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FCND DISCUSSION PAPER NO. 38

**SYSTEMATIC CLIENT CONSULTATION IN DEVELOPMENT:
THE CASE OF FOOD POLICY RESEARCH IN GHANA, INDIA,
KENYA, AND MALI**

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November 1997

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ABSTRACT

Successful food policy implementation is preceded by a defined policymaking process drawing from a sound information base. Yet too often the knowledge generated through food policy research does not become part of the local body of information and consequently is not used by policymakers. This leads to less than optimal food policies. This paper highlights the need for better linkages to be developed between the food research and food policymaking processes. We propose that a key component of the linkage is the integration of clients into the research process. This paper discusses the link between food policy researchers and one group of clients—food policy decisionmakers. The paper first reviews the role of research and clients in the policymaking process and proposes a conceptual framework that integrates clients into the research process. Case studies utilizing client consultation in Ghana, India, Kenya, and Mali illustrate the hypothesis that integration of all client groups, including policy decisionmakers and in-country researchers, beginning at the priority-setting stage of the research process, may best influence ultimate policy decisions.

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FOREWORD

This paper is the result of a study funded by IFPRI's Food Consumption and Nutrition Division and Outreach Division in 1995. The objective of the study was to get some sense of the costs and benefits of conducting client consultations within the context of complex fieldwork. By conducting client consultations at the end of the four case studies reported herein, the authors conclude that client consultation conducted throughout the life cycle of the four case studies would have strengthened them in a number of areas: research questions asked, the types of data collected, data collection methods, and the interpretation of the results. Perhaps most important, they conclude that continuous client consultation would have increased the use of the results by policy and program actors. It is the use of research results that gives them their value and gives them the potential to improve the lives of the poor and malnourished. As one of the tools that may accomplish this increased use, every effort should be made to employ systematic client consultation within policy research programs.

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ACKNOWLEDGMENTS

This paper is an outcome of a series of client consultation exercises conducted as a part of a now-completed multicountry project on Food Security and Nutrition Monitoring. The authors would like to thank Lawrence Haddad, Sudhir Wanmali, Per Pinstrup-Andersen, Carol Levin, Rosanna Agble, Rosetta Tetebo, Ellen Payongayong, Alison Slack, Festus Omoro, Kimberly Chung, and Hugo De Groote for their guidance and involvement in the client consultation process and for suggestions at the various stages of preparation of this paper. The authors alone are responsible for its outcomes.

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1. INTRODUCTION

It is abundantly clear that the process of generating policy alternatives through research and communicating these alternatives to policymakers does not necessarily result in or guarantee the appropriate choice of policy (Bates and Krueger 1993). Furthermore, observers increasingly recognize that information generation through policy research is only one input in the process of policy decisionmaking, and that research should be followed by active policy advocacy to ensure that research findings are used in designing and choosing among policy alternatives (Gulhati 1988; Hoffman 1995).

Although the dynamics of the policymaking process in developed countries have been well studied and widely debated, far less knowledge exists with regard to the policymaking process in developing countries; what does exist is scant at best. Yet, it is only when knowledge of the policymaking process is incorporated into policy research that this research can be effectively used to improve decisionmaking for the public. In short, if policy research is not used by policymakers, then research findings become simply a public good for other researchers and may or may not find their way into the policymaking process. The issue partly arises because researchers tend neither to understand nor consider the broader policy arena in which the policy subject to research is likely to be implemented (Lindbloom and Woodhouse 1993). How does the research question fit into the policy dialogue? Where are policy decisions made? Who influences

the decisionmaking process? And how does information generated for policy decisionmaking get used? These are key questions for policy researchers.

This paper proposes that an efficient way to feed research findings into the policymaking discourse is to identify and include targeted client groups in the research process. These clients feed information generated from policy research to the appropriate policymaking bodies at specific stages of the policy process. The paper argues that building client consultation into the research process not only forms a channel through which research findings can be disseminated and advocated in the policymaking arena, but it also feeds pertinent information from this arena into the formulation of a research agenda, improving the relevancy and timeliness of research findings.

Stakeholders, policy actors, and a number of other titles have been given to this assemblage of individuals we call the client group. Those who make up this group of "clients" depend upon the policy issue and/or the nature of the research. In the broadest sense, anyone can be a client in the research to policy continuum. The client can range from national policymakers to residents of a local community to the researchers themselves.

This paper is particularly concerned with the link between food policy researchers and one specific group of clients, food policy decisionmakers. The paper begins, in the next section, with a general review of policymaking and research processes. This is followed in section 3 by a discussion of the role of the client as the link between research and policymaking. A conceptual framework is presented in section 4 that maps out the

implementation of systematic client consultation. Case studies from Ghana, India, Kenya, and Mali are used in section 5 to highlight issues arising from client consultation. Section 6 draws together lessons learned by highlighting benefits and costs of a client consultation exercise in these countries. In the final section, we present our conclusions.

2. THE ROLE OF RESEARCH IN THE POLICY PROCESS

National decisionmakers often fail to adequately recognize policy research conducted by external institutions in the food and agricultural sector, even when it is country- and context-specific. In large part, this is due to a lack of ownership of the research output, often despite the fact that the research was carried out collaboratively by local researchers with researchers from overseas institutions (Gray 1989). Recent experience suggests that the common factor determining the use of information from policy research and analysis is the participation of users of the research information in the research and outreach process (Hoffman 1995). In this section, we examine the role of research in the policy process, followed by a discussion of the nature of research. We then examine the role of clients in linking the two.

THE POLICY PROCESS

Rather than a discrete event, policymaking is an ongoing and incremental process with a well defined structure. Ideas that make it onto the policy agenda are put through a series of stages, each which raise research questions. Figure 1 describes the phases of the

policy process and the roles that research can play within them. Whether policy clients are seeking to influence the policy agenda, formulate alternative solutions, adopt specific recommendations, monitor the implementation of policy actions, or assess any discrepancy between expected and actual policy performance, research provides a means to achieve these goals.

In the agenda-setting phase of the policy process, problems are structured and policy-relevant knowledge is presented to challenge the existing problem. The way one describes a problem often influences the solutions that policymakers devise to solve it. Problem structuring can uncover assumptions, diagnose causes, or design new policy options. The participation of clients in the agenda-setting stage of the policy process is central in deciding what are critical and relevant problems/issues. Clearly, if clients are not in favor of placing a diagnosed problem on the policy agenda, it is highly unlikely that policy research findings will be considered.

