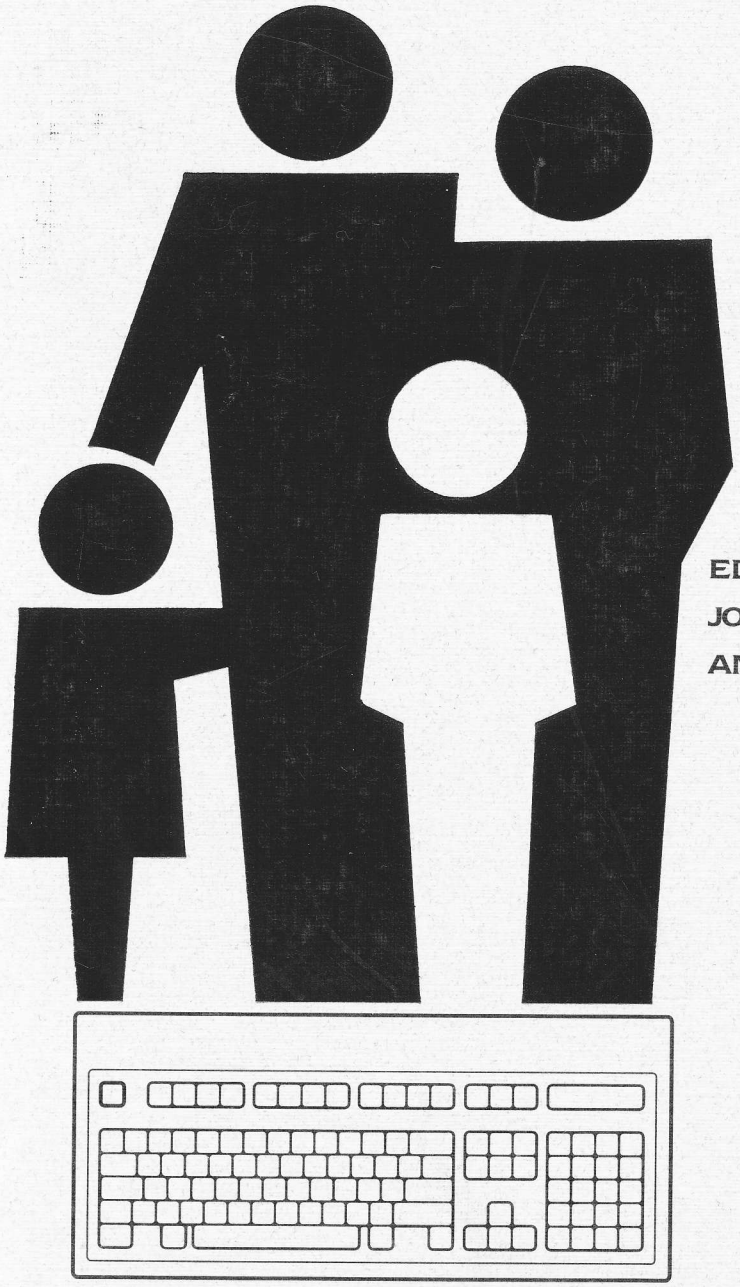
DATA NEEDS FOR FOOD POLICY IN DEVELOPING COUNTRIES

NEW DIRECTIONS FOR HOUSEHOLD SURVEYS



EDITED BY
JOACHIM VON BRAUN
AND DETLEV PUETZ

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE

DATA NEEDS FOR FOOD POLICY IN DEVELOPING COUNTRIES: NEW DIRECTIONS FOR HOUSEHOLD SURVEYS

As part of its publications program, the International Food Policy Research Institute issues proceedings of workshops or conferences, literature reviews, topical papers, and other special reports IFPRI believes may be of interest to its audience. These occasional papers undergo peer review prior to publication.

DATA NEEDS FOR FOOD POLICY IN DEVELOPING COUNTRIES: NEW DIRECTIONS FOR HOUSEHOLD SURVEYS

Edited by Joachim von Braun
and Detlev Puetz

International Food Policy Research Institute

Washington, D.C.

Published in 1993 by the

International Food Policy Research Institute
1200 Seventeenth Street, N.W.
Washington, D.C. 20036
U.S.A.

Library of Congress Cataloging-in-Publication Data

Data needs for food policy in developing countries : new directions for household surveys / edited by Joachim von Braun and Detlev Puetz.
p. cm. -- (Occasional papers / International Food Policy Research Institute)
Includes bibliographical references.
ISBN 0-89629-329-7
1. Nutrition surveys--Developing countries--Methodology. 2. Nutrition policy--Developing countries. I. Von Braun, Joachim, 1950- . II. Puetz, Detlev, 1957- . III. Series: Occasional papers (International Food Policy Research Institute)
TX360.5.D38 1993
363.8'09172'4--dc20 93-48782
CIP

Contents

_____. 1989. *The poor in Latin America during adjustment: A case study of Peru*. Living Standards Measurement Study Working Paper 56. Washington, D.C.: World Bank.

Glewwe, P., and K. A. Twum-Baah. 1991. *The distribution of welfare in Ghana, 1987-88*. Living Standards Measurement Study Working Paper 75. Washington, D.C.: World Bank.

Grootaert, C. 1986. *Measuring and analyzing levels of living in developing countries: An annotated questionnaire*. Living Standards Measurement Study Working Paper 24. Washington, D.C.: World Bank.

