Taking Stock: Impacts of 40 Years of Policy Research at IFPRI

Peter Hazell and Roger Slade



INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE

About IFPRI

The International Food Policy Research Institute (IFPRI), established in 1975, provides research-based policy solutions to sustainably reduce poverty and end hunger and malnutrition. The Institute conducts research, communicates results, optimizes partnerships, and builds capacity to ensure sustainable food production, promote healthy food systems, improve markets and trade, transform agriculture, build resilience, and strengthen institutions and governance. Gender is considered in all of the Institute's work. IFPRI collaborates with partners around the world, including development implementers, public institutions, the private sector, and farmers' organizations. IFPRI is a member of the CGIAR Consortium.

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The Independent Impact Assessment Reports are the product of externally conducted impact assessment studies of IFPRI's research. These studies are organized and overseen by an external impact assessment coordinator appointed by IFPRI who arranges for external experts to conduct the studies and who oversees a peer review of the draft reports by at least one internal and one external reviewer. Any opinions expressed are those of the author(s) and do not necessarily represent the opinions of IFPRI or PIM.

Series Name Change Announcement

The Impact Assessment Discussion Paper (IADP) series has been renamed "Independent Impact Assessment Report" beginning with report #36, and the numbering for this series will continue from the IADP series.

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The views expressed here are those of the authors and do not necessarily reflect the policies or opinions of IFPRI.

NOTE: The brief of this publication, <u>The Bang for Its Buck: Impacts of 40 Years of</u> <u>Policy Research at IFPRI</u>, is available at IFPRI's website.

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LIST OF ACRONYMS

ADB	Asian Development Bank
ANH	agriculture, nutrition, and health
ARD	agricultural research and development
ASTI	Agricultural Science and Technology Indicators
CAADP	Comprehensive African Agriculture Development Programme
CCTs	conditional cash transfers
CGE	computable general equilibrium
CRPs	CGIAR Research Programs
CRP4	CGIAR Research Program on Agriculture for Nutrition and Health
CSSPs	country strategy and support programs
DFID	Department for International Development
EPMRs	external program and management reviews
FAO	Food and Agriculture Organization of the UN
FFE	food-for-education program
G8+5	Group Eight + Five
GATT	General Agreement on Tariffs and Trade
GDP	gross domestic product
GIS	geographic information systems
GRPs	global and regional programs
HIV/AIDS	Human immunodeficiency virus infection and acquired immune deficiency syndrome
IA	impact assessment
ICARDA	International Center for Agricultural Research in the Dry Areas
IFPRI	International Food Policy Research Institute
IMPACT	International Model for Policy Analysis of Agricultural Commodities and Trade
IPGs	international public goods
IRR	internal rates of return
ISI	Institute for Scientific Information
ISNAR	International Service for National Agricultural Research
M&E	monitoring and evaluation
MDG	Millennium Development Goal
MPs	multicountry programs
NAPs	National Advisory Panels
NARS	national agricultural research system
NCCT	non-conditional cash transfer
NEPAD	New Partnership for Africa's Development
NGOs	Nongovernmental organizations
PCs	personal computers

PL480	Public Law 480
POR	policy-oriented research
PORIA	policy-oriented research impact assessment
PROGRESA	Programa de Educación, Salud, y Alimentación
PSNP	Productive Safety Net Program
R&D	research and development
RENEWAL	Regional Network on AIDS, Livelihoods, and Food Security
RePEc	Research Papers in Economics
ReSAKSS	Regional Strategic Analysis and Knowledge Support System
RR	research report
RRP	rural rationing program
SAKSS	Strategic Analysis and Knowledge Support System
SAMs	Social Accounting Matrices
UK	United Kingdom
UN	United Nations
US	United States
USAID	U.S. Agency for International Development
VASEM	Viet Nam agricultural spatial equilibrium model
VAT	value-added tax
WTO	World Trade Organization

ABSTRACT

Marking IFPRI's 40th year, this paper draws on external sources of evidence to review the Institute's policy influence and impact to date. The external evidence includes citations data, external program and management reviews commissioned by CGIAR, and a series of independently conducted impact assessment studies of many of IFPRI's research programs and projects between 1995 and 2015. The paper also reviews recommendations as to how IFPRI might improve its impact.

By the end of 2014, IFPRI had published 1,515 papers in journals tracked by the Institute for Scientific Information and had received 21,249 citations in the same journals. IFPRI's average of 14 citations per paper and its h-index of 61 are comparable to the World Bank, which had an average citation count of 13 per paper and an h-index of 83 over a similar period. Research Papers in Economics (RePEc) recently ranked IFPRI second among the top research institutions working in the field of agricultural economics. The external program and management reviews argue that it is *plausible* to conclude that IFPRI's influence has had significant and positive global impact, but that quantification of that impact has remained elusive.

Using the evidence available in the independent impact studies, this paper argues that it can fairly be concluded that IFPRI has had a tangible and substantial impact, and has very likely helped to benefit a large number of the world's poor, many among the "bottom billion." Although quantifying these benefits remains a daunting challenge in most contexts, a few studies at the country level have done so and together provide a surprisingly large estimate of IFPRI's impact. Without inflating these estimates to 2014 prices, and subject to the various rather strong assumptions underlying the quantitative analyses, the total benefit could exceed US\$1 billion. This is enough to cover about 75 percent of IFPRI's total spending of US\$1.403 billion in 2014 prices between 1976 and 2014. The full benefits are likely to be much larger as these few assessments cover only a fraction of IFPRI's total research portfolio. Moreover, they do not quantify the benefits that may have arisen from cross-country spillovers and regional and global public goods.

Most of the impact assessment studies contain recommendations to help IFPRI improve its impact in the future. These recommendations reflect the opinions of the external evaluators, formed in the context of the research project or program they evaluated, but there is a high degree of concurrence among them. The recommendations include finding ways to bridge the research-topolicy gap, such as giving more attention to advocacy and communications, introducing more noneconomic perspectives in research, developing more explicit ex-ante strategies in the form of theories of change for influencing policies, and being more strategic in selecting national partners who can help with outreach and policy influence as well as research. Other suggestions include being more systematic in capacity building and in setting research priorities within countries. However, one key remaining challenge stands out—the lack of relevant evidence. IFPRI has simply not done an adequate job of collecting evidence about its influence and impact. To correct this problem, IFPRI needs to routinely establish monitoring and evaluation systems in its research projects in order to build the foundations for later, more rigorous and quantified analyses of its impact.

1. INTRODUCTION

As the International Food Policy Research Institute (IFPRI) celebrates its 40th anniversary, it is an appropriate time for the institute and its key stakeholders to take stock of what is known about its policy influence and impact over these years. Has IFPRI been a worthwhile undertaking? What does available evidence tell us about IFPRI's impact on food and other rural policies? How might it achieve more policy influence and impact in the future? This paper draws on external sources of evidence to address these questions, including citations data, external program and management reviews commissioned by CGIAR, and a series of independently conducted impact assessment studies of many of IFPRI's research programs and projects. While much of this body of evidence lacks scientific rigor, and hence it must be viewed with some caution, it does reflect the views of external experts who were free to make their own judgments based on careful study of the available evidence.

This paper is structured as follows. The next section provides an overview IFPRI's work since 1976: its main types of research, outreach, and capacity-building activities; its research priorities; and levels of investment. Section 3 assesses how successful IFPRI has been as an institution in achieving policy influence and impact. Section 4 then examines the impact evidence for major lines of IFPRI research since 1995—the year when a series of independently conducted impact assessment studies was launched. The results are presented within a framework that differentiates among impacts at country, multicountry/regional, and global levels. Many of IFPRI's impact assessment studies contain recommendations for IFPRI's future work. These recommendations are reviewed in Section 5, with discussion of how IFPRI has already responded. Section 6 presents this report's conclusions.

2. IFPRI'S RESEARCH PROGRAMS AND INVESTMENTS

Types of Activity

IFPRI's stated mission is to provide research-based policy solutions that sustainably reduce poverty and end hunger and malnutrition. To fulfill this mission, IFPRI undertakes three major types of activity: policy research, communications and outreach, and capacity building. Some of IFPRI's policy research involves developing better tools, methods, and theories for food policy analysis as well as modeling international issues such as the global balance between food supplies and demand and adaptation to climate change. Most of this work is undertaken at IFPRI's headquarters in Washington, DC. However, the vast majority of IFPRI's policy research involves the collection and analysis of primary datasets, such as household surveys, census data, and spatially referenced GIS data. This work is typically undertaken in close collaboration with national partners in specific countries. Publications are the primary output from IFPRI's research, and a premium is placed on papers published in peer-reviewed outlets that help build and maintain IFPRI's international reputation for high-quality, evidence-based research.

IFPRI also seeks to deliver its research findings to policymakers at country, regional, and international levels through a range of communications and outreach activities. Researchers working on specific studies organize country workshops and seminars, interact with decisionmakers, and prepare briefs and other nontechnical papers that appeal to a wider audience than peer-reviewed research papers. Many of these activities are undertaken in collaboration with national and regional partners and involve IFPRI's outposted staff. Headquarters staff also organize regional and international conferences on important issues and run a very proactive communications program that covers all aspects of IFPRI's research output.

The third type of activity is capacity building, which aims to strengthen the capacity of developing countries to undertake, communicate, and use their own evidence-based policy research. The primary focus is on strengthening the skills of individual researchers through collaborative research (hands-on training), formal courses, thesis supervision, support to university degree programs, visiting fellows, and supervision of postdoctoral fellows. IFPRI sometimes also engages systematically in strengthening partner organizations, by training staff and building institutional capacities for undertaking field surveys, data analysis, economic modeling, and employing geographic information systems (GIS).

These three types of activity (research, communications and outreach, and capacity building) are seen as the three legs of a stool that together can help bring about sustainable improvements in agriculture and food system policies. It follows that they are often undertaken not as stand-alone activities, but as integrated parts of research projects and programs. Any evaluation of IFPRI's impact must therefore address the role and contribution of all of these activities. Doing so tends toward a broader definition of policy-oriented research (POR) than that commonly found in the literature.¹

¹ For example, Raitzer and Ryan (2008) define policy-oriented research (POR) as research intended to result in new or improved policies, regulations, and institutions (and their management) that enhance economic, social, and environmental welfare, a definition that tends to ignore the key roles of communications and capacity building.

Research Themes

When IFPRI was first established in 1975 with a small Washington-based staff, the research program was structured around four clusters of global issues: world food trends, agricultural production policies, food subsidies, and agricultural trade policies.² Some of this early work involved research in a few individual countries, especially India, but IFPRI's primary emphasis was on generating new knowledge about regional and global policy problems that would be of value to many if not all developing countries. These knowledge products are often called international public goods or IPGs. There was little systematic attempt to influence the policies of individual countries. As IFPRI's research expanded into a wider range of issues, the institute became more engaged in countryspecific studies. A few of these were one-off studies, but most were undertaken within an overarching framework that sought to generalize to multiple countries from a small sample of country cases in order to create IPGs. For example, IFPRI's early work on food subsidies was constructed around a set of carefully chosen country cases, leading to results and recommendations that could be extrapolated to a much wider set of countries using similar food subsidy policies. Generalizing in this way eventually provided the conceptual underpinning, in the early 1990s, for structuring IFPRI's entire research program around a set of Multicountry Programs (MPs), each of which addressed a well-defined policy issue of regional or global importance (Table 1). The principle of the MP approach has been maintained ever since, although the issues addressed and the names of the programs have inevitably evolved. In the early 2000s, many MPs became global and regional programs (GRPs). Table 2 shows the research programs that existed in 2014, clustered by broad thematic issues defined in IFPRI's latest institutional strategy.³

Although IFPRI has maintained the basic principles of the MP approach, recent years have also seen a significant expansion of country specific work undertaken within the context of new types of country programs. There has also been an accompanying decentralization of IFPRI's staff to regional offices and country project offices. This development has introduced much more demandled research at the country level, greater involvement of local policymakers and researchers in setting research priorities, and greater opportunities for IFPRI staff to be more directly involved in the processes of policy formulation and implementation. The majority of country programs are country strategy and support programs (CSSPs), of which there are nine at present (see bottom of Table 2). The CSSPs have introduced a new, country-specific element to IFPRI's research program, but it is not yet clear whether they will also contribute to the development of international public goods. IPGs might arise, for example, if comparative work on country experiences with the design and implementation of agricultural sector strategies were undertaken across CSSPs, but so far IFPRI does not seem to have moved in that direction.

² IFPRI was organized in the United States as a District of Columbia nonprofit, non-stock corporation on March 5, 1975, and its first research bulletin was produced in February 1976.

³See http://www.ifpri.org/publication/ifpri-strategy-2013-2018.