At the policy formulation stage, policy-relevant knowledge is used to construct forecasts of future states of affairs under alternate policy scenarios. These forecasts are used to examine the differing plausible futures or to estimate the consequences of implementation of existing or proposed policies. Information provided by the client group aids in establishing this plausibility.

Knowledge developed through research gets incorporated into recommendations in the policy adoption phase. The alternate future states, and the consequences attached to

Figure 1 The role of research in the policy process

The Policy Phase	The Role of Research
Agenda Setting	Problem Structuring: Challenges the assumptions underlying the definition of problems.
Policy Formulation	Forecasting: Determines the consequences of existing or proposed policies.
Policy Adoption	Recommendation: Reveals information and identifies future benefits and costs under all policy scenarios through information generated via forecasting.
Policy Implementation	Monitoring: Provides information about the consequences of previously adopted policies.
Policy Assessment	Evaluation: Reveals discrepancies between expected and actual policy performance.

Adapted from Dunn (1994).

them, that have been estimated through forecasting are presented to policymakers to attempt to aid them in their decisionmaking. Recommendations by researchers assess risk and uncertainty, identify externalities and spillovers, and, in some cases, specify criteria for making policy choices.

During implementation, policies are monitored to assess degrees of compliance and locate sources of departure. Monitoring also measures unintended consequences of policies, programs, or even projects. By taking stock or keeping track, researchers can

identify policies that have been distorted in favor of one constituent group over another or where an unintended positive or negative consequence has emerged.

In the assessment phase of the policy process, discrepancies between expected and actual performance are made known. Knowledge generated from this phase not only results in conclusions about the extent to which policy problems have been alleviated, but also may serve as a critique of values driving a policy.

THE NATURE OF RESEARCH

Like the policy process, the research process has its defined stages (see page 10 for discussion of the research process), but when viewed from a research perspective, policy *research* tends to be a fairly static concept. Research objectives are defined at an early stage, often with little or no client identification and consultation. The research team then implements the research program, largely independently. Policy research often appears to take a short-term, fire-fighting approach to problem-solving rather than being one component of a long-term policy dialogue integrating decisionmaking, research, analysis, and outreach (Herbst 1993). Research programs with long lifelines may generate research products that are no longer as relevant or timely (Grindle and Thomas 1991). The failure to use research to evaluate the impacts of policies on an ongoing basis mitigates against fine-tuning a policy to ensure that it achieves its ultimate objectives. One key reason for this apparent short-term approach is that policy researchers have not ensured the sufficient participation of end users in the various stages of the research process. Consequently, not

only is the dissemination of research information restricted, but the use of disseminated research information is less than optimal. It should therefore come as no surprise that although useful as a body of knowledge, research, in many cases, has not served the purpose for which it was originally intended—improved policy design and implementation in the country in which the research was conducted (Horowitz 1989).

However, the nondynamic tendencies of policy research are not inescapable. When examined closely, policy research can be designed to better influence policymaking.

3. THE CLIENT AS A LINK INTO THE POLICY PROCESS

The aim of policy research is to improve policies by creating, assessing, and communicating policy-relevant knowledge that has, at its center, knowledge use. Any effort to design a research agenda depends on how we are able to describe the policy problem, understand the presumed causes, and comprehend the larger policy domain. While research findings may be perceived as objective, policymaking is subjective, reflecting both the values and objectives of those who translate the research findings into policy. Quantitative analysis has had little success in describing the *values* that go into the policy and decisionmaking process. For a policy researcher to maximize her role as an adviser, she must be able to define and appreciate the importance of the client of policy research, because rational-scientific analysis can aid in explaining social existence, but cannot take the place of, or entirely explain, its normative core (Heineman et al. 1990).

The participation of the client in the policy research process provides a critical link, an interface, guarding against certain vulnerabilities of policy research, including

- research generating an information overload,
- research results being perceived as reinforcements of already made choices,
- research failing to recognize the values and objectives of those who use the research findings to formulate policy,
- the inability of research to take into account the politicization of the research, including the threat from countering studies that lessen the intrinsic value of findings,
- research having inadequate regard for the political process within which the research results are presented, and,
- research producing useful results that give very little guidance on how policy should be implemented.

However, adequately involving clients in the research process does not excuse policy researchers from a fundamental understanding of the policy process. Without such an understanding, policy researchers are unable to *identify* an appropriate group of clients for a particular research agenda. Failure to incorporate all relevant clients will undoubtedly lead to unanticipated policy outcomes.

Identification of the client group depends on the nature of the research undertaken and the ultimate end users of research findings. In many cases, clients may be formal policymakers: people who occupy positions in the governmental arena and who are entitled to authoritatively assign priorities and commit resources. (In the cases discussed in this paper, the targeted end users of the research were food policy decisionmakers in government.) But these clients can also be comprised of a diverse set of special interest and other constituency groups from outside the government arena, who press their demands on the formal leadership—this can include local researchers, local, national, and international nongovernmental organizations (NGOs), and other associative groups such as trade unions and village associations. Though the ultimate heirs of policy actions are the public, in most instances, "client" does not refer to the general public; the growing exception to this is the new emphasis on participatory development techniques and strategies.

We have discussed the role of research in the policymaking process and the benefits derived from involving clients in the research process. Yet, few research studies include the systematic use of client consultation. The cases presented in a subsequent section suggest that integration of client groups, beginning at the priority-setting stage of the research, may best influence ultimate policy decisions. Ongoing consultation throughout the research process, combined with a formalization of policy recommendations emanating from the research that incorporates decisionmakers, is likely to result in greater utilization

of information resulting from research. The following section presents a framework for including clients in the research process.

4. A CONCEPTUAL FRAMEWORK FOR SYSTEMATIC CLIENT CONSULTATION IN POLICY RESEARCH AND OUTREACH

Figure 2 illustrates a proposed conceptual framework in which policy research is viewed as a cyclic process that feeds into the larger policymaking process. In this framework, the research process is likened to a wheel. Around its rim are all the components necessary to enable ongoing policy research. The hub includes all the potential clients of the research program. The spokes represent the interaction between different groups of clients within the hub and the research process as the research program progresses. The center, or hub, of the wheel gives the structure its strength; likewise, policy research and implementation becomes a weak process without the use of systematic client consultation.