Grosh, M. 1991. *The household survey as a tool for policy change: Lessons from the Jamaican survey of living conditions*. Living Standards Measurement Study Working Paper 80. Washington, D.C.: World Bank.

Newman, J., S. Jorgensen, and M. Pradhan. 1991. *Workers' benefits from Bolivia's emergency social fund*. Living Standards Measurement Study Working Paper 77. Washington, D.C.: World Bank.

STATIN (Statistical Institute of Jamaica) and World Bank. 1988. *Preliminary report: Jamaica living conditions survey*. Kingston.

World Bank. 1990. *Indonesia: Public expenditures, prices, and the poor*. Report 11293-IND. Washington, D.C.

8
Focusing Small-Scale Surveys on Specific Food Policy Issues: IFPRI's Experiences

Detlev Puetz and Alison Slack

INTRODUCTION

Effective food policy research must address a wide range of issues to provide an understanding of the complex interrelations in food policy and nutrition, including food production, consumption, distribution, and trade. In the early 1980s, it was realized that many food policy questions could not be answered with existing data sets. Few sets covered the range of topics needed for a comprehensive analysis; in particular, there were few household-based data sets that included agriculture- and nutrition-relevant information simultaneously. Moreover, the impact of policy interventions and dynamic socioeconomic changes at both macro and micro levels (for example, structural adjustment and introduction of new technologies) and the way households and individuals reacted were often inadequately addressed in traditional household survey work, which tended to be more concerned with static, descriptive analysis.

As a result, the International Food Policy Research Institute (IFPRI) initiated a number of multisectoral household surveys, the majority of which focused on rural areas in developing countries. This chapter first describes some of the features and policy questions that are addressed in IFPRI's surveys. Following some notes on sample selection and characteristics, the chapter then draws attention to survey goals that reach beyond basic data collection. It concludes with some observations on the conditions needed for household surveys to have effective policy impact.

BASIC CHARACTERISTICS OF IFPRI SURVEYS

While covering a considerable range of issues, IFPRI surveys address the impact of policies and other socioeconomic and environ-

mental developments on food production, food security, and nutrition. They can be categorized within the following five subjects: (1) improved technologies/environmental degradation, (2) commercialization of agriculture and nutrition, (3) market and price policy (reform) and food subsidies, (4) famine and drought, and (5) public works and infrastructure. Most of IFPRI's household surveys were conducted in Africa and South and Southeast Asia and were implemented in cooperation with partner institutions in developing countries, with varying degrees of IFPRI staff involvement in field supervision. The collaborating institutions include independent centers concerned with development issues, governmental departments, national agricultural research systems, and universities.

Table 8.1 presents some basic characteristics of these household surveys. IFPRI surveys are typically small-scale insofar as they cover a cross-section of between 200 and 1,000 households, with a median size of 430. Most are not countrywide but, rather, are limited to selected regions. Hardly any of the IFPRI surveys are representative of the whole country. While most surveys cover a period of about a year or less, a few were conducted for longer periods (up to five years in Pakistan) or were repeated after a specified time frame. Their panel data offer the opportunity of longitudinal analysis in addition to the more common cross-sectional analysis.

Many of IFPRI's surveys are innovative insofar as they link a wide range of topics related to specific food policy questions in a systematic, structured sample survey approach. Surveys typically collect extensive quantitative data on agricultural production, farm and off-farm income, access to productive resources, services, infrastructure, and household assets. They investigate, in detail, food and nonfood expenditures and consumption. A number of surveys include anthropometric measurements of children and mothers, along with detailed information on variables affecting nutritional status beyond food consumption, such as health-related variables (morbidity, sanitation, and so forth) and, for women, reproductive and child history.

In several surveys (for example, Kenya, the Philippines, The Gambia), information on production, income, and consumption was collected separately for individual household members, allowing intrahousehold and gender-specific analyses. Household-level variables are frequently complemented by community-level information on prices, services, and infrastructure. Often, multidisciplinary teams of economists, nutritionists, geographers, social anthropologists, and agronomists work jointly in survey design, implementation, and analysis.

Table 8.1—Overview of IFPRI surveys by policy issues

Policy Issue/Country	Year	Main Topic	Length of Survey	Sample Size (households)	Location
Improved technologies/ environmental degradation					
Burkina Faso	1981-85	Improved technology	4 years	Approximately 150	Multiregional (rural)
Ethiopia	1988/89	Famine/drought	14 months	550	Multiregional (rural)
	1990-92	Seasonality, improved technology, environment	14 months	Approximately 700	Multiregional (rural)
The Gambia	1985/86	Commercialization of agriculture (rice irrigation technology)	1985/86: 10 months	200-250	Single region (rural)
India (Bihar)	1991/92	Improved technology (irrigation)	12 months	260 farmers; 130 for intensive and 130 for brief interviewing	Single region (rural)
India (North Arcot)	1982/83	Improved technology (green revolution)	15 months	480 total: urban, 320; rural, 160	Large single region (urban and rural)
India (Tamil Nadu)	1990	Improved technology (irrigation)	1 year	550	Single region
Nepal	1982/83	Environmental degradation	1 year	120	Single region (rural
Pakistan	1986-91	Food subsidies, technology	4.5 years	750-800	Countrywide (rural)
Rwanda	1985/86	Commercialization of agriculture (tea), potato technology	1 year	195	Single region (rural)
	1987/88	Improved technology (fertilizer)	1 year	80	Multiregional (rural)
Zambia	1985/86	Improved technology (hybrid maize), infrastructure	13 months	330 (varies by month)	Single region (Eastern Province) (rural)
Zimbabwe	1990-92	Improved technology	2 years	450	Multiregional (rural)

