

IMPACT ASSESSMENT DISCUSSION PAPER NO. 20

**THE IMPACT OF ECONOMIC
POLICY RESEARCH:
*Lessons on Attribution and
Evaluation From IFPRI***

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October 2003

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ABSTRACT

Economists and scientists have developed methods to assess the returns to investment in agricultural research. On the other hand, numerous political factors and actors complicate the connections between social science research results, outcomes, and policy influences, and methodologies for their assessment are not well developed.

In recent years, the International Food Policy Research Institute (IFPRI) has initiated efforts to develop such methods. This paper reviews approaches to the evaluation of economic policy research and discusses the main lessons drawn from a series of IFPRI case studies on ways to heighten and analyze the impact of economic policy research on policy decisions. The paper then reviews IFPRI's current efforts in this area.

Impact evaluations can employ both quantitative and qualitative approaches. Quantitative approaches generally employ economic models to measure rates of return to research. Although useful to compare returns across projects, quantitative analysis offers little insight into the policy process. Qualitative evaluations are better at this, usually taking the form of retrospective narratives.

Regardless of which approach is used, analysts must confront at least eight key issues in conducting impact assessments for social science research:

1. **Scale.** Will the evaluation focus on the institutional, programmatic, thematic, or project level?
2. **Time Lags and Discontinuities.** Since the policy process is not linear, how will the evaluation acknowledge discontinuities in the use and influence of information and lags in the generation of benefits from resulting policy change?
3. **Demand-side vs. Supply-side.** Ideally, evaluators should start at the point of demand for information and work backwards from actual policy changes to the research, but simply tracking how policymakers used the research may be more feasible.
4. **Surprise.** How did the addition of new information to policymakers' perspectives affect their perceptions about the desirability of the policy change?
5. **Attribution.** Many actors participate in the policymaking process and use various sources of information to make policy. Attributing impact to any one source is difficult, though donors will surely continue to press research institutions to identify the extent to which their work contributed to policy change.
6. **Choice of indicators.** Evaluators must determine the variables of interest: the output, the outcome or influence, policy response, or impact.

7. **Sampling.** Even in evaluations using case studies, evaluators must decide whether to make a random or purposive sampling. Each approach has pros and cons.
8. **Ex ante and ex post assessments.** Researchers can develop logical frameworks to gauge the success of research in achieving its objectives. They can also document outputs, outcomes/influences, and policy responses of the project. This promotes internal learning and enhances institutional effectiveness. Independent evaluations are still needed to ensure credibility.

Through a review of case studies, IFPRI also identified nine factors important to the generation of influence and impact: (1) the production of high-quality, independent research; (2) the timely availability of relevant research information; (3) the long-term and in-country presence of researchers; (4) the need for a policy environment conducive to research results; (5) the presentation of empirical data and simple analysis; (6) the likely trade-off between immediate production of results and impact and the long-term building of in-country capacity to undertake their own research as well as the possible impairment of research quality; (7) the strategic choice of partners and identification of “policy champions” who may effectively advocate for policy change; (8) building a consensus for change among stakeholders; and (9) learning from various cross-country experiences to improve ways of conducting research and influencing policy change.

Historically, IFPRI has blended quantitative and qualitative approaches to impact assessment. But rather than seeking to establish rates of return on overall research investment, IFPRI undertook a series of case studies. Most studies focused at the project and country level, examining the policy process and the use of research information by policymakers.

After reviewing the lessons learned from the initial case studies, the Board of Trustees in 2000 requested that management institutionalize impact evaluation at IFPRI. A Working Group on Impact Evaluation (WGIE) was established, and a number of pilot exercises involving *ex ante* impact evaluation on new projects were instituted. Focus groups were also held in which staff recounted instances where their research outputs influenced policy and had subsequent social or economic impacts.

If evaluation is to enhance the impact of research, the process must be institutionalized. Staff and management should take responsibility for recording outputs, outcomes/influences, and policy responses related to their research. Independent evaluators can verify these and endeavor to translate them into meaningful measures of their impact on economic welfare. Researchers must see such a system as an integral part of learning and improving their own actions.

Researchers must also be encouraged to take advantage of the increased availability of information technology to disseminate information to disparate groups and generate important public debate to better inform the policy process. In this way, there will be scope to bridge both policy and action as well as bridging research and policy.

INTRODUCTION

Donors and governments institute complex monitoring and evaluation mechanisms to demonstrate the value of their investments in programs and projects. Demonstrated high returns on investment, however, are not enough to justify funding. Economists and scientists have extensively documented the rates of return to investment in agricultural research and development at around 80 percent per year (Alston et al. 2000). Yet funding for the centers of the Consultative Group on International Agricultural Research (CGIAR), of which the International Food Policy Research Institute (IFPRI) is a part, has fallen by 8 percent in real terms in the last 10 years. On the other hand, even though evidence of the impact of research on policy choices and outcomes is scarce, between 1997 and 2001 the proportion of overall spending dedicated to economic policy research in the CGIAR went from 11 to 14 percent, to US\$49 million, a rise of more than 30 percent (CGIAR 2002).

Surely part of the reason for this situation is that funding of policy research is still a relatively small part of the CGIAR's budget, less than 15 percent. Likewise, donors and center directors recognize that even the best technologies cannot realize their benefits without a conducive policy environment.

In addition, methodologies for impact assessment of social science research are not well developed. Cause-and-effect relations in the biological and physical sciences are much clearer than in the policy arena, which depends to a greater extent on human behavior. The costs and benefits of a particular technology are thus more straightforward to calculate than that of a policy finding or recommendation, where numerous political factors and actors complicate the connections between research results, actions, and outcomes. Few researchers in economics or those from other disciplines have turned their attention to methodological issues of evaluating the impact of social science research, and so there are virtually no "best practices" available (Maredia, Byerlee, and Anderson 2001; TAC Secretariat 2000). When seeking to tighten the budget belt, donors and directors have tended to assume value for money and looked elsewhere for cuts.

In recent years, IFPRI, the leading economic policy research institute of the CGIAR, has faced growing demands for clearer demonstration of impact. Assessments would be valuable for justifying public investment in policy research. By illuminating how research and policymaking intertwine, assessments could also suggest what IFPRI could do to increase its impact.

IFPRI initiated efforts to develop methods to document impact in the mid-1990s. A symposium held at IFPRI in 1997 focused on the development of quantitative economic approaches (Smith and Pardey 1997). Participants presented ideas on how to assess social science research quantitatively, but concluded that at this stage case studies, instead of general quantitative analyses, were more appropriate for drawing conclusions about impact and the means to achieve it. Consequently, IFPRI commissioned a number of case studies to evaluate the impact of economic research on policy choice and outcomes. The studies, many of them summarized in Garrett (1999), covered a range of activities in which IFPRI was

involved, from direct policy advice, to building general knowledge, to training. These case studies provided a foundation for IFPRI's current approach to impact evaluation.

This paper begins with a review of methods and approaches to evaluate the impact of economic policy research, and then discusses the main lessons from case studies on ways to heighten and also analyze the impact of economic policy research on policy decisions and welfare outcomes. The paper then outlines a framework for evaluation that IFPRI is using to guide its next steps in this area.

DOCUMENTING AND MEASURING IMPACT

A research institution has at least four rationales for documenting and measuring impact. They are basically to improve:

- accountability and credibility;
- quality and relevance;
- program and project design and implementation; and
- future planning and prioritizing.

To a significant extent, the primary purpose of impact studies determines the appropriate approach. If accountability is the major reason for evaluation, the evaluator may choose programs or projects purposively, rather than randomly. Choosing the more successful candidates may more convincingly justify the investments in the institution to the public, clients, and donors. However, such "cherry picking" may not be as informative to an institution that is interested mainly in improving its quality, relevance, and effectiveness. In such instances, sampling failures as well as successes may offer more insights.