Table 1: IF	PRI's multicountry programs in 1996
MP1	Agricultural input market reforms
MP2	Agricultural output market reforms
MP4	Agricultural research, extension and education policy
MP5	Rural finance policies for food security and the poor
MP7	Marketing, institutional, and infrastructural policies for agricultural diversification and export promotion
MP8	Arresting deforestation and resource degradation in the forest margins of the humid tropics
MP9	Policies for sustainable development of fragile lands
MP10	Water resource allocation: Productivity and environmental impacts
MP11	Property rights and collective action in natural resources management
MP12	Macroeconomic policy reforms, agricultural growth, and rural development
MP13	Regional integration, agricultural trade, and food security in developing countries
MP14	Implications of urbanization for agriculture, food, and nutrition
MP17	Strengthening food policy through intrahousehold analysis
MP18	Safety nets for food security
MP19	Agricultural strategies for micronutrients

Table 2: IFPRI's research themes and programs as of February 2014

Transforming Ag	griculture
-----------------	------------

Country Development Strategy

Pro-Poor Public Investment

Rural-Urban Linkages

Facilitating Evidence and Outcome Based Policy Planning and Implementation in

<u>Africa</u>

Strengthening Institutions and Governance

<u>CAPRi</u>

Gender and Assets

Governance

Ensuring Sustainable Food Production

Land Resource Management for Poverty Reduction

Water Resource Allocation

Program for Biosafety Systems

Genetic Resource Policies for the Poor

Global Food and Natural Resources

Agricultural Science, Technology, and Innovation Policy

Agricultural Science and Technology Indicators (ASTI)

Building Resilience

Rebuilding after Emergencies and Crises Social Protection, Livelihoods and Asset Building Climate Change

Promoting	Healthy Food Systems
U	Food and Water Safety
Improving	Markets and Trade
	Globalization and Markets
	Participation in High-Value Agricultural Markets
Policy Com	munications
	2020 Vision
	Policy Communications
Capacity St	rengthening
	Learning and Capacity Strengthening
Country ar	nd Regional Programs
Africa	
	<u>Ethiopia Strategy Support Program</u>
	Ghana Strategy Support Program
	Nigeria Strategy Support Program
	Uganda Strategy Support Program
	Malawi Strategy Support Program
	Mozambique Strategy Support Program
Asia	
	China Strategy Support Program
	Bangladesh Policy Research and Strategy Support Program
	Pakistan Strategy Support Program

Levels of Investment

IFPRI's first full-year budget in 1976 was US\$731,000 (\$3 million in 2014 prices). As Figure 1 shows, apart from a modest dip in the early 1990s, IFPRI's total expenditure grew steadily until 2004 when it reached the \$40 million mark, and then accelerated to \$166.9 million in 2014. In total, IFPRI spent \$1.139 billion over the period 1976–2014 (\$1.403 billion in 2014 prices). To put this in perspective, IFPRI's total real expenditure since its establishment has been slightly more than half of the budget of the Food and Agriculture Organization of the UN (FAO) for its 2014/15 financial year (\$2.4 billion). Considering IFPRI's primary target group, IFPRI's total real expenditure is also equivalent to about one US cent over 40 years for each extremely poor person (living on less than \$1.50 per day) in the developing world.

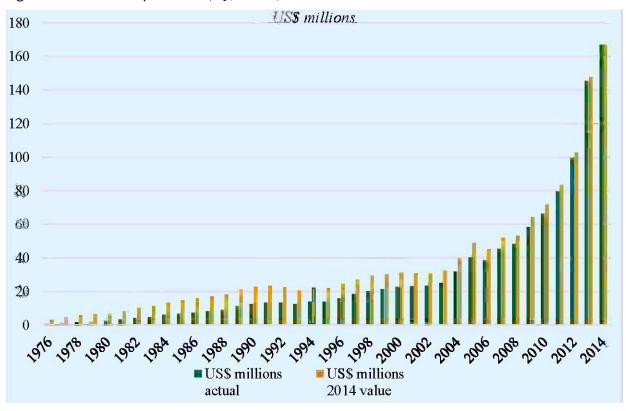


Figure 1: IFPRI total expenditures, 1976–2014

3. IFPRI'S SUCCESS AS A RESEARCH INSTITUTION

How successful has IFPRI been in achieving policy influence and impact? This section considers this question from the aggregate perspective of the institute. The following section examines the evidence from the perspective of selected research programs and projects.

There are three major sources of external evidence for evaluating IFPRI's influence and impact as an institution. These are its published output, citations, and ranking; IFPRI's ranking as a "go to" think tank; and a series of external program and management reviews (EPMRs) commissioned by CGIAR. EPMRs cannot be considered scientifically rigorous (that is, they are not peer-reviewed for scholarly journals), so their findings must be used with caution.

Publications, Citations, and Think Tank Rankings

Counts of research publications and their citation by other researchers are standard measures of the performance and peer influence of a research organization. The most widely recognized measures that have been consistently collected over the entire period of IFPRI's existence are the number of papers published in leading journals tracked by the Institute for Scientific Information (ISI) and the number of citations received in those same journals. The relevant data for IFPRI are given in Table 3. In total, IFPRI had published 1,515 papers⁴ in ISI-tracked journals by the end of 2014, and had received 21,249 citations in the same journals. This gives an average of 14 citations per paper, ranging from 176 to zero, with 19 articles cited more than 100 times, and 61 articles cited more than 61 times (an h-index of 61).⁵

These statistics are slightly lower than those of the World Bank, which had an average citation count of 13 per paper published in ISI-tracked journals from 1982 to 2010 and an h-index of 83 (Ravallion and Wagstaff 2010). IFPRI's performance is also comparable to some of the top universities in the UK and US that undertake research on development issues, though some of the best easily outrank IFPRI (University of Chicago, Harvard, Massachusetts Institute of Technology, Princeton, and Stanford) with average citation counts in excess of 25 and h-indexes over 100 (Ravallion and Wagstaff 2010). In making these comparisons it should be noted that the development research undertaken by the World Bank and top universities covers a much broader range of issues than food policy, and is more likely to be published in mainstream journals with larger readerships and citation rankings than the specialized agricultural economics journals where IFPRI research is primarily published.

The ISI counts are limited to articles published in leading journals. However, IFPRI's mandate requires it to reach out to a broader audience, including policymakers, so in addition to publications in top journals, IFPRI producers a wide range of other published outputs. One measure of IFPRI's wider range of output is provided by the Research Papers in Economics (RePEc) database. RePEc

⁴ Only full papers are counted here.

⁵ These findings echo the findings of an extensive bibliometric analysis of IFPRI's output undertaken by Pardey and Christian (2002). They also point out that citations are not measures of impact, noting that in its early years much of IFPRI's output found its audience in advanced economies. They attributed this outcome to the lack of policy research capacity in developing countries and made an early plea for IFPRI to redress this weakness.

uses publication counts, citations, and download statistics to rank institutions. In 2015, IFPRI was ranked as second among the top research institutions working in the field of agricultural economics, sixth among research institutions working in the field of development, and second among research institutions working on Africa.⁶

-	-		•			
Year	Number of	Cumulative number	Number of IFPRI	Cumulative number		
	IFPRI articles	of IFPRI articles in	citations in ISI-	of IFPRI citations in		
	published in ISI-	ISI-tracked journals	tracked journals ISI-tracked journa			
	tracked journals					
1980	2	2	0 0			
1981	3	5	1	1		
1982	4	9	5 6			
1983	4	13	5	11		
1984	8	21	7	18		
1985	10	31	17	35		
1986	11	42	9	44		
1987	9	51	25	69		
1988	29	80	29	94		
1989	7	87	34	128		
1990	8	95	62	190		
1991	16	111	53	243		
1992	16	137	52	295		
1993	15	152	82 377			
1994	37	189	79	456		
1995	25	214	93	549		
1996	20	234	130	679		
1997	28	262	149	828		
1998	35	297	189	1,017		
1999	39	336	261 1,278			
2000	35	371	261 1,539			
2001	36	407	324 1,863			
2002	37	444	327	2,190		
2003	51	495	379 2,569			
2004	47	542	459 3,028			
2005	54	596	522 3,550			
2006	49	645	664 4,214			
2007	73	718	1,025 5,239			
2008	77	795	1,180 6,419			
2009	76	871				
2010	81	952 1,830		9,842		
2011	126	1,078			2,212 12,054	
2012	132	1,210	2,526	14,580		
2013	142	1,352	3,116	17,696		
2014	163	1,515	3,553	21,249		

Table 3: Number of IFPRI publications and citations by year in ISI-tracked journals

⁶ <u>https://ideas.repec.org</u> accessed October 21, 2015.

Yet another measure of IFPRI's standing is its ranking in the Global Go To Think Tank Index. This index, which ranks the top 150 global think tanks, is compiled by the Think Tanks and Civil Societies Program at the University of Pennsylvania "with assistance from over 1,500 peer institutions and experts from the print and electronic media, academia, public and private donor institutions, and governments around the world."⁷ The index has some of the characteristics of an opinion poll, and can be similarly volatile. But for what it is worth, IFPRI was ranked sixteenth amongst the world's international development Think Tanks in 2014, down from eighth in 2013 (for reasons that are not explained).

Another indicator of IFPRI's global influence is the award of the 2001 World Food Prize to Per Pinstrup-Andersen, then IFPRI's director general. This award recognized that "[IFPRI's] 2020 Vision Initiative alerted world leaders to potential food security crises in the 21st Century, thus: helping change the priorities of governments; halting the decline in donor support to agricultural research and development; and leading to the instigation of projects which have improved the lives of the world's poorest citizens and reduced global poverty figures."⁸

In sum, IFPRI has established itself as a leading research organization in agriculture and food policy, producing significant numbers of high-quality publications that are widely recognized and used by policy researchers, journalists, and other members of the media. But does this status also imply that it has influenced the decisionmakers who make food policies? The best institute-wide evidence on this comes from CGIAR's external program and management reviews of IFPRI.

External Program and Management Reviews

EPMRs for all CGIAR centers were, until recently, routinely commissioned by CGIAR's Science Council (formerly the Technical Advisory Committee). Four EPMRs have been conducted of IFPRI to date—in 1985, 1990, 1998, and 2006. The reviews were undertaken by teams of external experts who had access to IFPRI's staff and files, undertook country visits to assess some of IFPRI's projects, and met with a wide range of key policymakers, donors, and other IFPRI stakeholders. While the primary purpose of the EPMRs was to evaluate the overall performance of the institute, they also shed useful light on IFPRI's influence and probable impact and on changes in the Science Council's expectations about what IFPRI should be striving to achieve as well as acceptable standards for assessing IFPRI's impact.

The first EPMR was conducted in 1985 (FAO 1985), and observed that

IFPRI's impact on national systems will always be difficult to assess, partly because of the multi-stranded and multi-layered composition of the food policy analyst/maker group in each country, and partly because of the genuinely collaborative nature of the Institute's research. When we speak of IFPRI's impact, we mean the joint impact of IFPRI and its collaborators. The role of IFPRI's research is to elucidate, not to recommend a specific policy or even a best course of action. Thus the ultimate impact of IFPRI's work rests on the judgment of the policy makers and their advisors.

⁷ See <u>http://gotothinktank.com/the-2013-global-go-to-think-tank-index-ggttti/</u>.

⁸ <u>See http://www.icda.org/news/food.htm.</u>

Nevertheless, strong implications for policy change often emerge clearly from policy analysis (FAO 1985, 57).

Despite this reticence, the same EPMR concluded that

In studies like those on food subsidies in Egypt and other countries, there can be no question that IFPRI's research has had a direct and substantial monetary impact. Egypt spends two billion dollars on food subsidies annually and the request by that country's Minister of Food Supply for certain types of analyses could well save Egypt hundreds of millions of dollars without compromising the food security of the poorer sectors in the country. In other cases, the impact has been less direct, and has required follow-up action of one kind or another. IFPRI's reports on the effects of commercial policy and exchange rates on both Colombian (RR24) and Argentinian (RR36) agriculture were quickly cast by national initiative into the-arena of public policy debate without the need for follow-up activity. Other IFPRI reports, such as the two on agricultural production instability in India (RR25, RR30), generated considerable public debate leading to wider recognition of the importance and nature of the problem (FAO 1985, 57).⁹

The second EPMR was conducted in 1990 (FAO 1990). Although this ERMP was primarily concerned with the management transition at IFPRI, it noted approvingly IFPRI's significant impact on policy through its provision of information that contributed to the elimination of price distortions in a large number of countries, allowed early identification of food deficits in critical areas, brought new dimensions to the General Agreement on Tariffs and Trade (GATT) negotiations, and influenced donor support for investment in infrastructure. The evaluation attributed this success to

- (a) IFPRI's neutrality and objectivity in addressing policy reforms that eventually have profound income redistribution effects;
- (b) the ability to sustain a research effort over several years on critical issues, achieve economies of scale, and engage in international comparisons;
- (c) sufficient budgetary and institutional stability to attract and maintain a critical mass of top-quality expert staff and thus bring to bear frontier analytical tools, establish stable cooperative agreements with developing country institutions, and ... link[s] with experts in the biological sciences (FAO 1990, 90–91).

Both the 1985 and 1990 EPMRs also referred briefly to the seminars and conferences organized by IFPRI, noting that these were effective vehicles for informing policymakers and increasing awareness and use of IFPRI's research results. The 1985 report further noted that because IFPRI lacked a formal training program, developing country researchers mainly gained knowledge and added to their competence by taking part in IFPRI's research in Washington or in the field. It went on to observe that the lack of professional capacity in the food policy research field in many developing countries is a serious constraint on IFPRI's ability to achieve impact through its research. The 1990 report endorsed this observation saying, "… IFPRI's enhancement of national research capacities through collaborative research effort is proving to be a very slow and extended process,

⁹ The RRs mentioned in this quotation are IFPRI Research Reports (García García 1981, Mehra 1981, Hazell 1982, Cavallo and Mundluk 1982). The 1985 EMPR (FAO) noted that these research reports were somewhat impenetrable to policymakers, but that the published short summaries for each were very helpful to both policymakers and other non-specialist readers.

which has not produced sufficient tangible results compared to the needs of developing countries" (FAO 1990, 94).

By the time of IFPRI's third EPMR in 1998 (FAO 1998), the Science Council had begun to refine its concept of impact.

The ultimate objective of IFPRI is to have an impact on poverty reduction, food security, and sustainable development ... these impacts will come via changes in policies The impacts will come through two types of outputs: directly through the policy relevant information provided to policymakers; and indirectly through capacity strengthening ... (FAO 1998, 36).

The 1998 EPMR records that IFPRI was at the forefront in understanding the conceptual underpinnings of the impact of policy research and that it had sponsored several activities bringing together the best thinking on this subject. IFPRI researchers, it noted, have recognized that assessing policy-oriented research (POR) is multidimensional, and that specification of possible impact pathways is an important component, together with analysis of the issues surrounding the problem of attribution, when it comes to linking policy research to ultimate impacts on poverty alleviation and other measures of human welfare.

Despite these assertions of progress, the 1998 report also observed that it will be a long time before definitive, quantitative assessment of final impacts will be possible. As a result, the report cautions against expecting significant evidence of impact. Rather it argued, IFPRI and its clients should content themselves with more anecdotal material and results, which together indicate that IFPRI's work is at least consistent with policy changes that have taken, or are taking, place.