Identifying the need for policy research and setting research priorities to ensure the maximum return in the shortest period of time, stage 1, begins the research process. At this entry point, the appropriate group of clients—policy decisionmakers and end users of the proposed research output (Babu and Khaila 1996)—engage in a dialogue. Following the initial dialogue, these clients may continue to play a participatory role throughout or be consulted and encouraged to provide feedback at various stages of the research

Figure 2 Client consultation and the research process

process. The group of clients who will be participants in the research and policy analysis—the in-country research collaborators—should also be determined at this stage. These in-country research collaborators not only are active participants in research program planning and implementation, stages 2 and 3, but share a responsibility in ensuring that the correct set of clients is identified at each stage of the research process. Other clients at various stages of the policy design and implementation process may include donors, NGOs, and government officers. Recognition of the needs of different clients determines at which stages of the research process they should be consulted and at which stages they should actively be encouraged to be participants. This understanding of

the client base also enables an effective communication, advocacy, and information dissemination strategy for research output to be devised, identifying both end users and appropriate mediums of information exchange, stages 4 and 5. Outreach and dissemination of appropriate, relevant, and timely information facilitates policy planning and formulation, stage 6. However, while the cycle appears complete, it is important that the impact of policy research be both addressed and utilized in formulating a continuing cycle of policy research, stage 7.

Using this conceptual framework as a guideline, case studies are presented that focus on food security and nutrition-monitoring programs in Ghana, India, Kenya, and Mali. These studies utilized client consultation at different phases of research, and are discussed in the next section.

5. CASE STUDIES IN CLIENT CONSULTATION

The role of client consultation in increasing the use of research information for designing policy interventions has received greater attention recently (Porter 1995). Case studies of systematic client consultation in setting policy research priorities, stage 1, and impact assessment of policy research, stage 7, have been described elsewhere (Babu and Mthindi 1995; Babu and Khaila 1996). The case studies discussed in this report were not implemented as case studies of the entire process of client consultation in research; rather,

consultations were conducted as part of disseminating the policy research results.¹ Our focus in this paper relates to the fourth and fifth stages—the preparation of policy research outputs and dissemination of research results—identified in the conceptual framework presented in the previous section.²

A series of client consultations were conducted in four countries—Ghana, India, Kenya, and Mali, based on a multicountry program of research on food security and nutrition monitoring. The key objective of the client consultations was to share the results of collaborative food policy research with national policymaking institutions, donors, and NGOs involved in designing intervention policies and to solicit feedback from them in order to reorient policy research questions and reorganize research design and implementation in the future. Although the specific objectives and research techniques of the different studies, which were conducted over a period of five years, varied, all the country-case studies had a common theme of identifying appropriate and cost-effective indicators for monitoring food security and nutritional status of the population.

In-country collaborators and/or researchers from the international team presented the results to client groups in each country in a one-day roundtable workshop. Following

¹ We are grateful to our colleagues for allowing us to examine their studies from a different perspective, putting the research process under the spotlight rather than the actual research program. It is always easy to be wise after the event and no criticism of any of the research discussed in this report is intended. Quite the contrary, our colleagues enjoy our utmost respect for allowing their work to be spotlighted in this way.

² The degree of client consultation in the first and second stages varied across countries. All studies involved in-country research collaborators, but the degree of participation by these collaborators varied at different phases of the respective research programs.

presentation of the research results, the roundtable discussions focused on policy implications of the research results, including their applicability in designing a food security and nutrition monitoring system; capacity strengthening; and methodological considerations, such as the appropriateness and replicability of the research program, including the suitability of the chosen food security and nutrition indicators. The expected outcome of comprehensive roundtable discussions was feedback on (1) the process of policy research, (2) the use of policy research information, and (3) the replicability of similar studies in the case study countries. A brief description of the process and the thematic outcomes of client consultation in the four case studies is presented in order to derive lessons for similar exercises in the future.

IMPACT OF CREDIT PROGRAMS ON FOOD SECURITY AND NUTRITION IN GHANA

Background and Research Objectives

Policy research in Ghana focused on an evaluation of the impact of rural credit programs, targeted to women, on household income, food security, and the nutritional status of women and children. Supplemental objectives of the research included an identification of constraints to women's participation in credit schemes, an assessment of the importance of the process of implementing credit schemes in achieving improved food security and nutrition, and an evaluation of the impact of growth monitoring on preschooler nutrition status. Two major credit programs were selected for the study: credit for food processing and rice and vegetable production in the Volta Region

(Programme of Actions to Mitigate the Social Costs of Adjustment [PAMSCAD]), and credit to facilitate technology transfer in smallholder agriculture (GLOBAL 2000) in the Brong-Ahafo Region. The food security indicators used in the studies were household per capita expenditures and household calorie availability. Nutrition security indicators were child anthropometric outcomes, both short- and long-run measures, and women's body mass index. A detailed description of the study methods, data collection procedures, and the results of the study are given elsewhere (Kennedy et al. 1994).

Client Consultation and Identification

Collaborators for the study were senior officials in the Nutrition Division of the Ministry of Health, and the Women in Agriculture Division of the Ministry of Agriculture. In the early stages of the research, these individuals played a major role in the selection of study sites and the definition of research hypotheses. Teams of agricultural extension officers and health officers carried out the field surveys. There was little involvement by in-country collaborators and, consequently, other in-country clients in the analysis phase, largely due to the geographic location of the research teams—all analysis was done in Washington, D.C. However, an initial feedback workshop to validate and clarify results was held at the district level in the Volta Region, one of the two study sites.

The national-level roundtable took the form of a half-day discussion, during which the research results were presented. The meeting was held at the Ghanaian National Development and Planning Commission—a decisionmaking body under the office of the

president. Participants of the roundtable included the research collaborators and representatives of government agencies, nongovernmental agencies, and the donor community, who discussed the relevance and implications of the study for development of food security and nutrition monitoring indicators in Ghana.

Research Implementation, Results, and Feedback The Process

The study results indicated differentials in the food and nutrition security indicators when stratified by participation in credit programs. The study found a depleted nutritional status for women participating in credit programs for rice and vegetable production. Collaborating in-country researchers confirmed that in conversations with women involved in credit programs connected with rice production, it was observed that the increased workloads combined with late delivery of credit had resulted in intensified time burdens and contributed to ill health among women participants. This was the reverse of credit programs used for cassava processing, which alleviated female time burdens. The Ghana study emphasized that basing policies formulated on outcomes without an understanding of the underlying processes was likely to be erroneous. For example, the negative outcomes associated with decreases in nutritional status for women involved in rice and vegetable production credit programs could result in women no longer being targeted for credit instead of changes in program implementation and a recognition of the other factors that influence the ability of women to benefit from program participation.