Approaches and Empirical Issues

Approaches. Impact evaluations can employ quantitative or qualitative approaches, or a mixture of both.

Quantitative approaches attempt to assess and attribute the welfare impacts of economic policy research, but a "virtual void" has existed in the economics literature with respect to the quantitative calculation of benefits and returns to social science research (Smith and Pardey 1997). The IFPRI 1997 symposium presented new thoughts on conceptual and methodological issues in quantitative assessments (Gardner 1997b; Norton and Alwang 1997; Timmer 1997; Zilberman and Heiman 1997). Suggested frameworks generally followed models used by economists to measure rates of return to agricultural research and development (Alston, Norton, and Pardey 1995). These approaches rely on market models or regression analysis to estimate costs of investment and the value of resulting benefits (Alston et al. 2000). They use standard financial analysis procedures to account for timing and variations in the streams of costs and benefits.

Empirical applications of these approaches remain scarce. Norton and Schimmelpfennig (2001) use a Bayesian approach¹ to value the benefits of risk management research in the United States. Ryan (2002) uses benefit-cost analysis to value the benefits of rice trade policy research in Vietnam.

These quantitative methods are particularly useful to assess historical trends in rates of return; compare returns across different geographical, environmental, and political conditions; and to assign investment priorities. However, these methods cannot provide insight into the policy process and how policymakers use research information. Just as assessments of investment in agricultural research and development do not describe how technologies enhance production or which of the seed's genes need to be tweaked, quantitative approaches do not illuminate how economic research influences policy choices or which policy actors should be targeted with research information. Policymaking remains a black box, giving little idea of how the research had an impact, if any, or how it could be improved or communicated more effectively.

Qualitative evaluations describe the processes by which research outputs influence policy formulation. They take the form of retrospective narratives (Adams 1983; Babu 2000; Islam and Garrett 1997; Richardson 2001; Ryan 1999b). They involve interviews with professional peers, policymakers, and their advisers and analysts. These elicit their familiarity with the research, how it compares with alternative sources of information, and what influences it had on the timing and design of policy.

Arguably one of the most impressive retrospective narratives is that of Campbell and Squires (1998). They describe the evolution of policies on the management of dolphin kills and tuna fishing in the seas around Australia and the role that biological and economic policy research played in policy development. Biological research on the synergy between dolphins and tuna and population dynamics began 20 years prior to the emergence of the problems of overexploitation of the tuna fisheries and the related problem of dolphin kills. This research was critical to later bioeconomic modeling, which was used to establish policies regulating tuna catches. Economic research provided information on the economic consequences of various policy choices. Biological and economic research were complementary in influencing policy in this instance. This is a good example of anticipatory research producing public goods, which could only have been done with public funding.

Evaluators can also blend quantitative and qualitative approaches. Ryan (1999a) describes how research interacted with the institutional and political environment to lead Vietnam to relax rice export quotas and liberalize internal restrictions on rice trading. He then employs a quantitative model to estimate the value of policy changes to rice farmers, the government, and consumers over time. Rodrik (1996) studies the impact of a whole body of macroeconomic policy research and advocacy over an extended period, including quantitative valuations of the effects of trade liberalization and fiscal and monetary stabilization strategies that reflect the influence of such research.

¹ Bayesian decision theory provides a framework for placing a value on the research information that policymakers use to update their beliefs about various "states of the world" and the impacts of their policy choices.

Counterfactual analyses are a variant of the mixed approach. These ask what might have occurred *without* a policy change. Burfisher, Robinson, and Thierfelder (2001) examine what would have occurred to jobs and trade balances in the United States *without* the North American Free Trade Agreement (NAFTA). The authors then compare these results to scenarios *with* NAFTA in place. While the study does not allow attribution to individual institutions or research, it does allow *ex post* verification of the accuracy of *ex ante* economic policy research.

Empirical Issues. Regardless of which of approach is used, analysts still confront at least eight key issues in the design and conduct of the studies (Ryan 2001).

Scale and scope. Although evaluators can conduct impact evaluation at different levels of analysis (institution, program, thematic body of work, project), most case studies are at the project level. Project-level studies are easier methodologically because the generation of research information and its dissemination often occurs within limited time and space. For example, Islam and Garrett's (1997) case study looked at how specific individuals (senior advisers and bureaucrats) used the information in a specific country context (Pakistan) to arrive at a policy decision to eliminate wheat ration shops.

Arguably, however, an international organization such as IFPRI produces knowledge as an international public good. The greatest impact of its research may actually occur *indirectly* through global effects, such as when country policy analysts employ methodologies or policy findings developed in another context in their own or when findings change common ways of looking at problems, leading to multiple changes in policy decisions across countries, institutions, and individuals (Farrar 2002).

These sorts of impacts are difficult to trace and capture. As one moves beyond the project level, more and more actors become involved, with exponentially greater sources of information and motivations. This limits the evaluator's ability to attribute policy responses to individual actors or specific pieces of research. The need for greater accountability, which seems to be a major rationale for the increased attention to impact assessment, encourages a focus on the project level, where impacts are easier to trace.

But this press for accountability in the short term has inherent moral hazards. It encourages an institution to focus on projects where impact is more easily attributable and avoid longer-term and arguably more risky international public-good policy research. It may slant the perception of the nature of the institute (and ultimately slant the research portfolio through incentives for project work), in that projects are only a part of total research program activity and an even smaller part of institute activity. In addition, it rewards those donors who provide country-level support tied to projects, while those donors whose funding allows flexibility across topics or across countries do not receive indications of the "impact" of their investment, creating negative incentives for donors as well (Farrar 2002).

Timing: Jumps, lags, and horizons. The policy process is not linear, or continuous. Policymakers at different levels can make decisions on the same issue at the same time, and interact with others inside and outside the government. Gaps, jumps, and lags in this process are present from the time an issue first arises in public discussion to when policymakers place

it on the policy agenda and then make, announce, and implement policy choices (Garrett and Islam 1998).

Because of the long lead and lag times between the completion of research and the accrual of any welfare impacts as a result of policy change, evaluations conducted soon after research is completed may not reveal any impacts, but only because it is premature to look for them. This raises another issue, termed the “Cassandra problem” by Smith and Pardey (1997): What is the value of “good research advice” not taken, or of delays in taking the advice? Perhaps advice continually not taken has value in that an analyst can then articulate the “opportunity costs” of a “wrong” decision (that is, estimate the cost of the alternative to not taking the advice). In such instances, decisionmakers presumably are not giving due weight to concerns with economic efficiency, the presumed objective of the “good research.” Alternatively, the so-called “good advice” might indeed arise from flawed research, with the policymakers then having “good reasons” not to accept it.

Time lags in the production, use, and ultimate impact of research information can make the value of anticipatory research on those issues likely to be important to policymaking in the future especially high. Research findings that are readily available when policymakers need them reduce time lags in “production” and “adoption.” Alternatively, research not available when policymakers need it will, obviously, have limited impact. Anticipatory research not done can have a high opportunity cost in terms of reductions in welfare if decisionmakers make a wrong policy choice as a result of not having appropriate information.

But it can be difficult to marshal resources for anticipatory research, to work on issues that do not seem “current.” This situation highlights the value of researchers who live and work in country (a “residential mode”), as they will likely be more aware of the policy process, the political environment, the key issues, and critical windows of opportunity for the generation, provision, and utilization of research.

Supply- versus demand-side approaches. Ideally impact assessment would start on the demand side from the point at which a major policy initiative occurs (the point of initial “demand” for the information) and then work backwards from the outcome towards the research itself, assessing what institutions and researchers have played a significant role in informing or influencing the policy change. Instead, most impact case studies have started at the level of the research project and tracked how the research outputs (the “supply side”) were used. The need for attribution has dictated this approach, but it may lead to loss of information about the importance of other projects, institutions, and sources of information.