With hindsight, it appears that these first EMPRs probably paid too little attention to the challenges of impact assessment and the associated resource costs. However, the 2006 review rightly explained that

Unfortunately, when all is said and done, one cannot count these measures [of citations, downloads, sales and distribution of publications, attendance at conferences, and briefings of key policy officials] as impact. As is the case of research quality, it is the testimony of those who have dealt with IFPRI that constitutes the most credible information. The Panel's assessment is that IFPRI is having substantial influence, if not impact, and that the influence is beneficial ... [but] impact is notoriously difficult to measure. There are no pathways to carrying out impact assessment that will be convincing to everyone ... (Science Council 2006, 72).

By the time of the 2006 EPMR, IFPRI had launched its own series of independent impact assessments and sought to draw together the latest thinking about how the impact of POR might be assessed. Hence the 2006 EMPR concluded that,

IFPRI's contributions to developing methods of impact assessment suitable for policy research are on the frontiers of this subject, and have taken important steps in making such assessment implementable. IFPRI's impact assessments of its own work have been path breaking as the most sustained efforts of their kind to be undertaken. They provide a foundation upon which future evaluations of policy research can build, and which future evaluators will ignore at their peril (Science Council 2006, 40).

In sum, the EPMRs suggest that IFPRI has had substantial influence, although the evidence underlying this conclusion is based more on peer opinion than hard evidence or policymaker testimony. It is also *plausible* to conclude that, as a result of such influence, IFPRI has had significant positive impact on a global scale. However, quantification of that impact has remained elusive. Overall, the implication of the EPMRs is that although more, and more convincing, evidence is needed, IFPRI's influence and impact has been notable—IFPRI's work has likely helped to increase the welfare of many of the world's poor.

4. THE IMPACT OF IFPRI'S RESEARCH PROGRAMS AND PROJECTS

More detailed evidence about IFPRI's impact can only come from external evaluations of some of IFPRI's research programs and projects, namely IFPRI's own program of impact assessment studies that began in 1997. At that time little was known about the impact of social science research in general or food policy research in particular. In order to expand the scope of available academic research and to develop quantitative methods for estimating the impact of IFPRI's work, several papers were commissioned from social scientists. IFPRI also held an essay contest to solicit proposals from a range of scientists on how to assess the impact of policy research. The resulting papers were discussed at a two-day symposium organized by IFPRI in 1997. These papers were subsequently published by IFPRI in a book (Pardey and Smith 2004) and as part of a new series of impact assessment discussion papers.¹⁰ This methodological work was followed by a series of external impact assessment studies of IFPRI's work. That series continues to this day, but the reports are now called Independent Impact Assessment Reports to more clearly reflect the independence of judgment that they represent.

In the years since the impact assessment program began, IFPRI has published a total of 40 impact assessment papers. Most are assessments of IFPRI's own research (29), some concern only methods,¹¹ and a few are stocktaking papers, partially based on two two-day workshops held in the early 2000s.

The remainder of this section is concerned with the 29 published papers that seek to assess the influence and impact of IFPRI's POR. With a couple of early exceptions where IFPRI's own staff were involved,¹² these studies were all conducted by external experts chosen and overseen by an external impact assessment coordinator appointed specifically for this purpose.¹³ These studies have ranged in the scope from evaluations of relatively small research projects to evaluations of entire IFPRI research programs. Among them, they have covered the majority of IFPRI's total spending on POR activities over the last two decades. As such, there is little need to be concerned about selectivity bias.

The central concern of all of these studies is to assess the extent to which IFPRI has been successful in influencing policy and achieving impact. Its 29 impact assessment studies are diverse, so

¹⁰ A complete list of these papers is found in Annex 1 and also at

http://ebrary.ifpri.org/cdm/search/collection/p15738coll2/searchterm/independent%20impact%20report/field/series/mode/all/conn/and/order/date/ad/desc%22.

¹¹ All published in 1997 and 1998.

¹² Impact Assessment studies 1 and 11 were conducted by IFPRI staff members with responsibilities for impact assessment and who were not involved in the work being evaluated.

¹³ The process of producing these reports has changed little over the 18 years since the first was produced. Topics are selected by an external impact assessment coordinator who also selects a competent consultant or consultants (without prior formal connection to IFPRI) to design and execute the impact assessments. All costs are borne by IFPRI. The resulting reports are anonymously peer reviewed and subsequently published by IFPRI. Although relevant staff at IFPRI are invited to comment on the draft reports, final substantive and editorial judgement rests with the consultants and the external coordinator.

to help tease out IFPRI's successes these assessments are classified here according to a simple typology of POR based on expected impact.

A Typology of POR Outcomes

Despite the need recognized by IFPRI and others for more rigorous and comprehensive methods for assessing the impact of POR, progress has been slow in the face of several difficult challenges (Box 1). The challenges and current best practices for assessing the impact of POR were discussed in detail at a workshop held on the topic in November 2014 at IFPRI. A background paper prepared for the workshop by Renkow and Byerlee (2014) provides a detailed summary of the current situation.¹⁴ Place and Hazell (2015) provide a summary and synthesis of the workshop discussions, including recommendations for assessing the impact of POR within CGIAR.

One finding from the workshop is that the difficulties of evaluating POR vary with the scope of the outputs or policy changes sought. Some POR is targeted at project-level or country-specific problems, such as improving a safety-net program or an agricultural extension system. In these cases the impact pathways are relatively short, the relevant policymakers and beneficiaries more easily identified, and the primary impacts can be captured at a local or country level. Other types of POR are targeted at regional/multicountry or global problems, such as regional or global trade arrangements or global warming. These types of POR have longer, more complex impact pathways in terms of the numbers and types of stakeholders and beneficiaries involved, the strength of potential indirect and cross-country spillovers, and the time it takes to realize change.

A priori, therefore, it is reasonable to sort POR in accord with this broad classification of its targeted or intended impact. But does this classification hold up in practice? That is, does the evidence of actual impact derived from a detailed textual and comparative examination of IFPRI's past impact assessment studies accord with this typology? Table 4 clearly suggests that it does; the degree or intensity of assessed impact is broadly consistent with the ex-ante expectations of the typology. For example, for research expected to deliver impact at the country level, Table 4 shows that the evidence of impact is greatest at that level. The same is true for the remaining two levels—regional/multicountry and global.

But Table 4 also shows that our classification of POR outcomes does not always map neatly into the three different categories of POR activity. POR targeted at one level may also (by accident or design) generate impact at one or both of the other levels in our three-way typology.¹⁵ As a result, many POR activities at IFPRI really need to be evaluated at two or more levels. However, most of IFPRI's evaluations focus on capturing single-country impacts, and there has been much less success

¹⁴ Available at https://sites.google.com/a/cgxchange.org/poria-workshop/background-papers.

¹⁵ Many of IFPRI's research activities are conducted in individual countries. These may be part of larger research programs that use a set of country case studies to extrapolate findings to multicountry levels (as for many of the Multicountry Programs and Global Research Programs described in Section 2). Thus, the POR not only generates outcomes in the case study countries, but also leads to spillover benefits in other countries facing similar problems. Another example is POR that addresses regional or global problems. The primary objective of such POR is usually to generate regional or global outcomes (IPGs), but additionally it may lead to trickle-down outcomes that can be assessed within individual countries. Lastly, POR that is intended to deliver global impact may also deliver some impact at the country or regional level, for example international conferences intended to lead to changes in the global development paradigm may find early adopters in some countries whose experience leads others to later adopt the change.

BOX 1: CHALLENGES IN ASSESSING THE IMPACT OF POLICY-ORIENTED RESEARCH

The impact pathway from POR is through dissemination (messaging), influence on policy decisions, implementation of those decisions, and the resulting changes in welfare. However, the policymaking process is messy, meaning that impact pathways are rarely linear, typically lengthy, generally complex, and often indirect (CGIAR 2008, Raitzer and Ryan 2008, Lindner 2011).

There are at least three major challenges in assessing POR. One challenge is assessing policy influence and attributing this influence to a specific POR source. Analysts have usually assessed influence through interviews and surveys with key informants, including the decisionmakers themselves. Sometimes citations of POR outputs can trace a pathway to decisionmakers. Analysts also commonly adopt "conservative" assumptions in making any attribution back to a specific POR source, in the hope that any bias in the benefits estimation would be downward. While most analysts are keen to make attributions to specific POR outputs, further attribution to research organizations involved in developing those outputs is not always desired. This may be the case, for example, when the output represents the joint efforts of several agencies, builds on the work of others, or where there are political sensitivities to identifying specific institutions, especially if these are external to the country.

A second major challenge is the specification of an appropriate counterfactual—what would have occurred in the absence of the research that was conducted. There are several possible counterfactual situations. One is where there was going to be a policy change anyway, and the POR led to a more informed change with a better outcome. In this case, the relevant counterfactual is the alternative policy change that would have occurred. In some situations, the counterfactual might be an earlier and/or more rapid implementation of a policy or set of actions than would have occurred anyway without the POR. In other situations, the policy would not have changed without the POR, as for example where the POR played an important diagnostic role in identifying problems with the old policy. In this case, the relevant counterfactual is the existing policy and helped prevent a worse outcome. In this case, the relevant counterfactual is the new policy that would have been put in place. Choosing the right counterfactual in an ex post impact assessment is much easier if the POR research team had an ex ante theory of change that spelled out the policy they hoped to influence, the steps involved, and the timeframe.

A third challenge is estimating the welfare effects of a policy change and its relevant counterfactual. This can sometimes be handled through a modeling exercise that compares the policy change scenario with the assumed counterfactual. However, much POR is not amenable to modeling exercises, and some important social, institutional, and environmental impacts cannot be captured in this way. Thus, many evaluations of POR remain qualitative, and the counterfactual is treated as a plausible narrative. Even where quantitative assessments of the impact of a policy or program change are possible, attributing part of the estimated benefits from the change to a specific piece of POR or a research institution typically remains elusive. in assessing regional/multicountry or global impacts. This is also true of the impact evaluations of POR undertaken by other research organizations (see Byerlee and Bernstein 2013). There is a tautological element here, in so far as the ex post assessment of the impact of POR that is intended ex ante to have mainly country-level impact will tend to concentrate on measuring that impact, largely to the exclusion of considering possible spillover benefits at regional or global levels. In sum, impact studies need to be framed with the full range of possible impacts in mind.

The classification of POR outputs as in Table 4 provides a useful framework for this paper. By allowing the results and lessons from impact assessment studies of IFPRI's work to be clustered, it permits broader generalizations about policy influence and impacts than would otherwise be possible.

As Table 4 shows, eight of the impact assessments fall into the country category, nine are regional in scope, and 12 have a global focus.¹⁶ The following discussion addresses each of these in turn, showing how the measurement of IFPRI's performance in achieving impact changes as both the policy content and the focus of the research widen.

Impact at the Country Level

Two country studies at the level of individual programs are illustrative. In both cases, IFPRI's research took a special form that applied IFPRI's expertise in research methods to the evaluation of two large-scale antipoverty programs.

The first program is Mexico's PROGRESA/Oportunidades, a program of conditional cash transfers (CCTs) to the poor—conditional on beneficiary households making specific investments in education, health, and nutrition (see Box 2). IFPRI contributed to the implementation of this program through a summative evaluation. An impact assessment (Behrman 2007) of IFPRI's work concluded that IFPRI's evaluation of PROGRESA advanced the flow of benefits, protected program continuity, and provided high-quality and politically convincing evidence of successful program performance.

The second case is Ethiopia's Productive Safety Net Program (PSNP). IFPRI has provided a continuing evaluation of the PSNP since 2007. Established in 2005, PSNP is aimed at enabling the food-insecure rural poor to resist shocks, create assets, and become food self-sufficient. It provides multi-year predictable food or cash transfers (or a combination of both) to poor people to help them survive periods of food deficit and avoid depleting their productive assets while trying to satisfy their basic food needs. IFPRI's methodical and rigorous evaluations undertaken at intervals since the program began have made fundamental contributions to the effective implementation of the PSNP that are widely acknowledged by the Ethiopian government and the donor community. Renkow and Slade (2013), in assessing the totality of IFPRI's research in Ethiopia, show that, under extremely conservative assumptions, the primary welfare benefits that have accrued to participants in the PSNP and that are arguably attributable to IFPRI are large enough to cover many times over all of IFPRI's wide-ranging POR expenditures in Ethiopia.

¹⁶ From IFPRI's point of view, global usually implies all developing countries, although some POR also speaks directly to developed (donor) countries.