(continued)

Table 8.1—Continued

Policy Issue/Country	Year	Main Topic	Length of Survey	Sample Size (households)	Location
Commercialization of agriculture and nutrition					
Bangladesh	1981/82	Public works/infrastructure/ technology	1 year	640	Multiregional (rural)
The Gambia	1985/86	Commercialization of agriculture (rice irrigation technology)	10 months	200-250	Single region (rural)
	1987/88	Market and price reform	5 months		Single region (rural)
Guatemala	1983 1985 1991	Commercialization of agriculture (horticulture)	3 months per survey	400-410	Single region (rural)
Kenya	1984/85	Commercialization of agriculture (sugarcane)	8 months	550	Single region (rural)
	1985-87		2 years	504-617	
Philippines	1984/85	Commercialization of agriculture (sugarcane)	1 year	510	Single region (rural)
Rwanda	1985/86	Commercialization of agriculture (tea), potato technology	1 year	195	Single region (rural)
Market and price policy reform, food subsidies					
Egypt	1981/82	Food subsidies, price policy	8 months	Urban, 1,000 Rural, 1,400	Countrywide (urban and rural)
The Gambia	1987/88	Market and price reform	5 months		Single region (rural)

(continued)

Table 8.1—Continued

Policy Issue/Country	Year	Main Topic	Length of Survey	Sample Size (households)	Location
Niger	1988-90	Market and price reform	2 years	135	Multiregional (rural)
Pakistan	1986-91	Food subsidies, technology, multipurpose	4.5 years	750-800	Countrywide (rural)
Philippines	1983/84	Food subsidies	16 months	840	Single region (northern)
Senegal	1988-90	Market and price reform	2 years	Approximately 250	Multiregional (rural)
Famine prevention, coping with drought					
Botswana	1991/92	Public works	3 months	375	Single region (rural)
Burkina Faso	1981-85	Improved technology	4 years	Approximately 150	Multiregional (rural)
Ethiopia	1988/89	Famine/drought	14 months	550	Multiregional (rural)
	1990-92	Seasonality, improved technology, environment	14 months	Approximately 700	Multiregional (rural)
India (North Arcot)	1982/83	Improved technology (green revolution)	15 months	480 total: urban, 320; rural, 160	Large single region (urban and rural)
Niger	1991/92	Famine/drought/public works	6 months	Approximately 400	Multiregional (urban and rural)
Sudan	1988/89	Famine/drought/public works	1 year	172	Single region (rural)
Infrastructure, labor-intensive public works					
Bangladesh	1981/82	Public works/infrastructure/ technology	1 year	640	Multiregional (rural)

(continued)

Table 8.1—Continued

Policy Issue/Country	Year	Main Topic	Length of Survey	Sample Size (households)	Location
Botswana	1991/92	Public works	3 months	375	Single region (rural)
Ethiopia	1990-92	Seasonality, improved technology, environment	14 months	Approximately 700	Multiregional (rural)
Madagascar	1991/92	Credit markets	8 months	189	Multiregional (rural)
Niger	1991/92	Famine/drought/public works	6 months	Approximately 400	Multiregional (urban and rural)

Note: Some surveys are listed several times if addressing several of the categories of policy issues.

Quantitative household surveys are not the answer to every food policy question, and many phenomena do not yield to quantitative assessment and analysis. They can, however, play an essential role to quantify, verify, modify, or defy anecdotal evidence and "conventional wisdom," as well as hypotheses derived from nonrandom household case studies. In several IFPRI surveys, the disadvantage of having purely quantitative, structured surveys is mitigated by simultaneously running a case study approach in a subsample of households and including social anthropologists and other specialists on the survey teams. Principle researchers often conduct in-depth interviews on specific subjects to identify systematic biases of the larger sample. Group interviews and participant observation form an integral part of most IFPRI surveys.

Policy relevance is a major goal of IFPRI surveys. This has significant implications for the research: if the focus is on policies, a different (additional) set of questions needs to be asked, compared with traditional socioeconomic research. Traditionally, for instance, the economic profession has been more interested in questions such as, How do people allocate labor? The relevant food policy follow-up question, however, would be, How can their labor-allocation decisions be taken into account in policy and program design? For this reason, interventions, socioeconomic and environmental changes, and the process of response have to be analyzed. It is critical to understand the response mechanisms of individuals, households, and markets to changing socioeconomic and natural environments. Catching the process of change in a cross-section is often difficult or methodologically questionable. In the future, more long-run or repeated panel surveys will be needed.

In several locations, IFPRI surveys have been an integral part of project or policy monitoring and evaluation. In some microlevel projects, they offer an opportunity for an intensive analysis of project impacts. In many countries, a systematic evaluation of the link between government programs and food security and nutrition had not been attempted before (for example, Bangladesh).

MAJOR FOOD POLICY QUESTIONS

Formulating specific research questions and forming focused hypotheses should be the starting points of any survey work. For a few selected IFPRI surveys, some of the main questions are summarized in Table 8.2 to give an idea of the type and scope of research. They should not, however, be seen as comprehensive or representative of all IFPRI surveys.