Importance of surprise. Surprise—the addition of new information to a policymaker’s understanding—is the essence of quantitative Bayesian approaches to measuring impact. However, research has also shown the value of confirmatory research that reinforces current understanding and policies (Weiss 1980). So surprise is not necessarily a *sine qua non* of impact. Likewise, anticipatory research that alerts policymakers to possible future scenarios and surprises can reduce the time lag between the appearance of an issue and action.

Attribution. Many actors participate in the policymaking process, and they rely on various sources of information when making or influencing policy decisions (Feldman 1989; Weiss 1977). It is difficult then to attribute impact to any one source, as the multitude of actors, themselves with differential influence on the decision, rely on a multitude of sources.

Attribution becomes even more difficult when we recognize that even this one information source can represent a collaborative effort. In public research, partnerships and collaboration among non-profits, universities, and governments are key and becoming the norm. A single source of information is actually a compilation of sources, making attribution to any one organization or individual exceedingly difficult. Determining contributions to decisions in such an environment may not only be difficult but politically unwise and deceptive. Investors instead should focus on the impacts produced jointly and synergistically by the partnerships.

Choice of indicators. Choice of the indicators of impact also involves some judgment. First, what is really the impact of interest? At what level and what kind of impact should the evaluator look for? Should evaluators look at *what* the research organization produces, including the format and quality of information? Or *how* the organization provides information to policymakers and whether it enters into the policy process and influences policy choices? Or does research have impact only when policymakers choose and then effectively implement policies that affect final outcomes of interest, such as reductions in malnutrition or poverty?

Garrett and Islam (1998) argue for a traditional principle of monitoring and evaluation so that evaluators can hold an organization directly responsible only for those outcomes over which it has significant control. In this case, given the nature of the policy process and of how policymakers use research information, is it sensible to hold a research organization responsible for a government's particular policy choices and for the effectiveness of those choices in improving social welfare or economic growth? Garrett and Islam (1998) argue that it is not. Rather, evaluation should look more at the quality of the research outputs, the effectiveness of communicating those outputs and contributing to policy debates, and the *potential* (rather than necessarily actual) outcomes of the policy recommendations, or choices, based on research findings.

Ryan (1999a, 2002) maintains that this focus on quality of research output, processes, and potential outcomes is necessary but not sufficient for impact assessment. He argues that one must also look at post-decision impacts if an institution is going to be able to differentiate its product from others and sustain funding support. He employs an economic model to measure the economic consequences of actual rice trade policy changes in Vietnam stimulated by policy research. The value of the research is then assessed as the economic value of the time saved in the government making the welfare-enhancing policy change, partly as a consequence of the research.

Socioeconomic welfare is an obvious impact indicator of this nature, but it is not the only one, and it is not equivalent to the welfare of politicians. Distributional outcomes are another. Generally portrayal of distributional outcomes has proved more influential than showing the economic losses due to current policies (that is, quantifying efficiency gains

from policy change). Also, articulation of local impacts is often more influential in changing policies than global estimates.

Bibliometric indices that survey how often others cite the research offer another measure of higher-level impacts on overall scientific knowledge. The improvement of data quality as a result of policy research can also be a legitimate indicator, as is evidence of increasing demand for research by policymakers matched by additional investment in research and development. Calculating the economic value of the time saved in effecting policy changes is a valid measure of impact as well, as is qualitative information of the influences and impact of the research draw from retrospective narratives. Historical narrative is especially valuable when the assessment starts with a demand-side approach.

Indicators are difficult to identify when the research reinforces the status quo, rather than resulting in distinct policy changes. It is equally difficult to assess situations where the research results in *inappropriate* policies or “poisoned wells.” Bayesian approaches, for example, cannot handle such outcomes.

Sampling. A number of organizations use case studies to assess impact, posing several important methodological questions. Case studies must choose cases, but should this be random or purposive sampling? Each approach has pros and cons, and no clear consensus has emerged. Interviewing and elicitation techniques remain a concern when evaluating policy research, especially when the selection of interviewees depends to a significant extent on the researchers themselves. Of course, these concerns are valid for quantitative approaches as well.

Statistical sampling methodologies go a long way toward addressing such concerns in quantitative approaches, but qualitative researchers from disciplines such as political science, anthropology, and sociology have developed methods to deal with sampling problems as well. For example, to identify bias and triangulate results evaluators differentiate among audience types and utilize various techniques. Use of independent peers offers objectivity and lends credibility to the impact evaluation, although limited budgets may reduce the study to a selection of only a small sample of projects and programs, leading to “cherry picking.”

Ex ante and ex post assessments. Both *ex ante* and *ex post* assessments are important. As part of standard monitoring and evaluation, a logical framework can employ an *ex ante* assessment to gauge the success of policy research in achieving its objectives. Even though all projects in a portfolio may not undergo formal independent *ex post* assessment, there is still considerable value in researchers documenting outputs, outcomes/influences, and policy responses. This promotes internal learning and enhances institutional effectiveness. However, independent peer impact evaluation is still needed to ensure credibility and accountability. All assessments require databases of outputs, outcomes/influences, and policy responses to enable the evaluator to verify them, track their influence and measure their impact.

LESSONS FROM CASE STUDIES

Based on a review of five case studies commissioned by IFPRI to assess the impact of the institute’s research and related activities, we have drawn some lessons for both enhancing

IFPRI's future impact and in designing and conducting future impact studies. The five studies were as follows and are summarized by Garrett (1999):

- IFPRI and the abolition of the wheat flour ration shops in Pakistan (Islam and Garrett 1997);
- Rice policy changes in Vietnam and the contribution of policy research (Ryan 1999a);
- IFPRI's 2020 Vision Initiative for Food, Agriculture and the Environment (Paarlberg 1999);
- Food security and resource allocation impacts of IFPRI research in Bangladesh (Babu 2000); and
- Policy research and capacity building by IFPRI in Malawi (Ryan 1999b).

Nine factors emerged as important to the success of economic policy research, and the subsequent generation of meaningful impact:

High Quality, Independent Research. All case studies noted that decisionmakers looked to IFPRI to produce quality research free of any apparent political bias. Being a CGIAR center seemed to confer this attribute in the minds of partners and stakeholders. The availability of peer-reviewed methodologies such as the International Model for Policy Analysis and Agricultural Commodity Trade (IMPACT) for the 2020 Vision Project and the Vietnam Agricultural Spatial Equilibrium Model (VASEM) in the case of work with the Vietnamese Ministry of Agriculture lent credibility to the advice that emerged. The 2020 study noted a major source of impact was that, in spite of its advocacy role, IFPRI never sensationalized the hunger and poverty issues or compromised professional judgments. "These high professional standards maintained by the 2020 Vision Initiative are one reason it came to be trusted by both donors and developing-country policy leaders" (Paarlberg 1999).

Objectivity, independence, and peer-reviewed outputs seem prerequisites for the acceptability of policy advice, but these attributes take time to cultivate. In many cases, however, policymakers need information in short order. Time is of the essence if the research is to influence policy. Yet the need to present results quickly to have impact poses a risk to quality, and inappropriate advice can offset any gains from timeliness. In Vietnam, for example, researchers provided early results to policymakers as they continued to refine the model and have their work peer-reviewed for publication. Fortunately later results differed only in degree rather than kind and did not vitiate the earlier conclusions or policy advice. In Malawi, however, early results concluded that improved credit access by smallholders increased incomes and food security. Later research came to the opposite conclusion using the same databases. The policy conclusions for the two cases would obviously be quite different. Longer-term core funding along with adequate peer review prior to the promulgation of results and recommendations can alleviate errors—at the possible expense of timeliness and increased impact, of course.