There was a general agreement with regard to the positive value of the research findings presented and the need to have research of this type. Participants recognized the importance of paying attention to the process of change in indicators as opposed to just the magnitude of change. This applied whether they were conventional quantitative indicators, as in this study, or alternative indicators. For example, in this study, changes in nutritional indicators had potentially been caused by changes in time allocation patterns and the labor intensity of women's work. It was crucial that indicators pick up this dimension as opposed to just reporting the magnitude of the change in an indicator of nutritional status.

The Use of Policy Research Information

The second part of the roundtable focused on the use and relevance of the study in evaluating indicators for ongoing food security and nutrition monitoring. This section of the roundtable did not meet its intended goal, but did contribute to a crucial unintended outcome. It was extremely difficult to get all participants to contribute to the discussion due to the composition of the roundtable. In many cases, multiple representatives from a single agency, often with differences in institutional status, made it difficult for all parties to share their views openly.

More important, it became apparent during the proceedings that extensive information was collected by both the Ministry of Food and Agriculture and the Ministry of Health, but that the information was not translated into indicators that triggered action

or interventions. One reason for this was the lack of intersectoral discussions. For example, the Ministry of Agriculture collected extensive data on price and food availability in the marketplace, while the Ministry of Health monitored child outcomes and growth in most health facilities. A discussion followed in which Ministry representatives shared the types of information collected at regional and district levels. Recognizing their poor intersectoral communications with regard to the information already collected became an important output for the policy process. Participants discussed convening a workshop of interested parties to identify indicators that could be created and monitored, based on currently collected information. This section of the roundtable discussions did not meet its intended goal of evaluating indicators used for monitoring food security and nutrition, but it did serve as a catalyst for a crucial, yet unintended, outcome: a strengthening of the collaborative capacity of the Ministry of Health and the Ministry of Food and Agriculture personnel in terms of utilization of currently available information to formulate indicators.

Replication of Studies

It was unclear whether the study could be replicated in terms of conceptualization and analysis. Participants stressed, however, that similar studies, and the results they generate, were a crucial ingredient for advocacy in the policy arena, even if the results were not immediately translated into action. However, the establishment of baseline data

for communities provides strong foundations on which to build further studies designed to examine the impacts of policies over time.³

The workshop concluded with the view that in some sense, it was premature to evaluate food security and nutrition indicators in the Ghanaian setting. To date, considerable information exists, but little is translated into operational indicators, such as anthropometric measure, food price, and food supply, with guidelines to policy intervention when indicators, or combinations of indicators, fall outside the predetermined norms. Participants committed themselves to a meeting to explore the establishment of intersectoral linkages and the translation of currently collected information into relevant food security and nutrition monitoring indicators.

³ The prior collection of data in the Volta Region, together with the local capacity established during the previous study, was a key reason for locating a new and current study on the impacts of structural adjustment in the Volta region.

RESEARCH ON INDICATORS OF FOOD SECURITY AND NUTRITION IN INDIA

Background and Research Objectives

The major objective of the India research study was to identify effective alternative indicators of chronic and acute food insecurity that could be more readily observed than quantitative survey-intensive methods in the Indian semi-arid tropics. In order to identify food security and nutrition indicators and field-test their validity and reliability, qualitative and quantitative data were collected from 324 households in south-central India over three rounds in 1992-93. Indicators were then created from the qualitative data with validation by the quantitative data. The results of the study, which was conducted by IFPRI in collaboration with the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) and several other national institutions, are given elsewhere (Chung et al. 1997).

Client Consultation and Identification

The research process in this study differed from that in Ghana. One member of the international research team was permanently based in India. Thus the majority of the data processing and analytical work was done in India, facilitating greater feedback during the analytical phases of research.

The format of the fourth- and fifth-stage client consultation exercise in India took a different form. Given the diverse nature of the clients in terms of their official status, institutional affiliations, and the associated difficulties involved in conducting open

discussions, it was decided to meet the clients individually to get as much information as possible on the nature and usefulness of the research project. A semi-structured interview technique was used in the meetings. A summary of themes emanating from the discussions and pertaining to an assessment of the process and potential use of research follows.

Research Implementation, Results, and Feedback The Process

In general, the research provided useful insights into the choice of indicators for targeting, monitoring, and evaluating the impact of food and nutrition interventions. Since the alternative indicators were identified through a participatory approach, they were very localized in nature, reflecting cultural dimensions of food access and use and thus required further testing in various socioeconomic and geographical settings to be more broadly applicable. For example, the drought-prone areas of Bihar and Orissa would require different indicators to identify households most at risk of food insecurity compared to the flood-prone areas of West Bengal. Many households in rural India have vegetarian diets by choice. Thus, use of a food security indicator based on frequency of eating nonvegetarian food items would be misleading in reflecting food insecurity for these households.

Some indicators of food insecurity remain ambiguous for India; for example, in rural India, even relatively well-off households may have one child with diarrhea, one suggested indicator of food insecurity, and in these situations, it is unlikely that the child is

malnourished. In these cases, it is more important to identify indicators that reflect poor sanitation and hygiene practices and thus highlight both the incidence and frequency of illness. Again, the number of food purchases, when used as an alternative indicator, may not truly reflect a food insecurity situation. In fact, it may be more indicative of the security of food supply in local markets. Indicators that provide information on food access, food availability, and food use should be combined into composite indicators, since they may not, when used singly, reflect the true situation.

Consumption of deliberately leftover foods from previous meals as an indicator of food insecurity in rural India may be inappropriate, given that the practice is considered more nutritious and time-saving in rural India. Labor-constrained households, in general, prefer to eat leftover foods to save time in cooking in the early hours of work. This indicator may not be applicable in urban or semi-urban areas, where labor allocation patterns differ. Likewise, an indicator that suggests households containing working women and young children are food insecure may be erroneous in an urban or semi-urban setting. Even in rural areas where nonfarm activities increasingly provide a good source of income, households with working women are better-off than households in which women do not work. A tighter definition of indicators in terms of group relevancy may improve indicator performance. For example, an indicator based on the number of working women may better reflect food insecurity for landless labor-constrained households.