Table 8.2—Research and policy questions of selected IFPRI surveys

Country	Topic	Main Research and Policy Questions
Zambia	Technology and infrastructure	• What is the impact of agricultural growth—particularly through hybrid maize and animal traction—on rural welfare (income, consumption, nutrition) in the Eastern Province? • Which farms are best able to adopt new technologies, and why? • What are the bottlenecks in the supply of basic services (infrastructure) that limit technology adoption, and what are the policy implications? • How do women's time constraints affect nutrition?
Zimbabwe	Technology (irrigation)	• What is the performance of different irrigation systems such as pump versus gravity, different plot sizes (15-20 sites were investigated)? • How do different schemes perform when managed privately, by government, or cooperatively? • What type of methodology for assessing technical irrigation system performance (water use efficiency and output per unit of water) can be developed?
The Gambia (1985/86)	Commercialization of agriculture	• To what extent do commercialization and technical change, that is, irrigation, raise production and income? • Does such change encourage diversion of labor from other activities (opportunity costs) or into leisure as income rises? • If extra production materialized, would it increase consumption of the poor? • Does any extra consumption affect adult and child nutrition?
Kenya	Commercialization of agriculture	• What effect does a shift from maize to sugarcane have on agricultural production, income, expenditure, and consumption? • How does this translate into health and nutrition, particularly of preschoolers?
Nepal	Environment	• What is the impact of labor constraints, especially of women, on output from small farms? • What are the consequences of deforestation on such farms? • How does women's time allocation affect agricultural production, food consumption, and nutritional status of children?

(continued)

Table 8.2—Continued

Country	Topic	Main Research and Policy Questions
Egypt	Food subsidies	• What are the effects of the government system of subsidies and controlled food marketing on income distribution and food consumption? • Does time cost in rationed food acquisition favor the poor? • What are the system's overall costs and benefits? How can targeting the poor be improved?
Philippines	Food subsidy	• What is the impact of a food subsidy scheme on consumption, acquisition, and nutrition? • How many calories were added (to assess cost-effectiveness of intervention)?
The Gambia, follow-up (1987/88)	Market and price reform, technology	• What were the effects of price and market policies under structural adjustment on agricultural production (supply response)? • What was the medium-term impact of technical change (irrigation) on pro-duction, consumption, and nutrition? • What is the potential of low-cost mechanization (technologies on the shelf)? • How did institutional reform, including privatization and market reform, affect agricultural production (focus on fertilizer)?
Senegal	Market and price reform	• What are the output/demand elasticities for cereal policy? • Are there differences by gender and income groups? • How do intersectoral income strategies affect supply response? • How do farmers respond to cost reduc-tions through advanced technology? • Would consumer demand support increased local cereal supply? • Is consumer demand stronger for other commodities?
Ethiopia/ Sudan	Famine	• What population groups are most affected by famine? • What coping mechanisms do people have? • What is the relative role of drought for famine? • What is the contribution of dysfunctional markets? • What impact do interventions have on households under famine conditions?

(continued)

Table 8.2—Continued

Country	Topic	Main Research and Policy Questions
Niger and Botswana	Public works projects	• Who participates in labor-based works projects? • What is the net project impact on household employment and income? • How successful have these projects been in improving infrastructure and targeting the poor? • What are the constraints of public works projects, and what is their potential for tackling food insecurity and long-term growth constraints?

The questions of how technology is adopted and who does the adopting are central to the Zambian study on hybrid maize and oxen cultivation. By analyzing the supply of basic services and rural infrastructure at different locations, as well as the impact they have on farm technology adoption, this study has a strong community focus. Other IFPRI surveys that study technology are more performance-oriented and focus on the technical and managerial aspects of different investment projects, such as irrigation systems in India and Zimbabwe.

Five survey-based studies, with a similar conceptual framework and a similar research question, trace the impact of increased commercialization of agriculture (cash crop production), from its effect on the farming system and farm income to household food consumption and nutrition, particularly of children. The commercialization studies pay special attention to women and how their time allocation and child care abilities are affected by the introduction of the new crop or technology. Women's time constraints are also an important subject in both the Nepal and Zambia studies. The main research questions are (1) How do women's time constraints affect the ability of the household to raise income and improve nutrition? and (2) What can be done about it? In addition, the Nepal study looks at the effect of deforestation and longer walks for the collection of firewood on the labor demands of women, while the Zambia study examines crop ownership and household decisionmaking on the part of women.

Two very different studies on food subsidies, one at the national level in Egypt and one set up as a controlled experiment in 14 villages in the Philippines, investigate the impact of food subsidies and distribution on consumption, income distribution, and nutrition (for the Philippines). By measuring the actual costs and benefits at the household level, the two studies comprehensively assess whether the interventions were cost-effective and reached the targeted population.

Wide-ranging policy reforms under structural adjustment are analyzed in the Senegal and The Gambia studies, among others. Farmers' supply response, its determinants, and how it differs by income group and gender are addressed. In Senegal, consumption patterns and price demand elasticities for cereals at the household level are estimated in order to determine the optimal pricing policy for rice. Another critical issue is the role of nonfarm income and its opportunity costs for agriculture in the Sahel. The Senegalese study is one of several that addresses this issue in detail (others include Burkina Faso and Niger).

In Ethiopia and Sudan, factors that cause famine (for example, whether the role of droughts versus man-made factors are more responsible) and farmers' coping strategies during a famine are identified. Questions addressed in this study include, What population groups are most affected by famine? Do relief efforts reach their targets and make a difference? In a follow-up to the famine studies, the potential of public works projects to provide a positive net employment and income impact are further investigated in Niger and Botswana. These studies look at what it took to make these programs more successful in improving infrastructure and targeting the poor.