IFPRI's role as an honest broker also enhanced its credibility. Although some contend that competitive tendering for projects with donors and banks, as was the case in Pakistan, Vietnam, and Bangladesh, can compromise independence, no evidence exists that stakeholders in those countries held that opinion. Commissioned research may actually improve the level of impact because stakeholders clearly want the information and plan to use it. In addition, independence was a primary reason that governments and donors

commissioned the research from IFPRI in the first place. Governments and donors then generally respected IFPRI's pursuit of the research in a professional manner, without compromising quality or integrity. The 2020 study by Paarlberg (1999) also acknowledged that IFPRI's position as a neutral institution between the "pro-World Bank" and "anti-World Bank" views allowed it to emerge as a respected voice.

Of course, quality research is not a sufficient condition to influence the policy process and generate impact. For example, although the food security and nutrition monitoring data and analysis in the Malawi study was regarded as among the best in Africa, its availability and use in policy analysis has not led to a significant improvement in food security and nutrition among the vulnerable groups in that country.

Timeliness, Responsiveness, and the Role of Communications and Advocacy.

While IFPRI cannot take credit for the policy changes *per se*, IFPRI research can give policymakers confidence that a change will have beneficial effects. Information then is useful in speeding up policy decisions, increasing cumulative benefits over the long term. In Pakistan, research on leakages in ration shops corroborated existing but limited research on the subject. IFPRI then provided specific and reputable data on which to formulate policies. Similarly the work on tobacco quotas in Malawi revalidated the decisions to relax them and allow smallholders to grow the crop.

Communication of key results prior to publication of project reports and refereed publications helped researchers gain time, and enhanced the usefulness and impact of the results. Through seminars, workshops, training programs, policy briefs, and working papers, researchers proffered timely data, information, and advice. IFPRI used this information to play both information and advocacy roles.

Involving the key ministries of government from the outset in design and feedback enhances timely response on the part of IFPRI and encourages timely use by ministries. In Bangladesh, researchers shared sensitive results prior to their public release with the concerned ministries. The final reports took account of the comments received but did not alter the results. This sharing built trust according to Babu (2000). It is interesting to reflect on what IFPRI might have done had there been a suggestion to suppress the results. Presumably, IFPRI would not have compromised if it had insisted on earlier public disclosure, but this does raise the issue of the possibility of unpalatable results and advice, which might affect the relationship between IFPRI and its collaborators and hinder impact. But if the advice is correct, then the clients and other interest groups still need to hear it.

IFPRI was also responsive to emergent needs of policymakers. Once models such as IMPACT and VASEM were calibrated and validated, researchers and analysts could use them to respond quickly to policymakers' questions, ensuring that they saw IFPRI as able to offer advice in real time on emergent issues.

Training staff in communications (presentation skills, interaction with the mass media, and public awareness) can have high payoffs. These skills allow staff to work comfortably to broaden the audience for research findings beyond the original clients or partners and hasten the policymaking process (with information as input), as all five studies

showed. For example, the SADC food security programs grew out of the Malawi project as a result of active networking and communication of results. However, the project may have overemphasized the written word at the expense of the spoken word, and on policy process benefits rather than impact.

To enhance impact, projects should have a clear communication strategy. For instance, IFPRI should review the target audiences and mailing lists to ensure that those groups important in eliciting consensus around policy changes are featured more prominently in the future, including those who may not share the IFPRI paradigm. As the 2020 study indicated, policy researchers (i.e., IFPRI's intellectual peers) have traditionally been the primary audience. If policy impact is to be a higher priority, then IFPRI should recognize that audiences would be different. Web-based products and translations of publications into more languages should also grow to broaden the audience.

Long-Term Collaboration and In-Country Presence. The studies also indicated that having experienced staff living and working in countries and regions over extended periods is advantageous. This helps to build mutual confidence and understanding. Resident researchers enabled IFPRI to identify windows of opportunity where the contemporary research could build on past research to constructively contribute to policy formulation and capacity building.

The Bangladesh study showed that a continuous presence allowed researchers to set and revise priorities through regular consultations with government officials. This increased the relevance and impact of the research. Government officials in Bangladesh brought IFPRI into planning for a follow-up to the rural rationing program, abolished partially in response to IFPRI research. The successful food-for-education program was the result. Similarly, IFPRI quickly responded to the need for work on procurement pricing and open tendering, helping to operationalize the policy change it had helped engineer to privatize and liberalize markets.

The Pakistan impact study cites IFPRI's nine-year association with the country along with outposted staff as increasing the likelihood that the information and research were used. That is, "[the research fellow's] presence on the ground ensured continuity of dialogue and flow of information, and was punctuated by the visits of larger IFPRI teams from Washington" (Islam and Garrett 1997). In contrast, the working paper series on food security and nutrition policy in Malawi's Bunda College stopped after the departure of the IFPRI staff.

In these examples, a residential presence allowed IFPRI to participate in planning and discussion sessions that might not otherwise have seemed to merit a separate visit from Washington. The advent of videoconferences may make maintaining such a presence easier and more feasible, even if researchers do not live in the country. Still, technology seems unlikely to replace the personalized knowledge and contacts in a country, which ease incorporation into these important initial discussions.

Of course, undue dependency of policymakers on IFPRI should not set in. However, for sustained impact, more than a few years of a residential presence in country appear necessary. Eicher (1999) contends that 25 to 50 years of sustained effort are needed in Africa

to strengthen the “agriculture knowledge triangle” involving research, extension, and agricultural higher education. He advocates long-term scientific technical assistance by posting scientists from industrial nations in universities, national agricultural research institutes, and ministries of science and technology. Timmer (1997) supports long-term country involvement with the same policymakers so that advisers are able to observe whether the policies they advocate in fact work. As Weber et al. (1988) point out, demand and supply constraints to local policy research are most effectively addressed when applied research, human capital formation, and policy extension are conceptually and operationally treated as joint products. Perhaps the time is ripe for one or two IFPRI regional programs in Sub-Saharan Africa to locate a critical mass of IFPRI scientists for the longer haul, along with libraries, databases, and training programs (see Ryan 1999b).

Another rationale for out posting IFPRI staff over extended periods is the acknowledged long lead and lag times between the generation of process benefits and the realization of socioeconomic impacts from resulting policy changes. This requires constant advocacy and responsiveness. It also allows a better understanding of the challenges involved in implementing policy. In the process, it can help in the articulation of the ultimate impacts of policy research. This is a neglected area, both in IFPRI’s portfolio and generally. There is a need to bridge policy and action as well as research and policy. As the Malawi study attests, despite almost 10 years of IFPRI involvement, four of them in a residential mode, and the quality data, research, capacity building, and publications that resulted, there has not been any improvement in the food security and well-being of the poor and vulnerable in that country.² Should not IFPRI stay the course to help ensure implementation and ultimate socioeconomic impacts? Should it do more “embracing and sitting” and less “hitting and running”?

Residential staff can orchestrate spillovers to other countries, regional institutions, and IFPRI projects by virtue of their presence and the contacts and reputations they develop. For example, in Malawi former students in the Masters program at Bunda College were involved in later IFPRI projects on market reforms and regional integration. The resident IFPRI staff member also encouraged the use of the project’s food and nutrition security information by the World Bank agricultural services project. As a quid pro quo he was able to convince the bank to include an agricultural policy training and research component. Such temporal spillovers are only possible with a residential presence.

Unfortunately, despite their influence on impact, long-term residencies of the type envisaged here are not easy to sustain using current funding levels and shorter-term project modalities. More long-term core funding is inescapably required, as this sort of presence is key.