The Use of Policy Research Information

Interviewees felt that the identified alternative indicators were not necessarily more pragmatic in terms of food security and nutrition monitoring. A need to develop an easily observable composite set of indicators that could be used jointly with other locally available information to identify vulnerable groups was recognized. Some of the alternative indicators of food insecurity identified by research, though they do provide a general set of indicators, were believed to be difficult to collect. For example, indicators associated with quality, such as quality of drinking water and quality of land, may not have uniform standards across locations of the area under study.

Equally, the type of indicators of food insecurity differs, depending upon the proposed intervention—food subsidies through ration shops, school feeding programs, or preschool child care centers. A need to develop impact and monitoring indicators was also recognized. Further, interviewees recognized that the role of causal factors explaining food insecurity had not been fully addressed in the current research program. Failure to understand underlying causal factors together with poor indicators results in a "blanket program" approach as opposed to a finely targeted intervention.

Those interviewed recognized a need to use secondary data in developing the village-, block-, and *taluk*-level indicators for targeting. These may include crop estimation information and food production statistics at the block and *taluk* levels and rainfall at the village level. Pragmatic considerations need to be made in identifying grassroots-level indicators. To what extent are the indicators identified by research both

cost-effective and efficient in identifying malnourished households and monitoring ongoing food and nutrition security?

Replication of Studies

The interviewees felt that there was an urgent need for testing the usefulness of indicators identified for food security and nutrition monitoring under various settings. The monitoring systems that are currently being established through the Integrated Child Development Services provide an opportunity to meet this need (ICDS 1994). These indicators need to be modified, depending on the agroecological zones, production systems, and rural and urban situations. The collaborators of the study suggested that the methodological contributions made by the study should be replicated by the local researchers in various academic and research institutions dealing with food security and nutrition monitoring. The use of study results in enhancing the effectiveness of food security and nutrition monitoring systems in India is further elaborated in Babu (1996).

NUTRITIONAL CONSEQUENCES OF AGRICULTURAL COMMERCIALIZATION IN KENYA

Background And Research Objectives

The major objective of this study was to assess the short- and medium-run effects of the commercialization of agriculture on household income, food security, and the nutritional status of preschool-aged children. The availability of longitudinal data, collected in collaboration with the Central Statistics Office in South Nyanza in 1984/85, 1986/87, and 1992/93, permits estimation of the lagged effects of income changes on the food security and nutritional status of households. Child nutritional outcomes were the key focus of the study. A detailed description of the sampling methods, analytical procedures, and the results of this study are given in Kennedy et al. (1995).

Client Consultation and Identification

The outcome of the research program was discussed at a workshop with 15 participants from government departments (including the Director of the Central Bureau of Statistics and the Director of Planning from the Ministry of Finance), academic institutions, and donor agencies.

Concern was expressed that both the data analysis and report writing phase of the research cycle could have been a more collaborative activity. The lack of active participation by in-country collaborators at this stage, it was felt, resulted in sociocultural issues that influence household decisionmaking behavior not being fully incorporated in explanations of the empirical results of the study.

Research Implementation, Results, and Feedback The Process

Research results indicated a declining availability of land resources for cultivation, owing to a population increase and consequent land pressure. Participants felt that one important policy issue for future research was landownership and access, especially by women, who were key decisionmakers in terms of what to produce and how much. In the study area, and more generally in Kenya, for example, women cannot have a savings account in commercial banks without a land title. Absence of a land title also reduces their ability to secure credit for crop production. Women do not inherit land and hence are not able to obtain a commercial loan.

While the study placed a great emphasis on children's nutritional status, it was felt that more effort should be made in the future to examine lagged changes in the nutritional status of the adults, particularly with regard to productivity gains in food and cash crop production.

Workshop participants also pointed to the influence of seasonality as crucial for data collection and assessment of food security and nutritional status. They suggested that linking sociocultural factors to the quantifiable variables was important in better explaining the results, and there was a need to revisit the data and methods used for analysis. Furthermore, causal factors of food insecurity and nutritional status are often used as core indicators in the study.

Participants of the workshop suggested that the data set be made available to local users for exploring issues that have not been addressed by the current study. There is also

a need to strengthen the capacity of policy analysts and policymakers to use study results to design specific policy alternatives.

The Use of Policy Research Information

A core group of users, particularly those from government ministries such as health and agriculture, felt it would have been better if the conceptual framework of the research and the policy issues to be addressed had been clear to them from the beginning. More specifically, the causality of income increases and its influence on nutritional status was not very clear to them in the study results. Also, changes in food consumption patterns—moving from less expensive, calorie-dense foods to higher quality, more expensive, but less nutritious food—should have been better captured by the longitudinal nature of this study. Researchers involved in the study should have recognized differentiated gender roles in decisionmaking systems regarding both crop choices and household expenditure patterns for food and nonfood commodities. The classification of sample households into female-headed and male-headed households may not be useful unless the reasons underlying the formation of different types of households are investigated further. In some parts of the study area, interhousehold support through informal networks became less effective as a means of coping with changing demand in consumption as household income increased.

In the open discussion session, participants elaborated on the methods and results of the research. They highlighted the need for further research on rural household gender roles in decisionmaking systems. Factors associated with increasing social status, reflected in the purchase of luxury consumer goods such as color televisions and reduced spending on food commodities, need to be recognized and incorporated in the analysis. In consultation with the clients, it was determined that more research is needed on market linkages and development, for both food and nonfood, in areas in which agricultural commercialization is promoted. It was not clear whether female-headed households assigned higher priority to reducing food insecurity and, hence, spent more on food as income increased. The traditional roles of members of the household need to be better understood for explaining caregiving activities as an input into better nutrition, along with increased food consumption induced by an increase in income. Also, nonfood inputs such as primary health care, clean water availability, and sanitation, and their interaction with food inputs need to be studied to explain the impact of commercialization on nutrition.