Focus of POR	Name of Import Acres must	Year published	Scope & Degree of Assessed Impact		
	Name of Impact Assessment		Country	Regional/Multi- countly	Global
Country	IA 36. An assessment of IFPRI'S work in Ethiopia 1995–2010 Ideology, influence, and idiosyncrasy	2013		•	•
	IA 27. Policy-Oriented Research Impact Assessment (PORIA) case study on IFPRI and the Mexican PROGRESA cash transfer program	2008	•	•	Ð
	IA 22. The contribution of IFPRI research and the impact of the Food for Education Program in Bangladesh on schooling outcomes and earnings	2004	•	•	٠
	IA 19. Impacts of IFPRUICARDA policy and property rights research on the Mashreq and Maghreb Poject	2003	•		•
	IA 13. Impact of IFPRI's policy research on resource allocation and food security in Bangladesh	2000	•	۵	0
	IA 11. Assessing the impact of policy research and capacity building by IFPRI in Malawi	1999	•	۲	
	IA 8 Assessing the impact of rice policy changes in Viet Nam and the contribution of policy research	1999	•		•
	IA 1. IFPRI and the abolition of the wheat flour ration shops in Pakistan	19 97	•		•
	IA39. Impact of IFPRI's Research on High Value Agriculture	2015		-	
	IA 38. Impact assessment of IFPRI's capacity-strengthening work, 1985-2010	2014	Ô	-	•
	IA 33. Ex-post impact assessment review of the Regional Network on AIDS, Livelihoods, and Food Security (RENEWAL)	2011	¢	•	0
	IA 32. Impact assessment of the IFPRI agricultural science and technology indicators (ASTI) project	2010			
Regional/ Multicountry	IA 31. Impacts of IFPRI's "Priorities for Pro-poor Public Investment" Global Research Program	2010	•	•	0
	IA 30. Case Study on IFPRI and Conditional Cash Transfer (CCT) and Non-Conditional Cash Transfer (NCCT) Programs	2009			•
	IA 26. The impacts of IFPRI's global research program on the sustainable development of less favored areas	2007	•	•	•
	IA 24. Regional policy networks IFPRI's experience with decentralization	2005	θ	0	
	IA 23. Strengthening food policy through gender and intra-household analysis	2005	•	•	•
	IA 40 Ex-Post Impact Assessment Review of IFPRI's Research Program on Social Protection, 2000-2012(a)	2015	•		•
	IA 37 Impact Assessment: IFPRI 2020 Conference on Building Resilience for Food and Nutrition Security	2014	0		•
	IA 35. An ex-post impact assessment of IFPRI's GRP22 program, Water Research Allocation: Productivity and Environmental Impacts	2012	0	•	
	IA 34. Impact Assessment: IFPRt 2020 conference "Loveraging Agriculture for Improving Nutrition and Health"	2009	•	•	
	IA 29. The Food Crisis of 2008: Impact Assessment of IFPRI's Communications Strategy	2008	•	•	•
	IA 28. Impact evaluation of research by IFPRI on agricultural trade liberalization, developing countries, and WTO's Doha negotiations	2003	•	۲	
Global	IA 21. Impact assessment of IFPRI's research and related activities based on economywide modeling	2003	•	•	•
	IA 17. Evaluating the impact of agricultural projection modeling using the "IMPACT" framework	2002	•	۲	
	IA 16 The impact of the International Food Policy Research Institute's research program on rural finance policies for food security for the poor	2002	•		
	IA 14. The production and diffusion of policy knowledge: a bibliometric evaluation of the International Food Policy Research Institute	2000	•		•
	IA 12. A Review of Food Subsidy Research at IFPRI	1999	0	0	
	IA 10. External impact assessment of IFPRTs 2020 Vision for Food, Agriculture and the Environment Initiative	1999	0	•	•
	Key	Substantial	Moderate	e Small	Uncertain/Unknow

Table 4: Distribution of IFPRI's impact assessment studies by scope and degree of POR impact

 Key
 Substantial
 Moderate
 Output

 (a) The high country and moderate regional impact attributed by IA40 is due to a recapitulation of the evidence in some earlier IA's dealing with social protection at the country level.
 Uncertain/Unknown

Source: Authors assessment of independently evaluated impact

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BOX 2: IFPRI'S IMPACT ON PROGRESA IN MEXICO

This evaluation posed four key questions about the influence and impact of IFPRI on the Mexican social safety-net program, PROGESA/Oportunidades.

- 1. Was the PROGRESA program design influenced by prior IFPRI research?
- 2. Why was IFPRI chosen to undertake the initial impact evaluation of PROGRESA?
- 3. How did the IFPRI evaluation of PROGRESA contribute to the program?
- 4. Were there spillovers of the IFPRI evaluation of PROGRESA?

Using carefully articulated methods, the evaluation concluded that:

- (1) IFPRI did not directly participate in the initial PROGRESA design, but was asked to evaluate the program. This evaluation led to important improvements in the design of the program. So it would be misleading to claim that a major part of the PROGRESA program benefits should be attributed to IFPRI's critical role in the design process. Nevertheless, prior IFPRI research and research by IFPRI evaluation team members on topics including food subsidy programs, nutrition, health, gender, intrahousehold allocations, and related policies played a role in the design process. Therefore, it is reasonable to attribute a very small part of the PROGRESA benefits to better design based on IFPRI's prior research contributions.
- (2) IFPRI presented advantages in terms of (i) type of organization (neither appearing to be a captive of national interests nor identified with structural adjustment or multilateral lending); (ii) reputation and credibility for solid scientific analysis of relevant policy-related issues enhanced by the addition of some prominent academic researchers; and (iii) aspects of management including flexibility, reliability, and relative low costs. These were perceived to offset the disadvantages in the eyes of some Mexican entities of not being Mexican and the logistic and communication difficulties of not having a Mexican base.
- (3) Key persons in the development and implementation of PROGRESA, as well as most of those interviewed, international organizations, and the media agreed that the IFPRI evaluation team did make a significant contribution to the short-run and longer-run sustainability and expansion of the program as well as to details of the evaluation and program modifications. While it undoubtedly remains the case that the basic success of PROGRESA is due primarily to those in Mexico who developed, nurtured, and implemented the program, it also seems plausible that some small share of the credit can be attributed to the IFPRI evaluation.
- (4) There were substantial spillovers, both in Mexico and internationally, from the evaluation of PROGRESA on the culture of policy evaluation in general and on conditional cash transfer (CCT) programs in particular. And it seems that some significant share of that is due to IFPRI's work adding considerably to both Mexican and international awareness of, and receptivity to, CCT programs.

Thus, the evidence summarized in this study suggests that IFPRI probably did have an important and significant impact on the highly positive direct and indirect outcomes of PROGRESA, even if this impact was a small part of the total impact of the program. Simulations of the cost-benefit ratio for IFPRI's involvement, under conservative assumptions, suggest that the benefits outweighed the costs substantially—and probably by much more with more moderate and more plausible assumptions. But even under the most conservative assumptions the cost-benefit ratio—considering the positive effects on the life of the program, improvements in the efficiency of program implementation, the increase in school enrollments, and positive externalities in the form of spillovers—was 84.3. Thus the IFPRI evaluation of PROGRESA resulted in a substantial IPG with a very high return on the resources used to undertake this evaluation.

Adapted from IFPRI Impact Assessment Discussion Paper 27 (Behrman 2007).

A more conventional example of the impact of IFPRI's country-level research is the contribution to the Food for Education Program (FFE) in Bangladesh. FFE ran from 1993–2001 and was a result of IFPRI's work in the late 1980s that conceived the program and evaluated an early pilot that led directly to its expansion, as well as additional work that improved program targeting. FFE provided a free, monthly food-grain ration to each participating household, contingent on the family being judged as poor and having at least one child attending primary school. Ryan and Meng (2004) show that the program led to material increases in school participation and expected lifetime earnings. Using propensity score matching and difference-in-difference methods, Ryan and Meng estimated that school participation rates increased by 20–30 percent. Additionally, FFE beneficiary children remained in school between 0.4 and 1.4 years longer than non-participant children. The long-term effects of increased schooling were estimated econometrically through changes in lifetime earnings. Provided a child attended school, an additional year of schooling increased future earnings by 5.13 percent in the rural sector and 9.21 percent in the urban sector. Estimated lifetime earnings were 30–35 percent higher for girls and 11–18 percent higher for boys. These are fairly large increments in future earnings. Gains were generally larger for women than for men.

The internal rates of return (IRR) on the total national investment in the FFE program were estimated to be 15–26 percent per year. Private rates of return were about double national returns for boys and much more than double for girls, suggesting that FFE represented not only an extremely wise economic investment for the government in terms of economic growth, but also a powerful tool for poverty alleviation, especially for women. Because FFE was effectively targeted to the poor, they received a disproportionate share of the national benefits as well as the returns on their own investments.

A further testament to IFPRI's substantial impact, this time on a crop subsector, comes from Vietnam. Between 1996 and 1998 under a contract to the Asian Development Bank, IFPRI examined a number of important dimensions of rice policy in Vietnam.¹⁷ A quantitative assessment (Ryan 1999a) established that IFPRI influenced the government of Vietnam to adopt policy changes. The assessment used a model of the Vietnamese agricultural sector (developed by IFPRI during its research) to conduct policy simulations and eventually a cost-benefit analysis to assess the economic value of IFPRI's contribution to changing Vietnam's rice policy and introducing the policy changes faster than would otherwise have been the case (see Box 3). It shows that, under conservative assumptions, IFPRI's contribution to Vietnam had a high net present value, without counting the additional wider net benefits to consumers worldwide.

In Bangladesh, and in a study that preceded the FFE impact study, Babu (2000) examined the effects of IFPRI's research on resource allocation and food security.¹⁸ This POR was driven in part by a concern with macroeconomic parameters, particularly the extent to which public-sector resource allocation might be improved by reforming Bangladesh's expensive Rural Rationing Program (RRP), which was known to be poorly managed. IFPRI's research showed, *inter alia*, that the RRP had

¹⁷ These included (1) an in-depth investigation of rice marketing, processing, storage, and trade; (2) analysis of the structure of farmer and trader incentives; (3) the impact of recent reforms on farmers, processors, traders, exporters, and consumers; (4) preparation of rice policy options for the government; (5) development of a database on key rice market indicators; and (6) provision of training to relevant government staff in statistical sampling, survey design, data processing, and economic policy analysis.

¹⁸ In addition, IFPRI undertook research on food-grain procurement, food stocks, the use of PL480 resources, and on the links between poverty and education in Bangladesh, which led to the FFE program.

BOX 3: IFPRI'S IMPACT ON RICE POLICY IN VIETNAM

In a dynamic and conducive policy environment (a government moving from central planning to market-based solutions), IFPRI gathered extensive data from large-scale, nationally representative sample surveys (that in themselves had lasting value) and a spatial equilibrium model (VASEM) to explore policy simulations using its own and other data. The main findings were: (1) in addition to increases in productivity, future growth of the rice sector depended on a dramatic increase in rice exports for which there was substantial potential; (2) export growth depended on the development of an efficient and effective privately-centered marketing system able to meet the needs of domestic and international markets at low costs; and (3) several factors reduced the efficiency of Vietnam's rice market. Among these the major ones were policy restrictions of rice flows across regions, barriers to entry in the export sector, limited access to credit for marketing, limited access to information, and macroeconomic policies (inflation and exchange rate appreciation) that reduced farmer incentives. To address these shortcomings, IFPRI made 13 specific policy recommendations.

A feature of the project was the close association of various institutions in Vietnam in all phases of the study. The primary counterpart was the Department of Planning and Projection in the Ministry of Agriculture and Rural Development, with the Department of Agricultural and Rural Development Policy becoming more directly involved as the study proceeded. Also involved were the major research institutions, such as the National Institute of Agricultural Planning and Projection, Hanoi Agricultural University, the Institute of Agricultural Economics, National Economic University in Hanoi, Can Tho University, and the Mekong Rice Institute. A number of these institutions were commissioned to prepare reports on the physical, biological, regulatory, and economic environment surrounding the rice sector. Other collaborators included the Ministry of Planning and Investment, Ministry of Transport, the Government Price Committee, the Bank for Agriculture in Vietnam, and the General Statistical Office. The participation of so many organizations greatly helped to build consensus on the need for, and nature of, policy change.

Under its contract with the Asian Development Bank (ADB), IFPRI executed the study with speed and effectiveness, producing its final comprehensive report in less than two years. Interviews with stakeholders attested to the quality of IFPRI's work, the value of the training it provided, the utility of its communications, and its significant influence on policy change. But, the changes that ensued cannot be exclusively attributed to IFPRI. The Vietnamese government, the World Bank, and the ADB all played important roles. If the present values and cost-benefit ratios of the benefit streams under three scenarios are truncated at 1997 to reflect only those realized at the time the impact assessment was done, the most conservative estimate of IFPRI's contribution to Vietnam is a net present value of US\$45 million, yielding a cost-benefit ratio of 56. The net present value of the policies remain in place until 2020. These welfare benefits to Vietnam underestimate the net total international benefits. Rice consumers in the rest of the world gained while producers lost. The impact assessment also notes some key lessons concerning the importance for POR of high-quality research, consensus building, good timing, the training of researchers and policy advisers, close contact with government, and the value of funders with clout.

Adapted from IFPRI Impact Assessment Discussion Paper 8 (Ryan 1999a).

leakages in excess of 70 percent. The findings of IFPRI's research were timely, conformed to decisionmakers expectations, and were specific.¹⁹ The RRP was abolished, saving the government US\$60 million a year. Babu went on to carefully estimate the costs of the RRP and, combining two concepts—"delay avoidance" and "benefit sharing"—estimated the cost-benefit ratios that could be attributed to IFPRI's research to be from 15:1, if only 25 percent of the benefits were attributed to IFPRI's research, to 60:1, if all the benefits were attributed to IFPRI's research. He also estimated the IRR of the IFPRI research project, using full project costs up to the time of the decision to abolish the RRP, to be from 114 percent to 259 percent, depending on the level of benefits attributed to IFPRI research. The net present values in 1989, using a 5 percent discount rate, ranged from \$27 million to \$116 million.

Other assessments at the country level, although less rigorous than those noted above, also provide plausible arguments suggesting positive impact. Islam and Garrett (1997) tell the story of IFPRI's role in helping the Pakistan government to justify abolishing wheat ration shops, an institution that in one form or another had existed since before the birth of modern Pakistan and which had become a "monument to institutional corruption." In this narrative evaluation, IFPRI's impact on the abolition decision is shown to have depended on (1) a propitious political environment and IFPRI's close and cordial access to the highest level policymakers; (2) strong donor support for research (from the U.S. Agency for International Development [USAID]) and IFPRI's good reputation; (3) close and effective political and economic collaborators; (4) substantial prior headway made in defining the issue; (5) the use of novel inputs including personal computers (PCs) and Gallup polls; (6) convincing data collection and analysis by IFPRI; (7) the likelihood of clear gains for the poor; and (8) astute political judgments by government decisionmakers that placated objectors.