Need for a Conducive Policy Environment for Receptiveness and Impact. A policy environment where the decisionmakers are eager for quality data, information, and advice and where there is a momentum for change is the most favorable for achieving both process benefits and real socioeconomic impact. This was clearly the case in Vietnam, Bangladesh, Malawi, and Pakistan.

² Of course, it is possible that, counterfactually, the situation may have been even worse today without the IFPRI program. However, there is no way of knowing this.

The currency of the topic, timeliness of the research, and sense of ownership by the collaborators and, importantly, the key policymaking audiences are critical ingredients for success. A topic that is demand-driven is imperative. A feature of the policy environments in all the case-study countries was a particular concern that any policy changes have an economic efficiency rationale and not come at the expense of the poor and their food security. Indeed IFPRI's ability to address this specific set of trade-off questions in a convincing way was instrumental in effecting significant policy changes.

In Pakistan, the focus on the impact on poor consumers of de-rationing helped diffuse criticisms that the closure of ration shops would lead to consumer unrest. The IFPRI study showed that corruption in the ration shops was rampant and few poor consumers in fact used them. In Vietnam, one of the most influential aspects of the IFPRI research was to satisfy policymakers that relaxing rice export controls would not harm household food security and the poor. The design of the food-for-education program in Bangladesh responded to a concern that the earlier decision to abolish rural ration shops might harm the rural poor if some new initiative did not replace it.

A major comparative advantage of IFPRI is an ability to examine poverty, distribution, and food security questions in a way that facilitates policy changes. Pointing out the economic efficiency gains of changes did not seem as instrumental in the policy decisions as were the data, analysis, information, and advice on the distributional and food security outcomes. In other words, it was IFPRI's influence on the political economy of the decisionmaking processes that led to impact.

This is consistent with the conclusion of Gardner (1997a) that estimates of deadweight losses from United States farm programs were not as influential as advocacy by economists to newspaper editorialists, government experts, and commodity grant representatives that commodity programs were costing taxpayers billions, but accomplishing little for them. The Pakistan study also found that the government was more concerned about the impact of the ration-shop subsidies on the budget than with the impact on GNP. Maredia, Byerlee, and Anderson (2001) point out from their review of best practices that much more attention needs to be given to the distributional consequences of research than has been the case until now. Rodrik (1996) contends that policy changes with larger redistributive consequences per dollar of efficiency gains will be more difficult to achieve. He calls this the political cost-benefit ratio. The more dollars that have to be reshuffled per dollar of efficiency gain, the less the chances of reform.

The Bangladesh and Vietnam impact studies estimated benefit-cost ratios of IFPRI's policy research and related activities in those countries. However, they could not translate these into meaningful measures of the impact of these efficiency gains on food security and poverty. These examples highlight the need for improved methods and higher priority for identifying and measuring the distributional impacts of cost-effective interventions targeted at the poor and food insecure.

Importance of Primary and Secondary Empirical Data and Simple Analysis. The country impact studies made the strategic importance of quality data and simple analysis evident. Results helped illuminate the policy debates, with household survey data perhaps

most significant in influencing policy decisions. In Malawi, sample household survey findings helped convince the government that even though the macro-arithmetic of national food production per capita showed that food security was not an issue, the majority of households did not have an adequate diet and almost one-half of children were severely malnourished. The availability of household sample survey data within a few weeks of its collection across the whole country was also critical in designing an effective drought relief response, thereby averting a potential national disaster. In Vietnam, presentation of preliminary results from household surveys on the extent and location of food insecurity was instrumental in alerting policymakers to the importance of increased rice exports and prices to the food security of smallholders, who were the majority of the poor. This sensitized them to later policy advice. In both Pakistan and Bangladesh, the information IFPRI assembled about the extent of leakages in the rationing programs was arguably the most powerful influence on policymakers.

Again, the importance of primary data on distributional issues by a credible international player with no stake in the outcome was key. It provided the ammunition for governments to respond to the various vested interests that may have opposed change.

The Trade-Offs Between More Immediate Impacts and Sustainable Ones.

Reliance on project funding and competitive contracting is not necessarily conducive to the long-term residencies frequently so important to achieving sustained impact. A long-term, continuous, and close involvement allows training and capacity-strengthening activities to be factored into the program in ways that both complement the short-term objectives and enhance the ability of partners and collaborators to sustain the momentum in the longer term. A lot can happen in the interval between the generation of process benefits and socioeconomic impacts that can reduce the chances of the latter occurring.

Experience in Malawi and Vietnam suggests that involving Ministries as collaborators in the research helps to reduce lags in achieving influence and impact from policy changes. However, staff of Ministries may have limited ability to refine and use the economic models and other analytical tools and so maintain the momentum of the research beyond the end of the project. Pressures of new issues and frequent staff changes are also not conducive to sustainability. Linking with universities and other research institutes can build capacity or allow governments to understand how to access research beyond the immediate project task.

IFPRI should ensure it has a strategy to ensure sustainability when it leaves a country, to avoid a vacuum that may vitiate previous and potential impact. IFPRI's 2020 Network in Eastern and Southern Africa is one such example of extending impact. This network now connects to existing ones on economics and policy under the auspices of the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA). While Malawi would have preferred IFPRI staff to continue to contribute directly to the Masters program at Bunda College, IFPRI made the conscious decision that, after several years, Malawians should assume the responsibilities.

The Choice of Partners and Collaborators. Collaborators should have an interest in and capability for carrying out the work, as well as acknowledged independence and responsibility. For example, in Bangladesh, a project on the optimum level of food stocks involved a complex economic model that the Ministry of Food did not have the capacity to

adopt. In Pakistan, IFPRI involved both the Ministry of Food and Agriculture and the Pakistan Institute of Development Economics in its program on ration shops. This had peers and policymakers involved jointly in the planning and conduct of the policy studies, which seem an optimal mix.

Staff in Malawi and Bangladesh still has limited capacity for food policy analysis, even after years of training and collaboration with IFPRI. This suggests that IFPRI needs to encourage ministries to rely more on independent think tanks like the Agricultural Policy Research Unit in Malawi and the Bangladesh Institute of Development Studies for data, research, and analysis, with a combination of core and project funding from the ministries. IFPRI could then work with both types of institutions in a synergistic, tripartite arrangement.

“Policy champions” at high levels of government are crucial to playing the necessary advocacy roles in the executive and legislative arms. In Pakistan, Sartaj Aziz, the adviser to the prime minister, played this role. In Vietnam, Cao Duc Phat, then director of the Department of Agricultural and Rural Development Policy in the Ministry of Agriculture and Rural Development was critical. In Bangladesh, the IFPRI project leader, Akhter Ahmed, a Bangladeshi, played the role of champion. Although on *a priori* grounds one may question the wisdom of having a national as leader of an international team because of the political pressures that might be brought to bear on him or her, it seems that this did not prevent the achievement of significant process benefits and impact.

Building the Consensus for Change Among Stakeholders. The international public good nature of IFPRI’s outputs implies both an opportunity and an obligation to proffer them widely. Free availability is paramount to all interest groups likely to be affected by policy changes. IFPRI did an excellent job in the countries studied. At the same time, IFPRI must ensure that partners and collaborators respect its freedom to publish and provide data and information, even when they may make the government uncomfortable. Such freedom of ideas and debate is necessary to create an environment conducive to building a consensus around key policy decisions.

In the case of the Pakistan, Vietnam, and Bangladesh projects, partners had no reluctance to publicize the information and recommendations largely because governments were already wishing to head in that particular policy direction. Indeed, in Bangladesh, a press leak occurred from some in-house seminars in November 1991, which were discussing the results of the research on the ineffectiveness of the rural rationing. When the Minister of Finance read the newspaper story he called the Secretary of Food for an explanation. He then also raised it in the Cabinet, which asked the Minister of Food to develop a proposal to abolish the rural rationing program. IFPRI shared its information on the savings to the government from its abolition. The Ministry of Food then used this information in subsequent Cabinet submissions, and ultimately abolished the scheme in May 1992.