THE ROLE OF SMALL-SCALE SURVEYS AND SAMPLING ISSUES

What is the distributive impact of certain policies across income groups? What are the household-specific or community-level constraints to technology adoption, or transfer of income, to improved nutritional status? At the intrahousehold level, are individual household members, for instance, women, affected differently? Answers to these research and policy questions are instrumental for developing effective and cost-efficient programs, mitigating negative effects of socioeconomic changes, and identifying the most vulnerable groups in order to target interventions and policies properly. Yet most of the answers can be provided only through household surveys. While household case studies

can yield helpful working hypotheses, only representative sample surveys allow inferences for a wider population.

Comprehensive small-scale surveys that analyze questions of general policy relevance are driven by the premise that a number of questions cannot be meaningfully investigated with a large sample. Or, as Rudra (1989) formulates, "the deeper one wants to probe the intricacies of a phenomenon, the smaller has to be the size of the sample." Much of the information needed is sensitive or time-consuming to collect, and respondents need to be cooperative and trusting. Large-scale national sample surveys are rarely capable of providing the necessary type of information with satisfactory quality. They tend to concentrate, therefore, more on measuring direction and rates of change of selected characteristics for a representative, nationwide sample. In contrast, small-scale surveys allow a much more detailed investigation of particular groups to analyze the factors and processes underlying these changes, but the results can rarely be generalized to a country as a whole.

This raises the questions, What determines sample selection in small-scale surveys? How large and representative should the sample be? How much do small samples and focused questions invalidate wider generalizations?

A review of selected IFPRI surveys (Table 8.3) shows several different criteria for selection of survey sites. Cluster selection and stratification criteria include the existence of certain projects or agroecological diversity. Villages were stratified for size, ethnicity, access to infrastructure, and logistical feasibility, among other criteria. Households were, for the most part, selected randomly, but were sometimes subject to certain criteria (for example, having a preschooler in the household for the Kenya study). Increasingly, the intrahousehold and gender dimensions are being taken into account in survey design. Stratified random sampling procedures were used to achieve a proper representation of project participants and nonparticipants or adopters and nonadopters of new technology.

The optimal size of a survey, which, in theory, depends on the population variance, is difficult to determine and is arbitrary in a multivariate survey, as population variance differs from variable to variable. Moreover, sample size often depends as much on cost and management considerations as on sampling theory. Clearly, the size and representativity of samples will vary depending on the questions addressed. It is important, however, that researchers find the optimal levels of these factors, and design the surveys accordingly, since the credibility of research with policymakers often hinges on how large and generalizable the samples are.

Table 8.3—Sample characteristics for selected IFPRI surveys

Country	Number of Survey Rounds	Length of Survey	Sample Size	Geographical Location	Survey Site/ Zone Selection Criteria	Village Selection Criteria	Household Selection Criteria
			(households)				
Egypt 1981/82	Urban, 1 round; rural, 2 rounds	8 months	Urban, 1,000 Rural, 1,400	Countrywide (urban and rural)	...	77 villages -Random -Spatial diversity	Random selection
Ethiopia 1988/89	1 round at each site	14 months	550	Multiregional (rural)	7 survey sites -Agro-ecological diversity -Ethnic group	...	Random (stratified by participation, 50 percent participants and 50 percent nonparticipants)
The Gambia							
1985/86	2 rounds	10 months	200-250	Single region (rural)	-Site of irrigation project -Control group	10 villages -Distance to project -Size/population -Ethnic group	Random selection
1987/88	1 round	5 months					
Kenya 1984/85 1985-87	4 rounds	8 months 2 years	550	Single region (rural)	-Existence of sugarcane factory	...	Random, with criteria of -<20 hectares -At least 1 preschooler -Resident

(continued)

Table 8.3—Continued

Country	Number of Survey Rounds	Length of Survey	Sample Size (households)	Geographical Location	Survey Site/ Zone Selection Criteria	Village Selection Criteria	Household Selection Criteria
Nepal 1982/83	4 rounds	1 year	120	Single region (rural)	Western Development Region	6 wards chosen -Altitude -Access to roads, infrastructure -Ethnic group -Degree of deforestation	22 households per ward Random selection
Niger 1991/92	1 round	6 months	Approximately 400	Multiregional (urban and rural)	2 urban and 3 rural survey sites -"good projects" (food-for-work)	...	Random (stratified by participation, 50 percent participants and 50 percent nonparticipants)
Philippines 1983/84	4 rounds	16 months	840	Single region (northern, rural)	3 provinces -Geographical location	14 villages: 4 villages selected from each province, 2 control villages -Subsidized food (8 subsidized and 6 non-subsidized villages)	Random selection

(continued)