Almost as counterpoint to this positive tale of influence, Renkow and Slade (2013) in examining the totality of IFPRI's POR in Ethiopia draw attention to the constraints to achieving impact. They provide explicit analysis of the way the political economy can handicap policy research by, *inter alia*, restricting the choice of research subject for ideological reasons. This not to say that IFPRI's work in Ethiopia was without influence or impact. In fact, it greatly influenced the form and formation of the Ethiopian Commodity Exchange, the implementation of the PSNP, and even the exchange rate. But other, perhaps more important, policy issues related to liberalizing agricultural input and output markets were not addressed. In a slightly different critique, Ryan (1999b) concluded that in Malawi IFPRI's work to improve the food security and nutrition situation was largely ineffective because IFPRI itself may have concentrated too much on data collection and too little on building solid links and durable partnerships with the national policymaking environment. Ryan also asserts that links with the donor community are not a substitute for substantive partnerships with decisionmakers, nor are staff turnover and changing priorities conducive to the generation of sustainable benefits from POR.

¹⁹ "Certain conditions prevailing during the early 1990s in Bangladesh helped enhance the decisionmaking process using IFPRI results. Food-sector reforms had been gradually gaining momentum. Then, because of increased foodgrain production from increased investments in agricultural research and rural infrastructure, real prices of foodgrains fell in the 1980s. This reduced the pressure on the food subsidy programs. With the reduction in the subsidies, ration cardholders became indifferent to the subsidized food. External agencies such as USAID and the World Bank helped the reform process by placing conditions on food aid and other lending programs. According to one interviewee, these agencies provided cover to the reformers within the government" (Babu 2000, 18).

For the most part, these country-level impact assessments are methodologically rich and some report quantified analyses, although with strong restrictive assumptions. These studies give the reader a sense that the results are reasonably grounded and the evidence of impact credible even when it is not quantified. They suggest that the returns to IFPRI's POR, when narrowly assessed as the return to IFPRI's "investment," can be very high if the policy change is successful. Subject to the various sometimes strong assumptions underlying the attribution analyses, the impact of IFPRI's country-level work as assessed in the quantitative impact studies is large, providing welfare gains to many millions of poor people. Such gains to humanity are the true measure of IFPRI's impact.

Impact at the Regional/Multicountry Level

Several impact assessments evaluate POR outcomes that fall into the multicountry category, not least because a substantial fraction of IFPRI's POR seeks to identify new or improved policies on specific issues applicable to groups of countries facing the same problem. Somewhat loosely, these solutions are termed IPGs. A clear example of IFPRI's impact that falls in this category is the research program to strengthen food and other policy research through the analysis of gender-differentiated decisionmaking in the household (see Box 4 and Jackson 2005).

Confronted with a research program extending across multiple countries, assessors of IFPRI's impact in the regional domain have generally eschewed any attempt at quantification (see Kydd 2015).²⁰ Nevertheless, working in the tradition of narrative evaluation and using other analytical

²⁰ It is common to find in impact evaluations that the absence of necessary and sufficient data precludes formal econometric analysis or the use of mathematical models. Nevertheless, there are instances among IFPRI's impact assessments where a more quantified approach to impact assessment seems to have been possible, but was eschewed (see Islam and Garret's 1997 work on Pakistan, Ryan's 1999 work on Malawi, or Jackson's 2005 work on the impact of using gender and intrahousehold analysis to strengthen food policy). That this is so reflects mainly on weak terms of reference for these impact assessments. Rigorous, quantified analysis will only be carried out if it is first requested by those who commission IFPRI's impact assessments.

A parallel concern is assessing policy influence and impact and then tracing this influence to a specific POR source (the "attribution problem"). This is seen as a major challenge alongside the specification of an appropriate counterfactual what would have occurred in the absence of the research that was conducted. Accepting that the attribution problem may not be soluble (see CGIAR 2008), in the sense that attribution cannot be proved, should not deter evaluators from using more subjective, but still quantified, methods. In such circumstances and in the absence of fully adequate data, the evaluator must make do with plausibility not proof, while making it plain that this is less than fully rigorous. In many cases there are signals as to what might have happened in the absence of a policy change, for example that the past trajectory of change would simply have continued, or some farmers may not have benefited from a policy change and thus provide clues to the counterfactual, or that another agency would have delivered similar results. In many cases therefore, a plausible counterfactual can be constructed and, if necessary, the assumptions on which it is based subjected to various forms of sensitivity analysis (many large and small investment projects are justified ex ante by cost-benefit analysis based on similar methods). Moreover, providing the counterfactual is stated clearly, it is contestable, thus allowing for modification and improvement. Last, where a significant degree of quantification proves possible and numeric values can be placed on the counterfactual as well as on observed events, then it is important to provide a simple summative measure of impact such as an IRR or cost-benefit ratio. But even where such quantification is impractical, the concept of cost-benefit may still prove useful in forming a subjective judgment about whether a piece of POR has been worthwhile. Several of IFPRI's impact assessments provide a narrow judgment of this kind—that is, an IRR where costs are defined as the cost to IFPRI of the research alone. While providing comfort to IFPRI, this is a very limited measure. What is really required is a cost-benefit analysis of the incremental investment called forth by the change in policy and the net welfare gains attributable to it. Such a broader measure of the impact made possible by the POR is the most valuable.

techniques²¹ together with plausible argument, they assert that IFPRI has had noticeable, but unquantified, influence and impact at the regional level.

BOX 4: IFPRI'S INFLUENCE AND IMPACT ON GENDER POLICY

Over the 10-year period 1992–2003, IFPRI undertook POR in several countries to explore gender differences in household decisions about the allocation of resources. The primary focus was on Bangladesh, Ethiopia, Guatemala, and South Africa, all of which had high intrahousehold disparities. The objectives of the program were to document intrahousehold resource allocation patterns; develop the economic models and data collection methods necessary to investigate determinants of intrahousehold resource allocations; establish the relevance of these patterns and models for food policy; evaluate the benefits relative to the costs of collecting gender-differentiated data (compared to undifferentiated data) at the household level; develop guidelines for *a priori* expectations on intrahousehold issues; and undertake outreach through training materials and publications. The impact of this research program was assessed through systematic analysis of the program's activities, research outputs, research dissemination, and capacity building. This entailed extensive review of publications generated by the research, bibliometrics, and website use, as well as interviews with IFPRI staff and users of the research outputs in Bangladesh and Guatemala, two of the program's focal countries.

The assessment found that most of the program's objectives were met in full and some in part, and that there were some unintended achievements. The outputs and the conduct of the program both met with enthusiastic approval from all respondents. The quantity and quality of research output was high; dissemination was varied, strategic, and extensive; there were important methodological advances;* and these methods and the data collected have created a resource that can be used for further POR in the years ahead. The relevance of the research for policy formulation was judged to be high. Modeling intrahousehold transfers is central to the formulation of gender policy. And the issue of how independently-held assets affect bargaining power in intrahousehold relations is relevant to women's property rights, especially land—an important policy issue in many countries. The assessment concluded that overall the research had undeniably high policy relevance, and therefore high *potential* impact. There was discernible policy influence and impact among major donors (such as the World Bank and the U.S. Agency for International Development) and among researchers in the United States and other developed countries. There was also considerable country-level impact in Bangladesh and Guatemala as well as in countries such as Mexico that were implementing conditional cash transfer programs. However overall, less policy impact was found at the country level than was hoped for. In sum, the main impact was not at the project or country level, but rather the addition to the corpus of knowledge about gender differences in households, which has changed minds and provided an IPG.

Adapted from IFPRI Impact Assessment Discussion Paper 23 (Jackson 2005).

* The research program "... was not simply refining household models, it was breaking new ground by investigating intrahousehold relations rather than assuming unitary household interests and behavior, and it was enormously ambitious in aiming at both empirical testing and new theory building" (Jackson 2005, 31).

Renkow (2010), for example, set out to assess the impact of IFPRI's empirical research into the value of rural public expenditure as an instrument of poverty reduction in India and China, as well as IFPRI's impact on African public expenditure for agriculture and rural development through the Comprehensive African Agriculture Development Programme (CAADP) process. Basing his judgments on the results of interviews with well-informed persons, bibliometric and citation analysis,

²¹ Typically, these include triangulating the numerical evidence on the quantity and quality of the research, as shown by its outputs, with the use made of those outputs (by other policy researchers and policymakers) and qualitative evidence on performance, utility, and influence gleaned from research peers and other informed observers.

a field visit to India, and IFPRI's own estimates of the marginal impact of rural roads expenditure in India on poverty and agricultural GDP,²² Renkow drew the following conclusions: IFPRI undertook pioneering research on the relative impacts of different types of public spending on agricultural growth and the incidence of rural poverty, and showed rural roads and agricultural research and development (R&D) to be the most important sectors for investment, followed by education. In India, there was (1) clear (if serendipitous²³) evidence that India's outlays on rural roads were directly influenced by IFPRI's research;²⁴ (2) IFPRI's research findings regarding agricultural R&D also influenced policymaking, but there was no compelling evidence that it influenced spending; and (3) IFPRI's findings about subsidies were discussed extensively in policymaking circles, but action was precluded by political inertia. In China, IFPRI's research was also influential, but the evidence base was less secure. In Africa, Renkow found that after 2002 IFPRI took the lead in CAADP and the Regional Strategic Analysis and Knowledge Support System (ReSAKSS)—which aimed inter alia to raise the overall level of public expenditure on agriculture and rural development in countries in Africa south of the Sahara to 10 percent of total public expenditure from its typically low level of two or three percent.²⁵ IFPRI's contributions were substantial, especially in crafting CAADP country compacts and establishing the ReSAKSS network, plus country SAKSS in seven countries. But the 2010 assessment proved to be too early to form a conclusive judgment about impact.

IFPRI has also used POR to help harmonize regional policy. A rather special case is its work to improve and standardize data on investment in agricultural R&D across countries. Building on early work by the International Service for National Agricultural Research (ISNAR) and arguing that well-funded and well-staffed agricultural research systems with efficient allocation of research resources are important for improving agricultural productivity and for meeting other agricultural development goals, IFPRI launched an initiative in 2001 called the Agricultural Science and Technology Indicators (ASTI). Using a network of national and regional collaborators, ASTI is now the most comprehensive source of agricultural research statistics for low- and middle-income countries. ASTI collects, compiles, processes, and publicizes these data. ASTI's outputs, datasets, and information are

²² These estimates were taken from three IFPRI publications and used in a variety of conservative scenarios (a form of sensitivity analysis) to assess the marginal impacts per Rs100 billion in roads expenditure attributable to IFPRI's research. For details, see the Appendix to Renkow (2010).

²³ Serendipity played its part in that, at a time when the prime minister was seeking to introduce a new program for the rural poor, a key adviser happened to read some of IFPRI's work on the value of rural roads and recommended a new rural roads program. The rest is history.

²⁴ Renkow (2010) estimates that India's increased spending on rural roads lifted between 180,000 and 3 million people out of poverty and increased agricultural GDP by between US\$3.8 billion and US\$15.2 billion. Even under the most conservative of assumptions, he calculates that IFPRI's work can be credited with raising 18,000 people out of poverty and increasing agricultural GDP by about US\$1 billion.

²⁵ CAADP is an African Union/New Partnership for Africa's Development (NEPAD) initiative to accelerate growth and reduce poverty and hunger in Africa. CAADP's primary goal is to assist countries in raising economic growth through agriculture-led development under a common framework reflecting principles and targets defined by African governments to guide their agricultural strategies and investments. IFPRI works with African partners to conduct research and provide analytical support within CAADP. ReSAKSS is an Africa-wide network established by IFPRI to provide readily available analysis, data, and tools of the highest quality so as to promote evidence-based decisionmaking, improve awareness of the role of agriculture for development in Africa, fill knowledge gaps, promote dialogue, and facilitate the benchmarking and review processes associated with CAADP. ReSAKSS is organized as a network of three nodes among the major regional economic communities in Africa. Each node, at the country level and Africa-wide, has set up a network of national, regional, and international partners that are expected to provide policy-relevant and timely analysis, data, and tools.

intended to inform and influence policy decisions about national agricultural research systems (NARS), especially resource levels.²⁶

Norton (2010) set out to assess the influence and impact of this POR initiative. Using conventional website analysis, publication counts, citation analysis, and stakeholder surveys and, after ruling out a Bayesian-based analysis (because it proved impractical to collect sufficiently accurate probabilities of the value of ASTI outcomes), he used a straightforward cost-benefit analysis to gauge IFPRI's impact and drew the following conclusions: ASTI data and publications have helped to raise awareness of declining funding for NARS and helped these systems to identify new sources of funding. The data have been used in publications to make cross-country comparisons. NARS have used the data to help prepare internal and external funding proposals and projects and to lobby governments and donors. In one country, ASTI data were used to develop an improved NARS policy including R&D priorities. At the regional level, ASTI data have been used in reports on agricultural research for development and for formulating development proposals. In summary, Norton argues ASTI has been a productive program, creating a unique IPG.

Norton was able to gather sufficient data for a simple cost-benefit analysis of part of the ASTI contribution in Kenya and Tanzania. Officials in the Kenyan and Tanzanian NARS as well as World Bank representatives claimed that ASTI data influenced their agricultural R&D funding decisions. Norton's analysis showed that if the decision by the World Bank to fund the East Africa Agricultural Productivity Program in Kenya and Tanzania, announced in June 2009, was only one percent influenced by ASTI data, under plausible assumptions, the predicted benefits would more than pay for the entire ASTI program from 2001 to June 2009. Norton notes that this kind of influence is common and hence that the impact of the ASTI program has been high.

The third regional category where IFPRI has had both influence and impact is in networking.²⁷ This activity is not a pure form of POR, but is used by IFPRI both as part of its outreach mission and to build research capacity and knowledge in developing countries on issues where policy change is needed. Paarlberg (2005) notes that policy networking—whether for research or not—can be difficult to extend into low-capacity regions. Inadequate or uneven access to modern communications and information technology, he argues, constrains effective long distance and large-scale policy networking in much of the developing world. Thus IFPRI's substantial efforts to do so may be considered ambitious and risky. But Frankenberger and Nelson (2011), who assessed the

²⁶ ASTI publishes data for 32 countries. Between 2004 and 2010, ASTI produced 91 country-level publications: 50 country briefs, notes, and reports and 16 factsheets on gender-disaggregated capacity indicators for Africa south of the Sahara; 13 briefs and reports for the Asia-Pacific region; 5 for the Middle East and North Africa; and 7 for Latin America and the Caribbean. ASTI researchers themselves conduct few in-depth analyses using the data, but other researchers and organizations such as the World Bank make substantial use of ASTI materials. Website statistics show that use of ASTI data is widespread. For example, there were more than 10,000 substantive visits to the ASTI website over a seven-month period in mid-2010. These visits originated in 163 countries and 1,612 cities.