The message here is that, while perhaps unintended, media publicity helped build a consensus and in the process saved valuable time. Without compromising integrity or skewing results, a research organization can utilize the media strategically. Certainly on some occasions, partners will prefer that the results of studies are kept in-house. But research

organizations must ensure that they have the freedom to publish in professional outlets and in the media.

In Vietnam, consensus building did not involve the media in the same manner. IFPRI engaged in an extensive series of seminars and workshops among disparate partners and stakeholders with a similar message about the benefits of liberalization of domestic and export markets for rice. In Vietnam, the policymaking environment is diffuse and consensus building is a prerequisite to effecting change. An international, market-oriented research institute with integrity, independence, and quality research was seen as a neutral agent for change.

The 2020 Vision Initiative had significant success in catalyzing consensus among international policy leaders, and moderate success among developing country policy leaders. Fora such as IFPRI Research Updates were useful for airing vastly different perspectives on topical policy issues. Paarlberg (1999) sees high value in bringing individuals and institutions with differing views together, not only through the written word but in settings where they can talk and listen to one another.

The Value of IFPRI's Cross-Country Experience. The cumulative experience of IFPRI in undertaking policy research and capacity strengthening in many countries serves to underpin its efforts in individual countries. Such experience is one of the main comparative advantages IFPRI has to offer. This experience and its research structure can increase the probability of success, save time, and reduce the likelihood of wrong policy advice.

The food-for-education program, for example, derived from IFPRI's extensive research on the design of targeted food and nutrition programs. Work by Kherallah and Govindan (1999) guides other countries on the appropriate sequencing of market reforms, using the Malawi experience. IFPRI also drew on 12 country studies of food subsidies to design a study of the same issue in Pakistan. Previous work in Egypt was especially relevant. IFPRI has also sometimes arranged study tours by senior policy advisers and analysts to help them understand the issues and to examine "best practice."

In summary, the case studies instituted by IFPRI in the past five years have proved to be effective in articulating impact, thus satisfying the accountability imperative, the primary rationale. Management has noted that donors have not been harping as much of late on the need for documented *ex post* evidence of impact, as was the case earlier. They seem content with the Impact Assessment Discussion Paper series. In addition, the case studies in this series have highlighted lessons that the institute is using in the *ex ante* planning and conduct of its future research and related activities. This was the second of the four rationales for conducting impact evaluation.

IFPRI'S CURRENT STRATEGY AND APPROACH

At IFPRI, the early imperative for impact evaluation in the mid-1990s was to enhance accountability to the institute's donors in order to justify the wisdom of their investments. The 1997 Symposium (Smith and Pardey 1997) concluded that case studies were the

appropriate way to articulate, measure, and document the impact of economic policy research, in the absence of an agreed methodology for doing this. The accountability imperative arose because of increasing competition for declining agricultural research and development funding from donors, and policy research had to compete with alternative investments. The hope was that by providing quantitative estimates of the economic benefits, especially to the poor, one would be able to demonstrate that policy research had comparable impacts to other research themes, as documented by Alston et al. (2000).

Ultimately, IFPRI did not pursue the more global quantitative approach that sought to establish rates of return on investments in economic policy research. Rather, IFPRI undertook a series of case studies, beginning in 1998, which examined the policy process and the use of research information by policymakers. IFPRI came to adopt a mixture of quantitative and qualitative approaches to assess socioeconomic impacts, primarily at the project level.

After reviewing the lessons learned from the initial case studies, the Board of Trustees in 2000 requested that management prepare an operational strategy to institutionalize impact evaluation at IFPRI. The management reviewed the draft strategy in 2001 and it was subsequently discussed in detail with all staff at the IFPRI Internal Program Reviews in both 2001 and 2002. A Working Group on Impact Evaluation (WGIE) was established in early 2001 to oversee the area as part of the strategy. An important responsibility of the WGIE was to instill a culture of impact evaluation within IFPRI. For this purpose, all four division directors and five IFPRI staff were members, along with three non-IFPRI members, one of who was Convener. In 2001, IFPRI's management initiated a number of pilot exercises involving *ex ante* impact evaluation on new projects as a component of the new strategy. IFPRI also began to go beyond the project-level to conduct evaluations of some of its thematic research programs. The first such study is Alwang and Puhazhendhi's (2002) examination of the impact of IFPRI's multi-year, multi-country research program on microfinance. The second is by Ryan (2003) on agricultural projection modeling at IFPRI.

The case studies provided *ex post* evaluations that remained at a certain remove from the daily operations of staff. IFPRI is now moving to incorporate some aspects of impact evaluation in all its research activities and to improve its ability to operate as a learning organization. In 2002–03, for example, all research staff was requested to narrate instances where their research outputs had influenced policy and had subsequent social or economic impacts. These were conducted in focus groups of four to six staff from the different research divisions in order to stimulate cross-fertilization and validation.

IFPRI's current approach to impact evaluation finds it useful to categorize the products from economic policy research and related activities as outputs, outcomes/influences, policy responses, and welfare impacts (Table 1). *Outputs* are activities or effort that can be expressed quantitatively or qualitatively. *Outcomes* or *influences* are measures of the use that clients or partners make of the outputs. They reflect the value placed on them as intermediate products, which in turn are inputs into the policymaking process. Outcomes and influences can be usefully separated into initial, intermediate, and longer-term. *Policy responses* imply a degree of attribution of the effects of the intermediate outputs and outcomes/influences on the formulation or reinforcement of policy. *Impacts* are measurable effects of the attributed policy responses on the well being of the ultimate beneficiaries of the

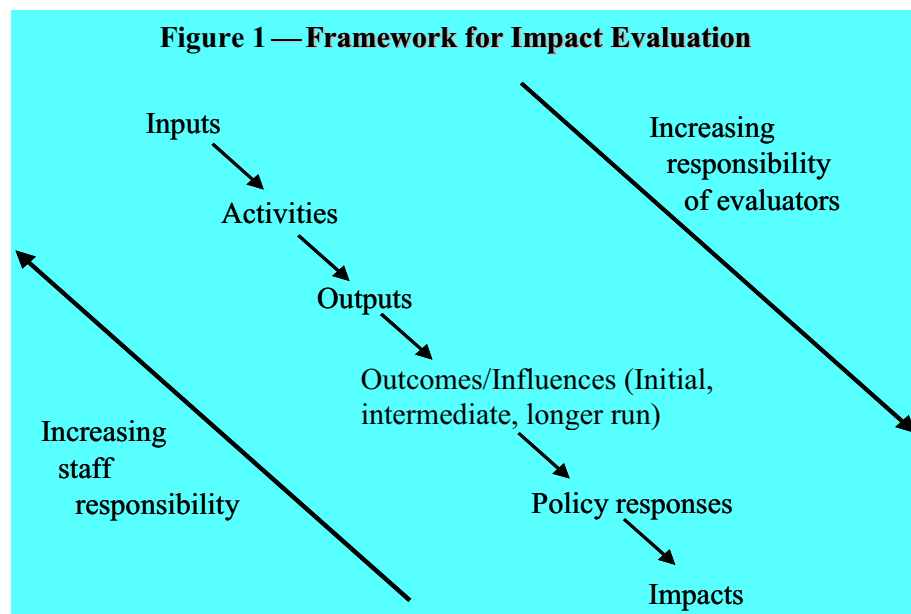
research, namely the poor, the food- and nutrition-insecure, and the environment. It could also include perceptions of peers and policymakers about such impacts.