Table 8.3—Continued

Country	Number of Survey Rounds	Length of Survey	Sample Size (households)	Geographical Location	Survey Site/ Zone Selection Criteria	Village Selection Criteria	Household Selection Criteria
Senegal 1988-90	Continuous interviews (mostly bi-weekly)	2 years	Approximately 250	Multiregional (rural)	6 agroclimatic regions/zones -Geographical and ecological characteristics -Infrastructure -Socioeconomic factors	24 villages; between 3 and 6 villages per region/zone -Geographical and ecological characteristics -Rainfall -Infrastructure	Between 9 and 10 households per village Random selection
Zambia 1985/86	Consumption, 13 rounds; anthropometrics, 3 rounds	13 months	330	Single region (Eastern Province, rural)	-Outside of central marketing route (railway) -Agriculturally productive	All 10 locations (branches) in Eastern Province were sampled	33 households per location Random, stratified by -Contact farmer -Use of hybrid maize -Use of oxen -Male versus female head of household
Zimbabwe 1990-92	4 rounds	2 years	450	Multiregional (rural)	3 agro-ecological regions -Existence and type of irrigation systems	20 villages (or irrigation projects) -Type of irrigation system (4 types total)	Random, stratified by -Irrigated holding size -Gender (of individual farmer in scheme)

Can the observed phenomena be generalized beyond the limited population from which the sample of households was selected? For surveys investigating behavioral questions, Srinivasan (1989, 239) notes that

> . . . purposive selection need not invalidate inference. If the relationship between variables can be assumed to be the same for all households in a sample, it is not necessary to choose a representative sample of all households to estimate the relationship. All that is necessary is sufficient variation of the variable among the chosen households.

But difficult questions can arise in a multipurpose survey as to how one can infer from a stratified, clustered sample on topics not directly related to the initial stratification criteria. Moreover, little may be known about similarities in behavior across different groups of households. These and other questions regarding sample selection and proper inferences go beyond the scope of this chapter. But it should be emphasized that better data-reporting standards are needed for sampling approaches used, sample characteristics, and methods of survey implementation (such as one-shot surveys) in order to avoid far-reaching conclusions and policy decisions based on data from inappropriate samples.

BUILDING CAPACITY AROUND SURVEYS

A survey is more than the collection of data (Figure 8.1). Household surveys can be a pivotal instrument for building the capacity of junior counterparts, as well as principal researchers, to tackle critical food policy issues. Surveys offer an excellent opportunity for local and expatriate researchers to get hands-on experience with fieldwork. In many IFPRI surveys, senior IFPRI staff or collaborators are located at the survey sites for extensive periods. They are forced to deal with a number of subjects in a structured and systematic way on a day-to-day basis. This intensive field presence, which is seen as essential to improve the quality and interpretation of data, also creates numerous opportunities to share information with collaborators, field staff, and policymakers. Also, researchers learn more about the ultimate target of development research: men, women, and children in the survey households. To be in touch daily with respondents opens eyes to new and relevant research issues beyond narrowly focused survey objectives and adds an important qualitative aspect to the more rigid quantitative sample survey tool. The in-depth, country-specific field knowledge gained from the various household surveys is a major asset of IFPRI's research and outreach activities.

Figure 8.1—Building capacity around surveys

Building or improving the capacity of institutions in developing countries to conduct food policy analysis is another of IFPRI's goals. Using survey work to improve analytical capability and knowledge of appropriate methodologies for household-based research is part of this effort. In environments with weak institutions, counterpart interaction may initially slow the task of collecting data. It must, however, be an essential part of any serious development effort to achieve long-lasting benefits. Included in IFPRI's aims of building the capacity to facilitate food policy analysis in developing countries are those of promoting effective and efficient data collection. There are numerous mutual learning effects if surveys are conducted in close collaboration with motivated counterparts rather than in an institutional vacuum.

Last, but not least, surveys are more than an academic exercise; they are a valuable tool for policy and program planning and implementation. It is generally felt that a strong field presence and in-depth country knowledge increases the credibility of research and, therefore, the impact of research findings. Some other determinants of policy impact will be addressed in the following section.

POLICY IMPACT

Many research reports, articles, and books have been published based on primary IFPRI survey data. Policy conferences and workshops have been held, both at national and regional levels, where household-level research results were central to presentations and discussions. Integrated analyses of surveys at different locations have been completed to pull together and compare information on similar issues across locations and to draw generalizable conclusions (von Braun and Kennedy, forthcoming; von Braun and Pandya-Lorch 1991). In some instances, specific research findings led directly to policy decisions and implementation. In Pakistan, for example, IFPRI's urban survey was instrumental in the abolition of the ration shop system, and in Egypt, some study implications were followed to cut food subsidies step by step and to cut them most where it would hurt the poor the least. Yet, often, the impact of household survey work on food policy is more complicated and elusive. Clear and effective impact from survey research cannot be assumed; it may come with substantial delay. Any impact must be fostered continuously at various levels, and positive results often take a bit of luck. In order to identify and improve the impact of survey work, it may be useful to ask the following questions: What is the population to be targeted in order to have positive impact? Will the impact be direct or indirect? Will the impact be short run or long run? What will be the impact of the "results" compared with the "process" of obtaining these results?

Ways of Achieving Impact

There may be several simultaneous users of survey results, some of whom are involved in policy decisions with long-term impact and others who are interested in policies with a short-term impact. These users include policymakers in developing countries (top-level politicians and administrators), international donors, research institutions, and project and program administrators (in public-sector and nongovernmental organizations). Depending on the type of research, they all

may be important targets for disseminating findings. This distinction between users also suggests a need for different survey messages that have to be tailored to individual decisionmakers in order to provide optimal input into policy formulation in politically sensitive areas at a national (or international) level and into improvements in operational/administrative aspects of projects and programs.