²⁷ According to Paarlberg, "... networks can be defined as organizations that use flexible and dynamic linkages to connect and reconnect multiple actors into new entities intended to innovate and deliver non-routine products or services. In their origin, networks can either be mandated (formal) or emergent (informal). It is widely agreed that emergent or informal networks tend to be the most effective. The basic building blocks of all effective networks are dyadic links of personal trust between pairs of individuals. If formal or mandated networks manage to aggregate and mobilize these vital pre-existing links of personal social capital, they can be highly effective When international policy research organizations attempt to create or sponsor networks in developing countries, they must take care to match network design to local capacity. The weaker the local capacity, the more centralized the network must be at the hub. Only if local capacity is strong will a decentralized network design become appropriate" (Paarlberg 2005, 5–6).

impact of the Regional Network on AIDS, Livelihoods, and Food Security initiative (see Box 5), suggest that investments in policy networks can have high payoffs if they are not hampered by low network sustainability and the uncertain effects of advocacy on actual policy change.

From the foregoing examples it is clear that assessing the impact of regional-level POR is generally more challenging than assessing country-level POR. Indeed, most of the studies listed above do not extend to capturing regional or multicountry impacts, but limit themselves to assessing impact within case study countries. This greater challenge stems in large part from the broader scope of regional POR, both geographically and substantively, as well as the longer and perhaps more tenuous links between input and impact, which make the identification and measurement of the impact more difficult. Recognizing this challenge, about which more is said in Section 5, is not to suggest that the impact of regionally focused POR is less than that of country focused POR, but simply a to note that this impact is more difficult to quantify and may require different tools and more resources.

Impact at the Global Level

Moving from POR that has multicountry/regional outcomes to POR that has outcomes of a global nature inevitably broadens the scope of the POR and increases the evaluation challenge. POR with a global reach not only requires global-level research, but also embraces the dissemination of research evidence and results and advocacy to change policy at a global level, perhaps even to shift the development paradigm. For IFPRI, POR with a global span includes research on thematic topics such as rural finance and water resources, economywide modeling and studies related to international trade and agricultural projections, and lastly, important international conferences organized by IFPRI, such as one on using agriculture to improve the links between nutrition and health held in New Delhi in 2011. In all of these global categories, the input-to-impact trail is hard to follow and even harder to assess.

Thematic evaluations comprise one subset for IFPRI's assessments of its global impact. An example is reported by Bennett (2013) who reviewed IFPRI's research on water resource issues from 1994 to 2010. This research had three main dimensions: global modeling, river-basin modeling, and institutional performance at various geographic scales. Over this 16-year period, IFPRI worked in an interdisciplinary way, bringing together economics, biophysical science, and other social sciences. Bennett found that the extensive research outputs (many published in prominent journals) were innovative in advancing institutional analysis and water pricing and in addressing the vexing and complex issue of water supply management. Overall, Bennett found IFPRI's research to be highly relevant to policy, for the most part at the cutting edge and widely cited by research peers, although precise evidence of influence and impact was hard to find, even at the country level.²⁸ However, Nelson et al. (2015), reviewing IFPRI's research on social protection, drew a slightly different conclusion. Drawing on country-level research studies such as that on PROGRESA in Mexico and after reviewing many of IFPRI's published papers on social protection, Nelson et al. concluded that IFPRI's research between 2000 and 2012 had given the world relevant, high-quality, evidence-based research on a wide range of topics related to social protection broadly defined and contributed greatly to the body of knowledge regarding social protection and social safety nets, particularly conditional cash

²⁸ This may have to do with shortcomings in the design of the research program. Shortcomings in the impact assessment may also be partly to blame.

transfers. By mid-decade, they judged the research to have contributed to a global "evaluation culture" for social protection and safety-net programming.

BOX 5: IFPRI'S IMPACT THROUGH RENEWAL

The Regional Network on AIDS, Livelihoods, and Food Security (RENEWAL) was launched in 2001 and became operational in several countries in Africa, including Kenya, Malawi, South Africa, Uganda, and Zambia. RENEWAL is a "network of networks" and is comprised of national networks of food and nutrition organizations and AIDS and public health workers. Its overarching goal is to provide evidence-based research on the links among HIV, food security, and nutrition that could inform actions to prevent or mitigate the scourge of AIDS. RENEWAL's strategic approach to achieving this and its lesser goals involved capacity strengthening, policy communications, action research, and the synergies resulting from their interactions.

The impact of RENEWAL between 2001 and 2010 was assessed through a review of its outputs (books, policy briefs, workshop summaries, reports, and discussion papers), stakeholder perceptions of RENEWAL products and activities, and national policy or programming changes resulting from RENEWAL-supported action research, capacity strengthening, and policy communications.

RENEWAL had a direct and positive influence on increasing understanding of the links among HIV/AIDS, nutrition, and food security, on the development of ways to respond to these challenges, and on national capacities to respond. RENEWAL's capacity-strengthening activities helped network members to conduct research, publish the results, and make it accessible to decisionmakers through concise policy briefs. RENEWAL's communications activities included the production of 32 policy briefs that were critical in helping to get everyone reading from the same page, especially understanding the two-way relationship between HIV/AIDS on the one hand and livelihoods, nutrition, and food security on the other. RENEWAL also forged links between researchers and policymakers, civil society, and community-based groups by bringing them together in National Advisory Panels (NAPs). However, some NAPS were less effective than expected owing to the absence of policymakers and other relevant actors from their membership.

RENEWAL-supported research generated a large number of outputs—over 150 publications, including journal articles, policy briefs, reports, and discussion papers. Forty-one publications on research sponsored by RENEWAL have been published in peer-reviewed journals, many of which remain widely cited, especially the book, *AIDS, Poverty, and Hunger: Challenges and Responses* (Gillespie 2006). Accessible online, these products are heavily utilized by a global audience—over 100,000 RENEWAL products were downloaded between 2006 and 2011, and nearly 6,000 visits to the web pages occurred during the same period.

RENEWAL was involved with or participated in a score of national and international workshops and conferences. The initiative helped to bring a greater awareness of the importance of food and nutrition to the global response to AIDS, as reflected in the 2006 UN declaration on AIDS* that "all people at all times [to] have access to sufficient, safe, and nutritious food ... as part of a comprehensive response to HIV/AIDS." In sum, RENEWAL's networking and research activities have contributed greatly to the body of knowledge regarding the two-way interactions between HIV/AIDS and agriculture, nutrition, and food security and particularly to identification of responses that maximize household and community resistance to HIV and resilience to the impacts of AIDS.

RENEWAL's impact has been equally significant at the national level, where its influence and technical expertise resulted in the development of HIV-sensitive sector or national policies on HIV/AIDS in all five main RENEWAL countries as well as in Mozambique and Tanzania, although the degree to which they were operationalized was less than hoped for.

Adapted from IFPRI Impact Assessment Discussion Paper 33 (Frankenberg and Nelson 2011).

* See Article 28, Political Declaration on HIV/AIDS, Resolution 60/262 adopted by the General Assembly, 2006.

In a wide-ranging review of IFPRI's capacity-strengthening work between 1985 and 2010, Kuyvenhoven (2014) was also challenged to fully discern IFPRI's impact. Strengthening national capacities for undertaking, communicating, and using evidence-based food policy analysis has long been one of IFPRI's major objectives and is commonly embedded as an objective in individual research projects and programs. Generally it is not a stand-alone objective. IFPRI has used a variety of means to strengthen capacity, including formal training, policy networks, country support, collaborative research with individuals and organizations, institutional development, support to university degree programs, support of graduate students and visiting fellows, and training of postdoctoral fellows. This work, although widespread, has tended to focus on Africa and Asia. For a broad sample of countries where IFPRI has sought to strengthen capacity, Kuyvenhoven assembled evidence using documentary sources, field visits, stakeholder interviews, and a few tracer studies.

Kuyvenhoven's assessment shows that doing research collaboratively is IFPRI's main instrument for strengthening research capacity. All the evidence suggests that collaborative research is widely appreciated and generally effective. Related to collaborative research is on-the-job training, often mentioned positively but rarely reported. Tracer surveys show that formal training courses do well on most evaluation criteria, but less so on impact. Courses are generally well appreciated, even if the new skills are not much used later, suggesting that training serves multiple goals (incentives, rewards, team building) and tends to be supply-oriented. Anecdotal evidence suggests that the influence and impact of training on the users of policy research through devices such as study tours is, at best, uncertain. In China, Ethiopia, and Ghana, IFPRI has provided support to MSc and PhD students, coupled in China with a visiting fellows program. These schemes have helped students to acquire new skills and to submit better quality theses, but Kuyvenhoven judged it too soon to discern any more substantive impact. IFPRI has also sought to fill gaps in data systems and survey capacity in large national research programs, as for example in Ethiopia where it has created lasting improvement in the capacity of the central statistical agency not only to collect data, but also to execute better and more innovative analyses. In Bangladesh and Ethiopia, among other places, the long-term presence of IFPRI staff has had an important and positive influence on the effectiveness of capacity-strengthening activities and the likelihood of long-lasting impact.

The impact of IFPRI's POR in macroeconomic and trade modeling is more readily discerned, but equally hard to measure. IFPRI's economywide modeling, carried out by a small and specialized group of staff from 1994 to 2003²⁹ was studied by Anderson (2003). During these years, IFPRI was a prolific generator of economywide modeling outputs published in numerous books and journal papers. In addition, it produced and made publicly available numerous Social Accounting Matrices (SAMs) and economywide models, plus methodologies associated with both. These modeling outputs were state-of-the-art and some clearly expanded the knowledge frontier. The range of policy issues analyzed and countries and agricultural products covered by IFPRI's models was extraordinarily wide (see Box 6).

Gauging the impact of this economywide modeling was (and remains) difficult. In this case the standard attribution problems, not least the problem of defining a plausible counterfactual in assessing the impact of methodological and policy research, are all the more difficult because IFPRI's research covered the full spectrum from basic to applied research and its dissemination, plus substantial data compilation, engagement in short-term missions, and provision of training

²⁹ This specialized division was closed in 2004 and their work is now embedded in other divisions of IFPRI.

programs. It also spanned all the major developing regions as well as multilateral and regional trade policy issues. Lastly, it covered all products and factors of production so as to ensure that the modeled interactions of the food sector with other sectors were fully incorporated. Cost-benefit analysis of the type that is possible for a single project (such as Ryan's [1999a] assessment of IFPRI's rice policy research in Vietnam) was not feasible for such a large and diverse program of research. Instead, Anderson used the less rigorous technique of a survey of stakeholders plus narratives provided by IFPRI staff.

BOX 6: THE IMPACT OF IFPRI'S ECONOMYWIDE MODELING

The uptake of IFPRI's economywide modeling outputs has been impressive. Website downloads of discussion papers from Trade and Markets Division over the 15 months prior to March 2003 were very large—105,000, or an average of 980 per paper for the 108 papers published between 1994 and 2002, or 65 per paper per month. The eight most popular had 313 downloads per month. One discussion paper was extraordinarily popular, with 22,400 downloads,* but a further 26 had more than 1,000 downloads each, and virtually all 108 enjoyed several hundred downloads. Despite their greater degree of technicality, the most popular discussion papers were the modeling papers, which comprised 67 percent of the total. This high degree of uptake would not have been possible had IFPRI's modeling work not been highly regarded by the economics profession. Further evidence of that reputation is provided by the many requests to IFPRI for copies of the standard computable general equilibrium (CGE) model and the associated training exercise manuals, as well as the hundreds of requests per year to generate and share SAMs, discuss methodological developments, present model results, take part in short-term policy missions, supervise PhD students, and conduct training courses throughout the world.

Among the many papers, one—on the likely consequences for hinterland farmers of China's World Trade Organization (WTO) accession with policy conclusions that also drew heavily on other IFPRI papers—led to widespread media coverage and to IFPRI's director general being afforded the opportunity to discuss the results with the president of China. If, as a consequence, the Chinese government boosted human capital investments in the western provinces to compensate those poor farm families likely to gain least or even lose from WTO accession, the benefits to the world of that alone would be many times IFPRI's entire investment of US\$15 million over nine years (1994–2003) in economywide modeling.

The impact assessment of IFPRI's economywide modeling (Anderson 2003) also noted that a high payoff can be expected from a project involving modeling of trade issues in 18 Latin American economies. And that IFPRI's economywide modeling work in Africa is contributing to debates over potentially high-payoff policy reforms there, including: (1) a more efficient indirect (VAT) tax system in Malawi and Mozambique, (2) a more equitable basic income grant scheme in South Africa (with potential spillovers to Mozambique and Brazil), (3) an improved policy for the oilseed complex in Morocco, (4) improved national accounts in Tanzania because of the SAM developed there, (5) use of the CGE approach in Tunisia to evaluate its prospective free-trade agreement with the European Union, (6) a World Bank loan to prevent contraction of Zambia's economy after the collapse of cooper prices, (7) a gender-enhanced CGE framework for analyzing agricultural technologies and so on, (8) an economywide approach to the analysis of the implications of HIV/AIDS for economic growth and human capital formation in southern Africa, and (9) an improved framework for exploring medium-term budget and employment projections in South Africa.

Adapted from IFPRI Impact Assessment Discussion Paper 21 (Anderson 2003).

* This was the first version of the standard CGE model by Lofgren, Harris, and Robinson, released in April 2001 prior to its more formal publication in late 2002.