Planning ministry officials felt that they benefitted from the results of the study by understanding how to better allocate resources to various social sectors in Kenya. Participants felt that research results needed to be available more quickly following data collection to enable timely policymaking. Frequent feedback from collaborators and policymakers to those engaged in data analysis would ensure a more accurate interpretation, greater ownership of the research output and policy prescriptions, and rapid development of timely interventions. Some participants expressed concern that even

though the study was conducted in collaboration with Kenyan academic institutions, government users of the research output were not involved in study design; therefore, it was difficult for these users to understand the study methodology. In particular, they desired a greater understanding of the relevance of the data collected for various socioeconomic variables. Frequent consultation with in-country researchers during the analysis phase, combined with the involvement of government users of generated results, would increase the likelihood that policy analysis based on data collected for the study would be continued by local researchers in order to address the changing policy environment.

Replication of Studies

We must recognize that institutional collaboration in policy research is more important than the collaboration of individuals. Collaborative research projects should identify the capacity strengthening needs of local institutions and individuals and integrate them into the project activities. This will provide a core group of policy researchers in an environment suited to institutionalize the policy research process.

IMPACT OF CREDIT WITH EDUCATION FOR WOMEN IN MALI

Background and Research Objectives

The major objective of the Mali study, as in the case of Ghana, was to provide an assessment of the impact of a credit and nutrition education for women program on

household income, food security, and the health and nutritional status of women and children. The program was implemented by the Centre d'Appui Nutritionnel et Economique aux Femmes (CANEF). Details and results of the study are found in De Groote et al. (1996).

Client Consultation and Identification

Unlike Ghana, but as in India and Kenya, one member of the international research team was permanently based in Mali, resulting in the data analysis phase being carried out in both Mali and Washington, D.C.

Both the international and Malian researchers who conducted the Mali Credit and Education Study presented the study to the audience, which consisted of members from government, NGOs, academic institutions, and donor agencies.

Four independent Malian reviewers, representing government, nongovernmental, research, and donor institutions who have conducted research or implemented projects that dealt with rural credit and nutrition issues, acted as discussants. The discussants' presentations were followed by discussions of major issues raised. These issues are summarized below.

In addition to sharing the results of research with policymakers through roundtable discussions, meetings were held with the final beneficiaries of the credit program. The villages where the credit program is currently implemented were visited in order to compare the research results with the opinions of the beneficiaries and community leaders.

Through participation in one of the credit club meetings, various processes of the credit project, such as the nutrition education component and the repayment of the credit, were observed. The major results of the study were summarized and discussed with the beneficiaries.

Research Implementation, Results, and Feedback The Process

Study results indicated that the credit program was well-targeted to those with lower levels of landownership, households with more women and children, and compounds of smaller size. Women's income was shown to increase for women receiving credit, but only for women with no preschool children. The authors speculated that women with preschool children may not have been able to use the credit effectively, possibly owing to binding child care time constraints. Increases in women's income improved women's nutrition in villages where credit was available, but only for women from the wealthiest two-thirds of households.

While participants largely agreed that participation in rural credit programs could increase income, they felt that the differential impacts of increased income on nutritional status needed to be better understood to be useful in policy decisionmaking. Attempts should be made to incorporate anthropological methods and Farming Systems Research (FSR) methods in order to identify constraints that reduce the impact of income on nutrition. In replicating the credit program in other parts of the country, it may be useful to focus on crop-based development, such as cotton in the south and rice in the north.

Also, the credit program should encourage crop diversification to increase the impact of credit on income and nutrition. It is important to develop local institutions to handle the credit programs with commercial banks so that high operational costs associated with the credit program can be eliminated.

The study showed that factors contributing to food security, beyond the increase in income generated from credit program participation, should be analyzed more rigorously. Linkages between food security and its conversion to nutritional improvement should be assessed in the light of health and nutrition factors, such as child morbidity, vaccination, eating and feeding habits, including breast-feeding, and environmental factors, such as water and sanitation. While workshop discussants suggested that the conceptual framework should have been refined to address more specific policy issues faced by policymakers with regard to the study areas, it was agreed that the conceptual framework used was, in fact, appropriate for the specified objectives of the study.

While the major criteria with regard to village selection were representative in terms of distance from major roads, market access, and population size, the participants of the workshop felt that a more random sampling of villages would have ensured a greater representation of the poor villages. The choice of household respondent with regard to the household surveys was also queried. While women received the credit, in many instances, men, as heads of families, answered the questions asked by interviewers. It was suggested that male and female respondents within households should have been selected, depending on the type of questions asked.

It was suggested that data on the knowledge, attitude, and practice of respondents with regard to nutrition and health behaviors should have been collected in order to more accurately correlate nutritional outcomes with the income-generating effects of a credit program.

Evaluation of credit interventions in terms of their impact on food and nutrition security and in terms of redesigning program implementation strategies was considered most important by the participants. There was a general agreement that the research study used indicators that are well accepted among Malian policymakers as appropriate for Mali. However, there is a need to develop and refine specific indicators that would meet various data collection and use requirements, such as rapid rural appraisal, participatory evaluation at the program level, evaluation based on client consultation, and detailed implementation of impact assessment studies. There is also a need to understand differences between the variables that cause changes in the final indicators and the final indicators themselves. In addition to the quantitative indicators generally used in research studies, it is important to identify qualitative variables that may be locality specific and reflect changes due to program implementation.

While participants in general agreed with the results, they felt that the credit funds were insufficient to ensure a long-term viable business creation. Beneficiaries also felt that not all who received credit used it effectively and, hence, got the full benefits of the program, suggesting a need for a greater training component.

In order to understand the implementation issues and potential to design a food security and nutrition monitoring system, a field meeting was held in Bogouni with the field monitors, program managers, and program coordinators of CANEF. The outcomes and insights gained from these discussions have been used in developing a new proposal for implementing a food security and nutrition monitoring system.

The Use of Policy Research Information

There was a major consensus among the participants of the workshop that the major objective of the study had been achieved. However, several questions were raised as to the cost-effectiveness of the credit program itself, a factor not addressed by the study. It was generally believed that the cost of providing credit to rural women through the program was very high and that additional research was needed to address the cost-effectiveness of the program.

There was a lengthy discussion on the actual choice of the income-generating strategy. Is credit the only way to increase income? Did the program implementors consider other methods of intervention to increase income and improve nutrition? Income increases may have differential benefits, depending on the season and timing of income received by the household. Further research is necessary to explore seasonality and the dynamic nature of income generation from credit interventions. It is also important to distinguish agricultural and nonagricultural sources of income in order to establish the income-nutrition linkage through the credit intervention that was targeted to income

generation (agricultural or nonagricultural). The cost involved in generating an additional CFA of income through provision of 1 CFA⁴ of rural credit should be compared with the relative cost/benefits of other intervention programs. The method of financing the credit program needs to be looked at closely to identify the opportunities for removing the possible inefficiencies in implementing the credit program.