Table 1. Some Indicators of the Products of Policy Research

Outputs	Outcomes/Influences	Policy Responses	Impacts
<p><i>Publications</i></p> <ul style="list-style-type: none"> • number and type • refereed/non-refereed 	<p><i>Publications</i></p> <ul style="list-style-type: none"> • citations, use in curricula, circulation numbers, sales, requests, web hits 	Changes in policies attributable to policy research	Reduced poverty
<p><i>Methodologies</i></p> <ul style="list-style-type: none"> • description • value-added 	<p><i>Methodologies</i></p> <ul style="list-style-type: none"> • use of new methodologies 	Reinforcement of existing policies	Improved food and nutrition security
<p><i>Training</i></p> <ul style="list-style-type: none"> • number of trainees • extent of training • duration of training • number and type of manuals 	<p><i>Training</i></p> <ul style="list-style-type: none"> • trainee promotions • number of others trained by IFPRI trainees 	Implementation of policy changes	Sustained livelihoods of the poor
		Changes in institutions	Enhanced natural environment
<p><i>Seminars/Symposia/Conferences</i></p> <ul style="list-style-type: none"> • number • type • number of participants 	<p><i>Seminars/Symposia/Conferences</i></p> <ul style="list-style-type: none"> • number of policymakers present and extent of influence on policy • invitations to IFPRI staff to present keynote and other papers at other meetings, number of organizations, and whether expenses were paid 		
<p><i>Press Releases</i></p> <ul style="list-style-type: none"> • number • type 	<p><i>Press Releases</i></p> <ul style="list-style-type: none"> • number of press releases published and in what fora; letters to editors spawned as a result 		
<p><i>Press Conferences</i></p> <ul style="list-style-type: none"> • number • type 	<p><i>Press Conferences</i></p> <ul style="list-style-type: none"> • number of press articles that resulted and in what fora 		
<p><i>Capacity Strengthening of Partner Institutions</i></p>	<p><i>Capacity Strengthening</i></p> <ul style="list-style-type: none"> • invitations to IFPRI staff and management to be on committees adjudicating policy changes in partner organizations and countries • Refereeing assignments of IFPRI staff, requests for additional research in response to earlier outputs • Degree of success in acquiring additional resources for policy research to partner institutions 		

These products are generally sequential. Evidence becomes more difficult to assemble as one moves from outputs to impacts. Generally responsibility of staff and management for documentation and evaluation decreases on the same continuum. The role of independent peer evaluators increases (Figure 1).³

For this framework to function, at a minimum staff must record output and outcome/influence indicators as a matter of course. This is now happening increasingly at IFPRI. These indicators will relate directly to milestones and achievements in work plans at the beginning of the year. Staff should also record policy responses, subject to subsequent verification by independent peer impact evaluators that can be captured effectively in narratives, as IFPRI is also now doing. This is not meant to be a top-down compliance approach, but instead a performance-management approach. Eventually, it could become a regular part of staff evaluation.



Investors in public research and development are no longer satisfied with activity-based progress reports. They expect outcome/influence and impact evaluation, that is, an objective assessment of the actual effects of the funded program on the target population (Easterling 2000). For research institutions to be able to deliver, this requires responsibility and accountability at the staff level. Suitable databases of indicators of outputs, outcomes/influences, and policy responses need to be developed and maintained so they become a sustainable part of the corporate memory that is not lost when individual staff leaves. Given the often-long period between the conduct of economic policy research and the generation of real impact, such databases are imperative.

Indicators at the staff level are then aggregated to the appropriate project-, program- or institute-levels. Benchmarks are important for all of these. These can be before-and-after

³ The graphic is not meant to imply the policy process is linear, but only to portray the responsibilities of staff and evaluators in assessing impact.

comparisons that document the gap between goals or milestones and actual achievements. A logical framework that ties outputs to processes and assumptions can provide a useful way of linking such *ex ante* with *ex post* impact assessments. This is now a feature in the CGIAR (Balzer and Nagel 2001). For a more comprehensive impact assessment, a comparison with best practices of others (i.e., with and without IFPRI) is desirable.

CONCLUSIONS

Progress has been made in the last five years in the conduct of various case studies of the impact of economic policy research and in drawing lessons for the future. Some progress has also been made in the development of methodologies for quantifying impact in economic terms. However, a number of issues remain. These include attribution, measurement, and the enhancement of impact.

Use of demand-side approaches seems preferable to supply-side ones. The former uses major policy events as the starting point and works retrospectively to establish the separate influences of the many research suppliers and other factors on policy responses. It may be easiest and most logical to measure joint impacts of various players rather than separating out the contributions of individual institutions. Impact assessment will also most likely use a mixture of both qualitative and quantitative methods. Retrospective narratives are an essential component of the former and indeed provide the basis for quantitative estimates and can help address the elusive issue of attribution. Most importantly, if impact evaluation itself is to be effective in enhancing the impact of research and researchers, the process must be institutionalized. Staff and management should take responsibility for recording outputs, outcomes/influences, and policy responses related to their research. Independent evaluators can verify these and endeavor to translate them into meaningful measures of their impact on economic welfare and assess what share might be attributed to policy research institutions and their partners. Researchers must see such a system as an integral part of learning and improving their own actions.

Researchers have a responsibility to ensure the dissemination of their findings to policymakers and the interested public. To the extent that the independence and credibility of the researcher and the institution are not compromised, a degree of advocacy is also appropriate. With the increased availability of information technology and the growing role of participatory democracy and good governance in developing countries, there is increased scope for credible policy research to be accessed by disparate groups, generate important public debate, and better inform the policy process. In this context, credible research on the distributional consequences of alternative policies will arguably have more influence and impact than will measures of the implications for economic efficiency.

We need to undertake more case studies in order to further refine approaches and methodologies for impact evaluation and learn lessons that can enhance future impact and help to define best practices. There is also scope for more multidisciplinary research into policy processes in order to better position policy research to have strategic influence. IFPRI's new institutional strategy and the new research program focusing specifically on nutrition policy processes in the Food Consumption and Nutrition Division (Haddad and Pelletier 2003) highlight this concern, as does, more broadly, the establishment of the new Development Strategy and Governance Division. But we should go beyond this into bridging

the gap between policymaking and implementation. In other words, bridging policy and action should complement bridging research and policy.

REFERENCES

- Adams, R. H., Jr. 1983. The role of research in policy development: The creation of the IMF cereal import facility. *World Development* 11 (7): 549–563.
- Alston, J. M., C. Chang-Kang, M. C. Marra, P. G. Pardey, and T. J. Wyatt. 2000. *A meta-analysis of rates of return to agricultural R&D. Ex pede herculem?* Research Report No. 113. Washington, DC: International Food Policy Research Institute.
- Alston, J. M., G. W. Norton, and P. G. Pardey. 1995. *Science under scarcity: Principles and practice for agricultural research evaluation and priority setting*. Ithaca, NY: Cornell University Press. (Reprinted in 1998, Wallingford, UK: CAB International.)
- Alwang, J., and V. Puhazhendhi. 2002. The impact of the International Food Policy Research Institute's research program on rural finance policies for food security for the poor. Impact Assessment Discussion Paper No. 16. Washington, DC: International Food Policy Research Institute.
- Babu, S. 2000. Impact of IFPRI's policy research on resource allocation and food security in Bangladesh. Impact Assessment Discussion Paper No. 13. Washington, DC: International Food Policy Research Institute.
- Balzer, G., and U. Nagel. 2001. Logframe based impact monitoring within the CGIAR system. Annex 4: Background papers in TAC Secretariat — The future of impact assessment in the CGIAR: Needs, constraints, and options. In *Proceedings of a Workshop Organized by the Standing Panel on Impact Assessment (SPIA) of the Technical Advisory Committee (TAC), 3–5 May 2000*, pp. 54–78. Rome: Food and Agriculture Organization of the United Nations.
- Burfisher, M. E., S. Robinson, and K. Thierfelder. 2001. The impact of NAFTA on the United States. *Journal of Economic Perspectives* 15 (1, Winter): 125–144.
- Campbell, H., and D. Squires. 1998. The role of research in fisheries management: Conserving dolphins in the Eastern Tropical Pacific and exploiting Southern Blue-fin Tuna in the Southern Ocean. In *Closing the loop: From research on natural resources to policy change*, Chapter 6, eds. S. R. Tabor and D. C. Faber, pp. 52–87. Policy Management Report No. 8. The Netherlands: European Centre for Development Policy Management and the International Service for National Agricultural Research.
- CGIAR (Consultative Group on International Agricultural Research). 2002. *Annual Report 2001*. Washington, DC: CGIAR Secretariat, World Bank.