The overall policy impact of surveys clearly goes beyond direct short-run actions and policy changes. For instance, achieving input into improved national strategies may have important indirect implications for a number of subsequent decisions. The input of IFPRI's survey work in Ethiopia into a national disaster prevention and preparedness strategy is one example. Often, impact may not be visible immediately, but the importance of slow attitudinal changes among decisionmakers, triggered by well-founded research, should not be underestimated. Research findings can significantly contribute to a more sophisticated discussion on specific subjects and increased awareness and conceptual understanding. For instance, in Kenya, the production of sugarcane is not thought to be as detrimental for nutrition as was formerly believed. As a result of in-depth research and long-term researcher-policymaker interaction, the real causes of poor nutrition receive more attention. In the Sahel, donors and governments have become more attentive to the heterogeneity of income sources in rural areas, beyond agriculture.

Indirect survey impact may also be achieved where policy findings in one setting are found to be useful in others. For instance, the Philippines survey of pilot ration shops had significant spillover effects on rural Mexico and Bolivia, where similar systems to those tested in the Philippines emerged. That there are many ways to achieve indirect impact suggests that the long-run effects of survey findings may far exceed the input into decisionmaking when results are first presented. Continued impact through improved knowledge and changing attitudes will trickle down, not only on policy decisionmaking but also, through secondary effects, on the shaping of future research foci.

The impact of surveys is not limited to the dissemination and discussion of survey findings. The process of getting there may be equally important. The active involvement of principal researchers at all stages of the survey cycle, along with intensive dialogue with collaborators and other contact persons during the course of fieldwork, can sensitize key decisionmakers about critical issues long before results are first formally presented. Where surveys have a strong institution-building component, or are used as an integrative part for training agricultural, nutrition, or health planners (as, for instance, in the Nepalese survey), the long-term impact may be even more significant.

Effectiveness of Impact

While there are a number of ways to achieve impact, its effectiveness depends on three major factors: governance and political convenience, relevance of results, and dissemination of findings.

Not only is the factual understanding of a phenomenon important for bringing about change, but so is the political will to do something about it. There are opposing and powerful political interests at play in many critical food policy areas. In such cases, research can contribute to a rationalization of the discussion. But, often, the attitude of policymakers and administrators toward data is a skeptical one, and there may not be much demand for data and data-based analysis. Moreover, data are often regarded as inconvenient where they do not match preconceived ideas or specific policy objectives: manipulating figures for self-serving purposes, as, for instance, frequently happens with agricultural production figures to solicit food aid, can defeat any data-collection effort. In many policy environments, political instability and diffusion of power and decisionmaking have led to widespread inactivity and erratic decisions that diminish the potential impact of surveys. In some cases, a completely different set of decision criteria prevails, such as in countries with civil unrest. Another problem is the weakness of institutions in many developing countries; there are negative consequences when critical collaborators are displaced or transferred.

While poor governance is often a valid explanation for lack of impact, the critical bottleneck may actually be how relevant the research results are to policymakers and the way in which the results are transmitted. Timeliness of results is most important for relevance: how to get results into the right hands (and heads) at the right time, and how to avoid the paralysis of analysis. There is little sympathy among data users for the time it takes to complete sound survey analysis. Researchers should make a deliberate effort to reduce the turn-around time between the formulation of a question and the answer, and to present, as soon as possible, the preliminary results in order to keep the interest in their work alive. Data entry, cleaning, and analysis should be geared toward presenting early findings, such as with a subsample or a limited number of variables.

To make findings more relevant for policymakers, it must be asked whether findings are prescriptive rather than descriptive. In other words, are policy options being offered that provide enough ways for the client to act? Are conclusions being drawn from the description of issues and problems? The focus should be on instruments that governments (or other clients) can actually use. Household surveys have a

tendency to treat the rest of the world as exogenous and, therefore, neglect to come up with ideas on what policy to pursue, where to set priorities, and how to act on a specific food policy problem. For this reason, household surveys should also attend more to community- or market-level analysis.

To a critical extent, the relevance and acceptance of findings in a national context are determined by the credibility of the research team and the quality of the fieldwork. While researchers may get away with results from poorly run surveys in their home countries or in the international arena, such results are usually easily discarded at a local level if certain quality standards are not met.

A last, but important, question is, Do research findings actually meet information needs? The usual prescription for addressing this problem is a closer interaction between potential data users and those who collect and process the data. But the definition of specific data needs and research priorities is a double-edged sword and should not be left solely to data users: their demands often exceed by far the capacity for a survey to deliver and may lead to unfocused surveys and overstretched expectations. Nevertheless, dialogue is indispensable.

Whether research results actually make a difference depends, finally, on how effectively findings are transmitted. Surveys do not end with the analysis of data; clear goals should be included for disseminating results to different users. Policy workshops and community meetings are valuable tools. The use of various forms of media can help to reach a wider audience. Most important, publications have to meet the needs of different clients. It may be necessary to condense research reports into two-page briefs to reach top-level decisionmakers (a policy adopted for international IFPRI workshops). Summaries of studies with key findings must use language that can be understood by nonspecialists. Again, communication of results and outreach to policymakers will improve the quality and, particularly, the relevance of survey-based research in the long run.

CONCLUDING REMARKS

In the past, a proliferation of underfunded and unfocused household surveys in developing countries often produced poor data and false conclusions and led to skepticism about quantitative household sample surveys. There is not enough appreciation of the fact that survey work takes a lot of resources, technical expertise, skills, and knowledge about appropriate methods.