Replication of Studies

Participants of the one-day workshop questioned the ability of local organizations that are implementing various income-generating activities. Concerns were expressed that the research project made very little effort to establish a monitoring activity as a follow-up to the research. Also, the capacity to collect, organize, and analyze similar information does not exist either in the government or in agencies that are involved in rural credit for food security and nutrition improvement.

⁴ Francs issued by the Communauté Financière Africaine.

6. LESSONS FOR SYSTEMATIC CLIENT CONSULTATION IN POLICY RESEARCH

The roundtable discussions that were part of these studies provided critical feedback on the research results and methodology, but, perhaps more important, identified important lessons for both the collaborative research process and the dissemination of newly acquired food and agricultural policy information.

The comparative exercise undertaken here reveals the importance of developing an indigenous capacity to increase the use of policy research results. For example, the absorptive and replicative capacity for using research results both in government and donor agencies was higher in countries such as India and Kenya, where some local capacity exists, than in countries such as Ghana and Mali. Such capacity to assimilate and incorporate research results in programming and policy decisionmaking helps to complement and enhance the impact of donors' assisted interventions.

All the studies considered here reveal the need to identify the full range of clients before initiating collaborative research. The potential collaborating, in-country research institution is probably best qualified to lead this exercise in identification. The clients identified are likely to include decisionmakers in government, NGOs, donor organizations, and other researchers in related fields, particularly in-country researchers, as well as researchers in the in-country collaborating research institution. Some of the clients will be full participants throughout the research cycle, while others will participate during some parts of the research cycle and be consulted during others. For example, the in-country

research collaborators should act as just that, and not merely facilitators for international researchers to carry out the research. They should be the most participatory group within those identified as clients.

The first stage in the research process should be an identification of information gaps as perceived by clients. This may require an “inventory exercise” of existing knowledge relevant to the issue and country in question. This exercise should involve participation by all clients. The Ghana roundtable revealed a wealth of information that was already being collected, but not being used for determining indicators for identifying food and nutrition security.

After identifying information gaps, clients should determine the priorities for policy research in terms of the information required. The Mali and Kenya studies highlighted policymakers' concerns with the linkages between increased income and improved nutritional outcomes. Involvement of the clients is of critical importance in this determination.

Consultation with clients should continue throughout the research process. Certain stages of the research cycle will probably be more inclusive of all clients than others. At some stages, participation by or consultation with small subgroups of clients will be sufficient. Examples of the more inclusive stages include the drawing up of the conceptual framework for the research and identifying specific research questions. For example, participants in the Mali roundtable were concerned about the cost-effectiveness of using credit programs to generate income increases for poor households. In India, those

consulted would have included the use of secondary data in conjunction with primary data to further fine-tune indicators. Participation by more clients in the initial definition of the conceptual framework and the identification of research questions would have probably resulted in modifications to the research program in all countries and would have ensured broader “ownership” of the final product. This is not to say that the “wish list” of all clients can be addressed by any one program of research, but at least all clients are aware of exactly what the program will and will not address.

Meetings, both participatory and consultative, with all and/or small “working groups” of clients as required, ensures ongoing dissemination of research results and progress. These meetings also ensure that information dissemination is recognized as an integral part of the research cycle that leads to the ultimate goal of policy decisions informed by policy research. The feedback received during these consultations also permits fine-tuning the research agenda, ensuring that results remain timely and relevant.

We recognize that the process of client consultation described in Section 4 above is no easy task, particularly when the client base for a research program is large and diverse, but we believe the benefits far outweigh the costs. The costs can often be reduced by setting up an external advisory committee for the research program. This provides a smaller, focused group of people who represent all clients, making the process of consultation easier. This external advisory group also ensures that specific clients participate or are consulted during relevant parts of the research cycle.

The benefits from systematic client consultation highlighted by the country studies are many:

- Systematic involvement of in-country researchers as full collaborators, rather than mere facilitators, as is often the case, ensures that the sociocultural nuances specific to a society are recognized in research design, implementation, and analysis.
- Full participation in the data analysis part of the research cycle by the in-country collaborators can enhance in-country analytical research capacities if these are not currently well-developed.
- Full involvement by in-country researchers in the data analysis phase not only enhances the quality of the research output generated, but ensures a longer use timeline for the data generated by the research. These researchers can continue to use the data to modify policy advice as minor changes occur within the economic climate. Equally, they can assist other in-country organizations in data access and analysis, extending the cost effectiveness of any data collected. However, this requires early identification and clarification of “property rights” with respect to the data.
- Participation and/or consultation by all clients at different stages of the research cycle ensures “ownership” and thus a ready and receptive audience for the research information generated.

- The ultimate goal is met—policy research information generated is both timely and relevant to policy decisionmaker requirements and thus will be used in the decisionmaking process.

7. CONCLUSIONS

This paper highlights the linkage between policy research and policymaking processes and illustrates both the approach and outcomes of a series of client consultation exercises conducted in four countries on a common theme. We believe that many of the problems raised by clients in the four case-study countries during the roundtable discussions would not have arisen had a more systematic approach been taken in terms of client consultation throughout the research cycle. In all the case studies reported, clients identified additional requirements for information that could have been supplied by minor refinements of the research questions and fine-tuning of the research methods. This demonstrates that prior to the process of implementation of research studies and dissemination of research results, more consultation with clients, including collaborators, could have been an effective method of increasing the ownership and relevancy of the policy research information.

The costs of failing to conduct systematic client consultation in the research process have been highlighted by the country case studies. These costs include missed opportunities to address policy need when designing the research agenda; policy advice that could have been more timely and more relevant; a less than optimal choice of research methods and analytical tools due to the lack of cultural awareness; an incomplete interpretation of research findings, particularly by nonnational researchers, due to a lack of understanding of local cultural norms; and policy recommendations that would have been more likely to have been adopted with a more complete appreciation of the political

climate. If the costs are apparently so high, why do policy researchers fail to engage in client consultation? We suggest that policy researchers recognize that the costs of client consultation can be substantial but fail to appreciate that the benefits will often outweigh these costs. This lowers the incentive for policy researchers to engage in activities beyond their immediate research goals. Additionally, both the benefits and costs of client consultation may well be asymmetric; researchers perceive that they bear the costs of engaging in client consultation while policymakers receive the benefits. Equally, the social benefits of a client consultation process may exceed any private benefits to researchers. Shifting this distribution of costs and benefits is not easy, particularly if funding for research is declining. In this paper, we offer a framework with which to build client consultation into the research process in a systematic way. While the costs of client consultation are still nontrivial, we believe engaging in systematic client consultation is less costly than ad hoc client consultation, and perhaps more important, incurs less costs than those generated by failing to engage in client consultation.