- Easterling, D. 2000. Using outcome evaluation to guide grant making: Theory, reality, and possibilities. *Non-profit and Voluntary Sector Quarterly* 29 (3): 482–486.
- Eicher, C. K. 1999. Institutions and the African farmer. *Issues in Agriculture* 14. Washington, DC: Consultative Group on International Agricultural Research.
- Farrar, C. 2002. Personal communication to J. Ryan.
- Feldman, M. 1989. *Order without design: Information production and policymaking*. Stanford, CA: Stanford University Press.
- Gardner, B. L. 1997a. Returns to policy-related social science research in agriculture. Paper prepared for the IFPRI workshop on “The Benefits of Policy-oriented Social Science Research,” International Food Policy Research Institute, Washington, DC.
- Gardner, B. L. 1997b. Measuring the Benefits of Agricultural Economics Research: Discussion. *American Journal of Agricultural Economics* 79 (5): 1551–1553.
- Garrett, J. L. 1999. Research that matters: The impact of IFPRI’s policy research. Washington, DC: International Food Policy Research Institute.
- Garrett, J. L., and Y. Islam. 1998. Policy research and the policy process: Do the twain ever meet? *Gatekeepers Series* No. 74. London: International Institute for Environment and Development.
- Haddad, L., and D. Pelletier. 2003. The nutrition policy process: A proposal for a global and regional research program (GRP). Draft consultation document for discussion and comment, International Food Policy Research Institute, Washington, DC.
- Islam, Y., and J. L. Garrett. 1997. IFPRI and the abolition of the wheat flour ration shops in Pakistan: A case study on policymaking and the use and impact of research. Impact Assessment Discussion Paper No. 1. Washington, DC: International Food Policy Research Institute.
- Kherallah, M., and K. Govindan. 1999. The sequencing of agricultural market reforms in Malawi. *Journal of African Economies* 8 (2): 125–151.
- Maredia, M., D. Byerlee, and J. R. Anderson. 2001. Ex post evaluation of the economic impacts of agricultural research programs: A tour of good practice. Annex 3: Overview papers in TAC Secretariat — The future of impact assessment in the CGIAR: Needs, constraints, and options. In *Proceedings of a workshop organized by the Standing Panel on Impact Assessment (SPIA) of the Technical Advisory Committee (TAC), 3–5 May 2000*, pp. 3–43. Rome: Food and Agriculture Organization of the United Nations.

- Norton, G. W., and J. Alwang. 1997. Measuring the benefits of policy research. *American Journal of Agricultural Economics* 79 (5): 1534–1538.
- Norton, G. W., and D. E. Schimmelpfennig. 2001. Using Bayesian approaches to value policy research. Paper presented at the Ministry of Foreign Affairs, Netherlands-IFPRI Workshop on Assessing the Impacts of Policy-Oriented Social Science Research, The Hague, Netherlands, 12–13 November.
- Paarlberg, R. L. 1999. External impact assessment of IFPRI's 2020 Vision for Food, Agriculture, and the Environment initiative. Impact Assessment Discussion Paper No. 10. Washington, DC: International Food Policy Research Institute.
- Richardson, B. 2001. The politics and economics of wool marketing, 1950–2000. *Australian Journal of Agricultural and Resource Economics* 45 (1, March): 95–115.
- Rodrik, D. 1996. Understanding economic policy reform. *Journal of Economic Literature* 34 (1, March): 9–41.
- Ryan, J. G. 1999a. Assessing the impact of rice policy changes in Vietnam and the contribution of policy research. Impact Assessment Discussion Paper No. 8. Washington, DC: International Food Policy Research Institute.
- Ryan, J. G. 1999b. Assessing the impact of policy research and capacity building by IFPRI in Malawi. Impact Assessment Discussion Paper No. 11. Washington, DC: International Food Policy Research Institute.
- Ryan, J. G. 2001. Synthesis report of workshop on assessing the impact of policy-oriented social science research in Scheveningen, The Netherlands, November 12-13, 2001. Impact Assessment Discussion Paper No. 15. Washington, DC: International Food Policy Research Institute.
- Ryan, J. G. 2002. Assessing the impact of food policy research: Rice trade policies in Viet Nam. *Food Policy* 27 (1): 1–29.
- Ryan, J. G. 2003. Evaluating the impact of agricultural projection modeling using the “IMPACT” framework. Impact Assessment Discussion Paper No. 17. Washington, DC: International Food Policy Research Institute.
- Smith, V. H., and P. G. Pardey. 1997. Sizing up social science research. *American Journal of Agricultural Economics* 79 (5): 1530–1533.
- TAC Secretariat. 2000. *The future of impact assessment in the CGIAR: Needs, constraints, and options*. Proceedings of a Workshop Organized by the Standing Panel on Impact Assessment (SPIA) of the Technical Advisory Committee (TAC), 3–5 May 2000. Rome: Food and Agriculture Organization of the United Nations.

- Timmer, C. P. 1997. Valuing social science research and policy analysis. *American Journal of Agricultural Economics* 79 (5): 1545–1550.
- Weber, M., J. Staatz, J. Holtzman, E. Crawford, and R. Bernsten. 1988. Informing food security decisions in Africa: Empirical analysis and policy dialogue. *American Journal of Agricultural Economics* 70 (5): 1044–1052.
- Weiss, C. H. 1977. Research for policy's sake: the enlightenment function of social research. *Policy Analysis* 3: 239–271.
- Weiss, C. H., with M. J. Bucavalas. 1980. *Social science research and decisionmaking*. New York: Columbia University Press.
- Zilberman, D., and A. Heiman. 1997. The value of economic research. *American Journal of Agricultural Economics* 79 (5): 1539–1544.

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IMPACT ASSESSMENT DISCUSSION PAPERS

20. **The Impact of Economic Policy Research: Lessons on Attribution and Evaluation from IFPRI**, *by James G. Ryan and James L. Garrett (October 2003)*
19. **Impacts of IFPRI/ICARDA Policy and Property Rights Research on the Mashreq and Maghreb Project**, *by John H. Sanders and Hassan Serghini (October 2003)*
18. **Institutional Learning and Change in the CGIAR: Summary Record of the Workshop Held at IFPRI, Washington, DC, February 4-6, 2003**, *by Ronald Mackay and Douglas Horton (October 2003)*
17. **Evaluating the Impact of Agricultural Projection Modeling Using the IMPACT Framework**, *by James G. Ryan (February 2003)*
16. **The Impact of the International Food Policy Research Institute's Research Program on Rural Finance Policies for Food Security for the Poor**, *by Jeffrey Alwang and V. Puhazhendhi (December 2002)*
15. **Synthesis Report of Workshop on Assessing the Impact of Policy-oriented Social Science Research in Scheveningen, The Netherlands November 12-13, 2001**, *by James G. Ryan (March 2002)*
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