In multisectoral surveys, the demand for knowledge about certain subjects and methodologies is compounded. Therefore, a strategic approach to survey work is suggested. Since learning and setup costs for good survey work are high, it is necessary to increase investments in country-specific expertise on how to collect quality data at the household (and intrahousehold) level rather than conducting ad hoc surveys and reinventing the wheel. This expertise need not be concentrated in one government agency, such as a central statistics bureau, but should make ample use of the technical and subject-matter knowledge of specialized agencies and research institutions with fieldwork and survey experience, such as health or agricultural ministries. Although costs may initially be high, as good surveys do not come on a "shoestring budget," the payoff in terms of increased knowledge for improving development activities should be appreciated and fostered.

REFERENCES

Braun, J. von, and E. Kennedy, eds. Forthcoming. *Agricultural Commercialization, Economic Development, and Nutrition*. Baltimore, Md., U.S.A.: Johns Hopkins University Press for the International Food Policy Research Institute.

Braun, J. von, and R. Pandya-Lorch. 1991. Income sources of malnourished people in rural areas: A synthesis of case studies and implication for policy. In *Income sources of malnourished people in rural areas: Microlevel information and policy implications*, ed. J. von Braun and R. Pandya-Lorch, 1-46. Working Paper on Commercialization of Agriculture and Nutrition 5. Washington, D.C.: International Food Policy Research Institute.

Rudra, A. 1989. Field survey methods. In *Conversations between economists and anthropologists*, ed. P. Bardhan. Delhi: Oxford University Press.

Srinivasan, T. N. 1989. Field survey methods. In *Conversations between economists and anthropologists*, ed. P. Bardhan. Delhi: Oxford University Press.

9
Surveys at Household Level for Monitoring and Evaluation

Osvaldo N. Feinstein

INTRODUCTION

Surveys are the most frequently used instrument for project monitoring and evaluation. Given the growing awareness that the relevant unit in agricultural projects is the household, there has been a shift from farm to household surveys as well as an interest in intrahousehold inequalities (particularly regarding gender). However, the literature on household-level surveys from a monitoring and evaluation perspective is limited.[1] Furthermore, this literature is basically of a prescriptive nature, indicating what should be done or what can be done, and neglecting what is actually being done.

This chapter takes as its point of departure an observation that corresponds to the actual practice of surveys at the household level in the context of project monitoring and evaluation: costly household surveys are being carried out and very limited use is being made of their results. Why is this happening? A cost-benefit qualitative approach might be useful in answering this question and in providing indications of how to improve the current situation.

COSTS AND BENEFITS OF SURVEYS

Recommending household surveys for project monitoring and evaluation has become common practice. But what is the relationship of the household survey's anticipated (ex ante) costs and benefits with its actual (ex post) costs and benefits?

[1] For example, there is not even a single section on household surveys in the two monitoring and evaluation books published as a joint study by the World Bank, the International Fund for Agricultural Development, and the Food and Agriculture Organization of the United Nations (Casley and Kumar 1987, 1988).

_____. 1989. *The poor in Latin America during adjustment: A case study of Peru*. Living Standards Measurement Study Working Paper 56. Washington, D.C.: World Bank.

Glewwe, P., and K. A. Twum-Baah. 1991. *The distribution of welfare in Ghana, 1987-88*. Living Standards Measurement Study Working Paper 75. Washington, D.C.: World Bank.

Grootaert, C. 1986. *Measuring and analyzing levels of living in developing countries: An annotated questionnaire*. Living Standards Measurement Study Working Paper 24. Washington, D.C.: World Bank.

Grosh, M. 1991. *The household survey as a tool for policy change: Lessons from the Jamaican survey of living conditions*. Living Standards Measurement Study Working Paper 80. Washington, D.C.: World Bank.

Newman, J., S. Jorgensen, and M. Pradhan. 1991. *Workers' benefits from Bolivia's emergency social fund*. Living Standards Measurement Study Working Paper 77. Washington, D.C.: World Bank.

STATIN (Statistical Institute of Jamaica) and World Bank. 1988. *Preliminary report: Jamaica living conditions survey*. Kingston.

World Bank. 1990. *Indonesia: Public expenditures, prices, and the poor*. Report 11293-IND. Washington, D.C.

8
Focusing Small-Scale Surveys on Specific Food Policy Issues: IFPRI's Experiences

Detlev Puetz and Alison Slack

INTRODUCTION

Effective food policy research must address a wide range of issues to provide an understanding of the complex interrelations in food policy and nutrition, including food production, consumption, distribution, and trade. In the early 1980s, it was realized that many food policy questions could not be answered with existing data sets. Few sets covered the range of topics needed for a comprehensive analysis; in particular, there were few household-based data sets that included agriculture- and nutrition-relevant information simultaneously. Moreover, the impact of policy interventions and dynamic socioeconomic changes at both macro and micro levels (for example, structural adjustment and introduction of new technologies) and the way households and individuals reacted were often inadequately addressed in traditional household survey work, which tended to be more concerned with static, descriptive analysis.

As a result, the International Food Policy Research Institute (IFPRI) initiated a number of multisectoral household surveys, the majority of which focused on rural areas in developing countries. This chapter first describes some of the features and policy questions that are addressed in IFPRI's surveys. Following some notes on sample selection and characteristics, the chapter then draws attention to survey goals that reach beyond basic data collection. It concludes with some observations on the conditions needed for household surveys to have effective policy impact.

BASIC CHARACTERISTICS OF IFPRI SURVEYS

While covering a considerable range of issues, IFPRI surveys address the impact of policies and other socioeconomic and environ-