While there has been a new emphasis on incorporating client consultation in the design and implementation of development projects and programs, the challenge remains in terms of incorporating client consultation into the research process. When looking at the case studies explored in this paper, it is easy to be wise after the event; we do not mean to imply that client consultation will be a panacea, ensuring that timely and relevant policy research information is both generated and utilized. It should be noted that unless policymakers and policy advisers recognize the importance of information-based

decisionmaking, the maximum benefits of systematic client collaboration will not be fully realized. Equally, we argue that researchers have to be more aware of the environment in which policymakers and advisers function if they are to fully recognize how and where the information they generate is used. The goal of the current generation of IFPRI research is to embody these concepts and objectives, in part through dialogues such as the one summarized in this paper.

Delineating various stages of client consultation in the process of policy research does provide an opportunity to identify policy intervention points and generate dialogue between those who generate policy research information and those who use it. This dialogue may educate policy decisionmakers about the role of research in the policymaking process, and educate researchers about the policy environment within which research information is being used.

BIBLIOGRAPHY

- Babu, S. C. 1996. Food security and nutrition monitoring for development—Can India learn from international experience? Outreach Division Discussion Paper 10. International Food Policy Research Institute, Washington, D.C.
- Babu, S. C., and S. Khaila. 1996. Priority-setting in food and agricultural policy research—A case study and lessons from Malawi. *Quarterly Journal of International Agriculture* 35 (3): 221–233.
- Babu, S. C., and G. B. Mthindi. 1995. Costs and benefits of informed policy decisions—A case study of food security and nutrition monitoring from Malawi. *Quarterly Journal of International Agriculture* 34 (3): 242–308.
- Bates, R. H., and A. O. Krueger. 1993. *Political and economic interactions in economic policy reform*. Cambridge, Mass., U.S.A.: Blackwell Publishers.
- Chung, K., L. Haddad, J. Ramakrishna, and F. Riely. 1997. Alternative approaches to locating the food insecure: Qualitative and quantitative evidence from South India. Food Consumption and Nutrition Division Discussion Paper 22. International Food Policy Research Institute, Washington, D.C.
- Davis, K. 1987. Research and policy formulation. *Health Policy* 7: 295–296.

- De Groote, H., E. Kennedy, E. Payongayong, and L. Haddad. 1996. Credit with education for women in Mali: Self-selection and impacts on women's income, with implications for adult female and preschooler nutrition. Report for the United States Agency for International Development. International Food Policy Research Institute, Washington, D.C.
- Dunn, W. N. 1994. *Public policy analysis*. Englewood Cliffs, N.J., U.S.A.: Prentice Hall.
- Gray, B. 1989. *Collaborating: Finding common ground for multiparty problems*. San Francisco, Calif., U.S.A.: Jossey Bass.
- Grindle, M. S., and J. W. Thomas. 1991. *Public choices and policy change: The political economy of reform in developing countries*. Baltimore, Md., U.S.A.: Johns Hopkins University Press.
- Gulhati, R. 1988. *The political economy of reform in Sub-Saharan Africa*. Economic Development Institute. Washington, D.C.: World Bank.
- Gulhati, R. 1990. *The making of economic policy in Africa*. Economic Development Institute. Washington, D.C.: World Bank.
- Heineman, R. A., W. T. Bluhm, S. A. Peterson, and E. Kearny. 1990. *The world of the policy analyst: Rationality, values, and politics*. Chatham, N.J., U.S.A.: Chatham House Publishers.
- Herbst, J. 1993. *The politics of reform in Ghana, 1982-1991*. Berkeley, Calif., U.S.A.: University of California Press.

Hoffman, J. 1995. Linking economic research and policymaking: The role of AERC.

AERC Special Paper 20. African Economic Research Consortium, Nairobi.

Horowitz, D. L. 1989. Is there a Third World policy process? *Policy Sciences* 22: 197–212.

ICDS (Integrated Child Development Services). 1994. Management information system—Workshop on Management Information System in ICDS. Hyderabad, India.

Jenkins-Smith, H. 1982. Professional roles for policy analysts: A critical analysis, *Journal of Policy Analysis and Management* 2 (Fall): 88–100.

Kennedy, E., D. Ngare, E. Jacinto, and L. Haddad. 1995. The medium-run food and nutrition consequences of agricultural commercialization: Findings and implications in Kenya. Final Report of the Food Security and Nutrition Monitoring Project (IMPACT), U.S. Agency for International Development. International Food Policy Research Institute, Washington, D.C.

Kennedy, E., E. Payongayong, L. Haddad, T. Tshibaka, R. Agble, and R. Tetebo. 1994. Impacts of credit programs in food security and nutrition in Ghana. Final Report of the Food Security and Nutrition Monitoring Project (IMPACT), U.S. Agency for International Development. International Food Policy Research Institute, Washington, D.C.

Krueger, A. O. 1993. *Political economy of policy reform in developing countries*. Cambridge, Mass., U.S.A.: Massachusetts Institute of Technology Press.

Lindblom, C. E., and E. J. Woodhouse. 1993. *The policymaking process*, 3rd Edition.

Englewood Cliffs, N.J., U.S.A.: Prentice Hall.

Majone, G. 1989. *Evidence, argument, and persuasion in the policy process*. New

Haven, Conn., U.S.A.: Yale University Press.

Nakamura, R. T., and F. Smallwood. 1980. *The politics of policy implementation*. New

York: St. Martin's Press.

Porter, R. W. 1995. *Knowledge utilization and the process of policy formation Toward*

a framework for Africa. Washington, D.C.: Office of Sustainable Development,

U.S. Agency for International Development, Africa Bureau.

White, L. G. 1990. *Implementing policy reforms in LDCs: A strategy for designing and*

effecting change. Boulder, Colo., U.S.A.: Lynne Rienner.