty and food security, and for monitoring nutrition interventions, that are useful for understanding the data needs connected to those uses are presented in the Annex 1.² In what follows, the document contains a summary of the literature on key choices that confront

during supervised visits from enumerators (for example, for two-day recall periods if visited every other day). This blurs the line between diary and recall methods, especially when respondent illiteracy is high and supervisors support completion of the diary with visits every few days.

...and so forth...

3.2 Seasonality, number of visits

Consumption and expenditure patterns often show seasonal variations that are linked to the agricultural production season, cyclical events, such as floods and droughts, or cultural events (e.g. Ramadan, Christmas), which affect food availability, prices and customary consumption practices. The existence of seasonality in food consumption patterns is well-established (Paxson 1992, 1993; Alderman, 1996) but its extent depends greatly on the context.

Seasonality can be particularly important for food consumption because seasonal variations in dietary patterns, overall quantities of food consumed, and the consumption of particular nutrients can be pronounced, partly because of its relationship with food production cycles (Coates et al., 2012). D'Souza and Jolliffe (2012) find that household consumption in Afghanistan can be as much as one third lower in the lean season compared with the post-harvest season. The different levels of consumption, if taken at face value, would result in estimates of the poverty headcount doubling from 23 percent in the fall to 46 in the following

Footnotes:

1. For a list of indicators that can be derived from food data collected in HCES, see Moltedo et al. (2014); Foster et al. (2013).[↵](#)
2. See Annex 1.[↵](#)

SELECT LSMS GUIDEBOOKS

Measuring Household Expenditure on Education Gbemisola Oseni, Friedrich Huebler, Kevin McGee, Akuffo Amankwah, Elise Legault, Andonirina Rakotonarivo December 2018

Spectral Soil Analysis & Household Surveys Sydney Gourlay, Ermias Aynekulu, Calogero Carletto, and Keith Shepherd October 2017

The Use of Non-Standard Units for the Collection of Food Quantity Gbemisola Oseni, Josefine Durazo, and Kevin McGee July 2017

Measuring the Role of Livestock in the Household Economy Alberto Zezza, Ugo Pica-Ciamarra, Harriet K. Mugera, Titus Mwisomba, and Patrick Okell November 2016

Land Area Measurement in Household Surveys Gero Carletto, Sydney Gourlay, Siobhan Murray, and Alberto Zezza August 2016

Measuring Asset Ownership from a Gender Perspective Talip Kilie and Heather Moylan April 2016

Measuring Conflict Exposure in Micro-Level Surveys Tilman Brück, Patricia Justino, Philip Verwimp, and Andrew Tedesco August 2013

Improving the Measurement and Policy Relevance of Migration Information in Multi-topic Household Surveys Alan de Brauw and Calogero Carletto May 2012

Design and Implementation of Fishery Modules in Integrated Household Surveys in Developing Countries Christophe Béné, Asafu D.G. Chijere, Edward H. Allison, Katherine Snyder, and Charles Crissman May 2012

Agricultural Household Adaptation to Climate Change: Land Management & Investment Nancy McCarthy December 2011

Agricultural Household Adaptation to Climate Change: Water Stress & Variability Sushenjit Bandyopadhyay, Limin Wang, and Marcus Wijnen August 2011

Comparative Assessment of Computer-Assisted Personal Interview (CAPI) Software Packages Arthur Shaw, Lena Nguyen, Ulrike Nischan, and Herschel Sy July 2011