His survey revealed that a majority of even the least-informed respondents believed that economywide modeling offers an extremely valuable contribution to food policy analysis, notwithstanding its complexity and the associated difficulty of communicating its results. Its main

advantages were seen as quantifying the effects of nonfood policies on the food sector and of structural or policy shocks on factor markets and thus, on income distribution and poverty. The more-informed respondents thought IFPRI's economywide modeling publications valuable, with the majority rating them extremely valuable. There was a strong consensus that IFPRI's greatest visible contributions were the production of SAMs and the methodologies for compiling them, the development of the standard CGE model, and other contributions to economywide modeling methods. The majority of respondents said that IFPRI's modeling work was both very influential and an effective global contribution to food policy.

Anderson also examined the influence and policy contributions plausibly attributable to IFPRI's modeling work in a number of individual countries (Box 6). Even though it is very difficult to attribute policy reform directly to specific influences, together the country studies strongly suggest that outputs from this research have been directly used in policy debates on major issues of direct significance to poor people in many countries. In short, that IFPRI's economywide modeling had global influence and, more likely than not, significant impact.

Finally, conferences and advocacy are the last type of IFPRI's POR that seeks global impact. In this category, and important because of its singularity, was IFPRI's policy response to the 2008 food crisis. An impact study by Hovland (2009) documents IFPRI's communications activities during the crisis and notes that they were unusual for the institute. The communications campaign included IFPRI's usual avenues and built on IFPRI's existing place in the global food policy system, but was unusual in its concerted coordination across all divisions of the institute, the relatively low number of publications, and the unusually high level of engagement with the media, as well as the large number of face-to-face presentations and meetings. Guided by the tenets of Appreciative Inquiry—a technique built on questions about, and reflections on, success—and using interviews and detailed document and website review, Hovland provides a very thorough chronology of the food crisis and IFPRI's role.³⁰

Hovland shows that, drawing on its past work, IFPRI developed its policy response to the crisis on the run. This response involved advocating policy actions to: eliminate trade barriers; increase investment in rural infrastructure and market institutions in developing countries; increase investment in agricultural science and technology; expand social protection; and include agriculture in the climate change agenda. Two of many policy briefs were particularly influential, *Investing in Agriculture to Overcome the World Food Crisis and Reduce Poverty and Hunger* (Fan and Rosegrant 2008) and Physical and Virtual Global Food Reserves to Protect the Poor and Prevent Market Failure (von Braun and Torero 2008).³¹

³⁰ Appreciative Inquiry is a wide-ranging semi-philosophical method of inquiry. It is often said to be a change-management approach that focuses on identifying what is working well, analyzing why it is working well, and then doing more of it. See http://whatis.techtarget.com/definition/Appreciative-inquiry-Al.

³¹ Fan and Rosegrant (2008) argued that sound government spending can be one of the most direct and effective means of promoting agricultural growth, which in turn is a key driver in reducing poverty and hunger. They presented ranges of estimates of the cost of achieving Millennium Development Goal 1 (MDG1)—halving the proportion of people living on less than \$1 a day and halving the proportion of people who suffer from hunger by 2015. They concluded that the global incremental public investment required—the additional amount necessary to meet MDG1—would be US\$14 billion for all developing countries. Von Braun and Torero (2008) addressed one of the causes of the food crisis, namely the malfunctioning of world grain markets. They reviewed the traditional approach of building up a physical, globally managed grain reserve, including its disadvantages, and proposed that a minimum physical grain reserve should be maintained in

Using these and other papers, IFPRI drew on its reputation as an international thought leader to engage the World Bank, International Monetary Fund, World Food Programme, UN, US government, UK Department for International Development, and many others. Its role in influencing the World Bank in the 2008 food crisis and earlier through the Bank's 2008 *World Development Report* was, Hovland explains, highly significant. IFPRI's communications were also prize-winning. Hovland notes that IFPRI was not an isolated actor during the food crisis, and cannot claim sole credit for any outcomes. But IFPRI staff understood their position within the food policy system well enough to position their communications efforts appropriately and to inform and influence other actors, who in turn informed and influenced others. IFPRI contributed to ripple effects, and IFPRI research results and recommendations percolated through policy circles. Hovland argues that it is impossible to separate out or measure this type of impact, but ultimately concludes that IFPRI helped to increase international attention to agriculture, with potential benefit to billions of people.

IFPRI's role in the 2008 food crisis was important, but in the domain of conferences and advocacy its role is best captured by the more than 20-year old "2020 Vision Initiative."³² The goal of this ongoing initiative was and remains: to refocus the world's attention on current and future challenges in food security and nutrition, agricultural development, rural poverty, and environmental protection; to catalyze a new consensus on these issues within the international policy community; and to encourage policy leaders—both in the donor community and in the developing world—to commit more energy and resources to resolving food security concerns.

This initiative has not been subjected to a single comprehensive assessment of its impact, but an early evaluation (Paarlberg 1999) concluded:

"... the impacts of the 2020 Vision initiative already emerge as substantial. At times these impacts have been significant or even highly significant, and in most other instances they have at least been noticeable. These significant impacts have also been highly cost-effective, as indicated by the tiny share of IFPRI's budget outlays (just 5 percent annually) devoted to its 2020 Vision initiative. Within the international donor community, the 2020 Vision initiative has in several instances had a noticeable positive effect on actual resource commitment decisions. Governments in the developing world were a secondary focus during much of the first phase of 2020, yet even here significant impacts were felt on policy debate. The goal of the second phase of 2020 will be to produce significant impacts on policy action inside developing-country governments as well" (Paarlberg 1999, v).

Furthermore, that IFPRI had achieved its 2020 goals to a great extent was recognized when, in 2001, the World Food Prize was awarded to Per Pinstrup-Andersen, IFPRI's director general from 1992 to 2002, who conceived of the 2020 project and guided its early implementation.

A more recent impact assessment (Paarlberg 2012) of the 2020 Conference on "Leveraging Agriculture for Improving Nutrition and Health" held in 2011 in New Delhi provides an example of

addition to a virtual reserve and intervention mechanism to calm markets under speculative situations, backed up by a fund. They urged the G8+5 to consider this option in their meeting in July 2008.

³² IFPRI's 2020 Vision is a world where every person has access to sufficient food to sustain a healthy and productive life, where malnutrition is absent, and where food originates from efficient, effective, and low-cost food systems that are compatible with sustainable use of natural resources. See http://www.ifpri.org/book-753/2020-vision.

how the 2020 Initiative is having a global impact, although direct impact on national governments has been modest. It also illustrates some of the key challenges in assessing the impact of conferences and advocacy (see Box 7).

BOX 7: THE IMPACT OF IFPRI'S 2020 CONFERENCE, NEW DELHI

The IFPRI 2020 Conference on "Leveraging Agriculture for Improving Nutrition and Health" was held in New Delhi in 2011, and attracted more than 900 attendees. Conference activities included 12 plenary sessions, 15 parallel sessions, 14 side events, an ongoing knowledge fair with more than 25 exhibit booths and tables, six informal discussion groups, and roughly 30 "rapid fire" presentations during coffee breaks. Assessing the impact of this conference is a task complicated by multiple issues including assessment coverage and impact attribution. The assessment methods include surveys of conferees, internet searches, website and literature searches, pre- and post-conference opinion surveys, and extensive personal interviews. Distinctions are drawn between short-term and medium-term impacts, and also among impacts on individuals, on institutions, and on professional discourse.

The impacts on the substantive views of those who attended the conference were found to be small. Most conferees (75 percent) came to Delhi already convinced that a cross-sector approach to agriculture, nutrition, and health (ANH) was appropriate. At the individual level, the conference affected motivation and empowerment more than beliefs. The conference gave those who attended new information, new networking opportunities, and various "positioning advantages" that made them more effective within their own institutions back home. Such advantages were primarily important in the short term.

Regarding impacts on institutions, the 2020 Conference produced important but mixed results. Direct impacts on national governments were small, in part because ministerial structures and bureaucratic routines in governments are traditionally segregated by sector and resistant to anything more than incremental change. Direct impacts from the 2020 Conference on private companies and NGOs were also modest, but for a different reason: these institutions are inherently comfortable working across sectors, so most of the private companies and NGOs participating in the conference felt little need to change. The strongest institutional impacts came within a category of organizations that wanted to integrate nutrition with agriculture, but were unsure of how, or how quickly, to move forward. These institutions include CGIAR itself as it moved to create the CGIAR Research Program on Agriculture for Nutrition and Health (CRP4); the United Nations Food and Agriculture Organization (FAO) as it responded to an internal evaluation of its own work in nutrition; and a number of donor institutions, including most prominently the UK's Department for International Development (DFID), which used the materials and policy energy generated by the 2020 Conference to help guide and push a major expansion of bilateral funding into the ANH arena. These DFID responses alone were a large enough payoff to mark the conference a success.

A third significant impact was on professional discourse. The 2020 Conference helped change the conversation about agriculture and food security by boosting the frequency of reference to cross-sector impacts on both nutrition and health. Impact measurement becomes difficult here because the conference was not the only initiative highlighting cross-sector linkages. Nonetheless, the average number of Google Internet hits per search for the phrase "linking agriculture, nutrition, and health" increased from 9,288 in the pre-conference period to 13,508 in the immediate post-conference period. Searches of organization websites revealed that 18 of 21 of the sites had more links to agriculture, nutrition, and health issues immediately following the conference compared to just before, and 20 of 21 had an even higher number of such links one year later. There was noticeably less impact on governments, partly because eonly 19 percent of conference attendees were government officials, compared to 41 percent from research institutes or universities.

In sum, the conference in Delhi sought to change the way individuals and institutions thought about agriculture, nutrition, and health. Measurable progress was made toward this goal in both the short and medium terms. IFPRI took a risk by desining the Delhi conference to challenge traditional paradigms, but the risk was rewarded.

Adapted from IFPRI Impact Assessment Discussion Paper 34 (Paarlberg 2012).

The sixth and latest conference under the 2020 Vision umbrella was held in Addis Ababa in May 2014 with the title "Building Resilience on Food and Nutrition Security." In assessing the impact of this conference, Paarlberg (2014) notes that the topic was more complex and more abstract than the one discussed in New Delhi and there were a large number of varied but immediate impacts, mostly on individuals. But the true long-term impact will not be known for at least another two or three years and "... will depend in part on the strength of IFPRI's own efforts, currently underway, to leverage its short-term 2020 Conference success in Addis into successful collaboration in the design of a distinct and fundable research agenda around the topic of resilience-building for food and nutrition security" (Paarlberg 2014, 42).

The Bottom Line

It can be fairly concluded from the studies outlined above that IFPRI has had a tangible and substantial impact, and has likely benefited a large number of the world's poor. But quantifying these benefits remains a daunting challenge, and most of IFPRI's evaluators have shied away from the task because of lack of suitable data and methods. A few attempts have been made. These studies capture just a fraction of IFPRI's work over 40 years, but provide a surprisingly large estimate of IFPRI's impact. Estimates are available for IFPRI's work on: the PROGRESA program in Mexico (Behrman 2007), Vietnam's rice market liberalization (Ryan 1999), rural roads investment in India (Renkow 2010), PSNP in Ethiopia (Renkow and Slade 2013), abolition of the rural rationing program in Bangladesh (Babu 2000), and ASTI's influence on R&D investment in Kenya and Tanzania (Norton 2010). Most studies give a range of estimates, and we use only the most conservative numbers here. Even without inflating the estimated economic benefits to 2014 prices, and subject to the various rather strong assumptions underlying the analyses, the total benefit could exceed US\$1 billion. This is enough to cover about 75 percent of IFPRI's total spending (US\$1.403 billion in 2014 prices) over the period 1976–2014. The full benefits may be much larger, especially given that these estimates do not include the additional benefits from cross-country spillovers and global public goods.

Most studies only considered the economic benefits of IFPRI's research, measured as increases in national income, economic surpluses, lifetime earnings from education, or savings in government costs. Only two studies explicitly considered the impact of IFPRI's research on the poor. Renkow (2010) estimated conservatively that IFPRI's research on rural roads in India can be credited with having lifted between 18,000 and 19,000 people out of poverty over 2005–2009, while Babu (2000) estimated that the changes to the rural rationing program in Bangladesh had a neutral poverty impact. Additionally, Renkow and Slade (2013) estimated that IFPRI's research on the Ethiopian PSNP could be attributed with leading to an additional 2.44 million people having 31 extra food-secure days per year over a five-year period. Quantifying poverty impacts seems to be much harder than capturing economic benefits, and this is clearly a topic that needs further development if IFPRI's work is ever to be fully measured against the yardstick of its primary mission.

5. LESSONS LEARNED FOR INCREASING IFPRI'S EFFECTIVENESSS

Most of IFPRI's impact assessment studies contain recommendations to help IFPRI improve its impact in the future. These recommendations (made by external evaluators within the specific context of the research project or program they evaluated) reveal a high degree of concurrence. In 2001 IFPRI, with the help of the Dutch government, held a workshop in Scheveningen, Netherlands, to review what had been learned about effective methods for assessing the impact of POR and what had been learned about ways in which the impact of POR could be enhanced. The proceedings of that workshop are found in Ryan (2002) and were later summarized in an IFPRI brief (Box 8). Subsequently, Ryan and Garrett (2003), in examining methods and approaches to evaluating the impact of POR, made a further attempt to synthesize these and other lessons on how IFPRI might increase its impact.

BOX 8: FINDINGS FROM THE 2001 SCHEVENINGEN SYMPOSIUM

The main conclusions of the symposium on how IFPRI's POR could be enhanced were:

- Set clear priorities for research at all levels;
- Improve researchers' understanding of the policymaking process, not least by stationing researchers in the developing countries;
- Improve researchers' communications skills, especially oral skills, but maintain a balance between objectivity and advocacy;
- Pay more attention to the distributional dimensions of research outcomes rather than just efficiency gains;
- Make *ex ante* and *ex post* impact evaluation a part of the core business of research;
- Undertake more multidisciplinary research, including research on policy processes;
- Build policy epistemic communities involving all stakeholders and build indigenous research capacity;
- Never compromise on quality and objectivity in the quest for impact; and
- IFPRI should take the lead in the development of a consortium to help improve interdisciplinary methods of assessing impact.

Adapted from IFPRI Impact Evaluation Brief (IFPRI 2002).

Since 2003, IFPRI has decentralized and placed about half its senior staff in regional and country project offices, and has developed a set of country strategy support programs (see Section 2). This decentralization has in effect implemented the recommendation in Box 8 to station more researchers in developing countries. It has also transformed the policy context in which much of IFPRI research is now undertaken. IFPRI researchers now have far more opportunity to engage with policymakers and national counterparts on a sustained basis, to respond in more systematic ways to local needs for policy research and capacity building, and to monitor the impact of their research. The lessons that have emerged from impact assessment studies conducted in the post-decentralization era are reviewed below. Many of the old recommendations in Box 8 have yet to be

satisfactorily addressed, while new challenges have emerged.³³ On a more encouraging note, while a full evaluation of the impact of IFPRI's decentralization has yet to be undertaken, some initial evidence provided by Renkow and Slade (2013) and Kuyvenhoven (2014) suggests that IFPRI's decentralization strategy is proving effective in building local capacity and influencing policies.

A common refrain in many recent impact assessment studies is the difficulty IFPRI still experiences in bridging the research-to-policy gap, or the 'last mile' problem. Evaluators consistently find that IFPRI's research teams produce excellent and widely cited research products, but too often these do not translate into policy influence and impact at country levels. Several factors contribute to this problem.

One such factor is insufficient attention to **advocacy and communications.** As a general rule (and with some notable exceptions), the research ability of IFPRI staff exceeds their ability to use research findings to advocate changes in policy. Simply put, effective advocacy involves a somewhat different skill set than that required for excellent research—a skill set in which the ability to communicate effectively with lay audiences trumps methodological niceties. Steps along this path include getting more from communications and advocacy by, inter alia, committing more effort and resources to editorial and presentational skills and developing a wider range of website and related tools, such as email based dissemination (Hewitt 2008).³⁴ This would also include crafting policy briefs in which key policy insights and recommendations are the main focus, rather than the procedures used to arrive at those insights and recommendations. And cultivating the capability—or at least partially refocusing the efforts—of research staff to examine existing relevant evidence on a given issue or issues from multiple perspectives and through an interdisciplinary lens. In technical fields such as economic modeling, Anderson (2003) argues for more SAMs and models to be made freely available on the IFPRI website, the provision of more back-of-the-envelope model results to assist intuition and understanding of full-blown modeling results, and more write-up of results in nontechnical policy papers, briefs, and presentations to outreach seminars and conferences—a point echoed by Nelson et al. (2015).³⁵ The essential bottom line, as advocated by Ryan and Meng (2004), is the need for each research project or program to have an explicit, tailored communications strategy.

³³ Nearly all IFPRI's impact assessments since 2003 contain recommendations related to the conduct of policy research. Many of these are specific to particular fields in the landscape of IFPRI's research and are too detailed to be included here.

³⁴ Bennett, in agreeing with this point, argues that "... policy work should be increasingly oriented to web-based publications that have better and quicker penetration into policy circles (with concurrent efforts to raise awareness of the reports online). Developing-country researchers and policymakers and advisers often do not have easy access to journals that are not open-access (and most of the top journals continue to be subscription based at least for publications less than two years old). Furthermore, the time taken in the publication process often imposes significant delays. One key benefit of journal publication, however, is that the reader has increased confidence in the quality of the research reported because of the double-blind review process usually employed by the better journals. It is important for the program team to generate and maintain confidence in their web-published reports by instituting a rigorous review process that involves referees who are entirely independent of the research work. This process needs to be coordinated external to the program to protect the anonymity of the referees. This implies the need for a review coordinator who is internal to IFPRI but independent of the program team. IFPRI should publicize this process widely to raise and maintain levels of confidence in the online reports. A negative consequence of this approach is that the publication of research results in refereed working papers may preclude their publication in journals. This highlights the choice that needs to be made in the research design of a project regarding the mode of distribution of findings. Strategies to target specific intended audiences for the results will need to be developed with the intellectual property consequences in mind" (Bennett 2003, 33).

³⁵ Nelson et al. (2015) rather unfairly compare IFPRI's attendance at conferences, symposiums, and workshops with that of organizations such as the Institute of Development Studies and the Overseas Development Institute that engage more extensively in advocacy but undertake less policy research than IFPRI.

This should include retrieval systems to track the publication of IFPRI research and the associated citation and media reporting associated with each research output (Hewitt 2008).

Another reason for the last-mile problem is the lack of a clear strategy among most research teams for attaining policy impact. More attention needs to be given ex ante to a project's **theory of change**. There should be a properly disaggregated and theorized policy impact analysis as the first step in research projects and programs (Bennett 2013; Jackson 2005; Nelson et al. 2015). There are echoes of this notion in several impact assessments, but none make the clear and unequivocal point that an explicit theory of change not only helps to clarify research objectives, but also gives form to a research project and lays out the expected path of activities, outputs, and outcomes and their timeframe, whether used ex ante or ex post. These steps inform the execution of the research and can be later picked up in an evaluation. As Ryan (2002) notes, such a theory of change might also be accompanied by an ex ante analysis of expected impact. Most theories of change start from the supply-side and map the impact pathway, beginning with the POR and working along the pathway to policy change and impacts. An alternative is possible, that is, a demand-side perspective that starts with a known policy change and attempts to work back to its causes, although this is an uncommon approach.³⁶

Why a theory of change is so frequently absent from IFPRI's impact assessments is a puzzle. In part it may reflect the absence of logical frameworks and theories of change in research proposals and research project designs. But more likely, those who undertake impact assessments for IFPRI are not versed in theory-based evaluation and underestimate the value of laying out clearly, at the outset of an evaluation, the expected impact pathway. It may also reflect the common observation in many of IFPRI's impact assessments that there is no clear impact pathway, given the many actors involved. This last observation, however, is an unsatisfactory excuse, as it is this very complexity that needs to be examined in ex post assessments as well as in ex ante proposals. Such an exploration is an important guide to both how an evaluation should be conducted and, ex ante, how a research project should be designed and implemented. Increasingly research donors are now recommending that researchers should develop a theory of change to help them think through how they can undertake research and communicate its results in ways that maximize the value of the research for policy.³⁷

English and Renkow (2007) also advocate for the use of theories of change, concluding that if practitioners are to absorb, support, or operationalize results, the results need to be derived from a framework that is understandable by the practitioners, or can at least be explained in their terms. Thus, input from other appropriate specialists should be sought at the beginning of the research design process. They argue that this might complicate matters early on, but help to broaden support for policy recommendations later, thereby increasing impact.

Importantly though, as Bennett (2013) suggests, the research team also needs to incorporate the views and ideas of policymakers and advisers on a continuous basis. The local knowledge of

³⁶ There is an extensive and sometimes contradictory literature on theory-based evaluation dating back many years (see Chen 1994 and Weiss 1997). Some analysts (for example, Vogel 2012) contend that research projects should include a theory of change ex ante to help in the process of identifying and considering the challenges that might have to be overcome in undertaking the research and in inducing policy change. Others (for example, White 2009) note that it is also an essential prelude to designing ongoing monitoring and data collection.

³⁷ See Policy Impact Toolkit available at: <u>http://policyimpacttoolkit.squarespace.com/theory-of-change/</u>.

technical research partners can also be useful in this regard, as in-country researchers may have wellestablished contacts within policy circles. They may also act as local champions of reform processes and so act to stimulate uptake of conceptual advances in the local policy context. Their integration with the research effort also provides a legacy effect: the knowledge and experience they hold after the completion of the project can provide an ongoing source of knowledge for local stakeholders and a reference point for policymakers and advisers. Avoiding the project completion "vacuum," where local policymakers and researchers have not been integrated into the project, is an important part of broadening research partnerships and ultimately increasing impact (English and Renkow 2007).

Related to the above are recommendations for IFPRI to become more **strategic in selecting its partners** within a country (Nelson et al. 2015). Choosing the right national partners for POR has an important bearing on whether research results reach and influence high-level policymakers. The right partners might be well placed or influential individual researchers, or partner organizations that have strong advocacy skills (Kuyvenhoven 2014). The right partners may also be better placed to take advantage of new opportunities to influence policies that might emerge from a crisis or a sudden change of government. Nelson et al. (2015) emphasize the need for strategic partnerships with those who are able to link "policy to action."

In addition to the last-mile problem, a number of studies highlight the challenge IFPRI faces in trying to produce IPGs at global or multicountry level (as required of a CGIAR-funded institution), while at the same time being judged largely on policy impacts assessed within individual countries. Although the dual nature of this challenge was partially addressed in the design of IFPRI's multicountry programs (MPs), which sought to generate IPGs through a set of case studies in countries facing a common problem (see Section 2), this did not always lead to sufficient emphasis on, or engagement with, the policy process in the case study countries. As Bennett argues,

"... research projects can be either supply or demand driven, but in either case, both sides of the research market need to benefit from the process. Demand-driven projects need to have a dimension that involves the production of international public goods, especially involving conceptual advancement. Supply-driven projects need to take into account the policy needs of those anticipated to be users of the projects outputs" (Bennett 2013, 34).

Another limitation of the MP approach is that, since the number of cases undertaken is generally small and the method of selecting them is based on research criteria, the approach does not necessarily lead to a portfolio of cases that have high, direct country impacts.

Several impact studies lament the lack of **multidisciplinary analysis and skills** in IFPRI's research and claim research papers are too technical and economics-oriented (see Jackson 2005 and Nelson et al. 2015). It is thought that a better balance between economics and other social science disciplines might enhance communication with policymakers and thus also policy impact. Another argument is that more multidisciplinary research, especially use of ideas and methods from political science, might improve the contextualization and policy relevance of IFPRI's work, leading to greater influence. Emphasizing this point, Nelson et al. (2015) call for a greater use of mixed methods. Proof of these propositions must await a wider deployment of such methods and new impact assessments.

Poor national capacity to undertake, communicate and use evidence-based policy analysis was identified in early EPMRs and impact assessment studies as a serious constraint to IFPRI's

potential to achieve greater impact. In response, IFPRI has set capacity building as one of its strategic goals. Yet several recent impact assessment studies still lament the lack of attention in practice to capacity building in many research programs (see Paarlberg 2005, Frankenberger and Nelson 2011, and Nelson et al. 2015). In a dedicated evaluation of IFPRI's experience with capacity strengthening since 1985, Kuyvenhoven (2014) observes that many past capacity building activities were opportunistic and undertaken within research projects that had their own objectives. Little emphasis was placed on systematic needs assessment as a way of guiding the types of local research capacity that should be strengthened. He also highlights five ways to maximize impact in building research capacity: (1) joint research; (2) training programs (especially visiting fellowships and MSc and PhD support schemes); (3) help with building basic data systems, including survey work, processing, and analysis; (4) delivering capacity building on a sustained basis through comprehensive country programs; and (5) using thematic programs that cover wide geographical areas and bring a comparative perspective. Kuyvenhoven also argues that, in all of these capacity-strengthening actions, IFPRI should focus primarily on the needs of institutions rather than individuals, and recognize the need to work with multiple partners who each have different comparative advantages for data collection, research, outreach, and policy influence. Finally, he argues that IFPRI needs to develop a more coherent strategy to guide its capacity building work, a strategy that explores the implications for staffing, budget allocations, and staff incentives and rewards.

A related issue is a lack of effective **exit strategies** for some of IFPRI's research teams, particularly those that were embedded in regional or national policy networks (Frankenberger and Nelson 2011 on RENEWAL; Nelson et al. on social protection; Paarlberg 2005 on regional networks). Such networks can quickly collapse once IFPRI leaves and funding and leadership fall off, unless due attention is given to building capacity that will sustain activity well into the future. This can be difficult to do when networks are funded through short- to medium-term grants that may not be renewed.

A lack of **priority setting** is also mentioned in several impact studies. When launching new research programs, it is recommended that IFPRI consider ways of identifying policy gaps and determining which gaps, if closed, are likely to have the biggest impact. Renkow and Slade (2013) argue this should be an institute-wide procedure, mirrored at each and every level of a research program. Such procedures are an effective, but not infallible, way of weeding out the less rewarding or higher-cost research questions. Priority setting may also help to bridge the gap between demandled and supply-driven research. By helping to drive the global agenda on food policy issues, IFPRI can help shape national research priorities, including through better-informed donors and government entities (Nelson et al. 2015). An analogous concern is to avoid "short termism;" that is, to realize that short-term impacts are easier to examine and hence are likely to receive more evaluative attention than long-run impacts, which are more troublesome to discern and to measure.

A related problem that can arise in the absence of a more comprehensive priority-setting process is the **peril of idiosyncrasy**. There are several instances in IFPRI's research record illustrating the importance of particular individuals to particular outcomes and impacts. This has, by and large, worked greatly to the advantage of IFPRI.³⁸ However, there are at least two somewhat troublesome issues related to such idiosyncrasy. First, it can lead to distortions in the research agenda, as personal

³⁸ Idiosyncrasy is not a one-way street and can lead to both positive and negative (poison well) outcomes. Examples abound; one such is the profound, but unexamined, influence of one policy researcher in Ethiopia on the design and establishment of Ethiopia's Commodity Exchange (Renkow and Slade 2013).

preferences are pursued over institutional goals. Second, idiosyncrasy is not a learned or taught skill; neither is it a replicable commodity. As such, it confers a certain amount of organizational vulnerability as leadership changes over time. The most promising route to managing these risks is through rigorous research priority setting (Renkow and Slade 2013).

A common concern in nearly all the impact studies is the lack of credible evidence available for ex-post evaluations. Very few research teams compile a systematic evidence trail about the impact of their work, leaving it to evaluators to try and create such evidence in an ex-post setting. Sadly, much valuable information relevant to the conduct and influence of research is lost as memories fade or individuals with knowledge of specific research activities relocate (Renkow and Slade 2013). Regular and well-designed **monitoring and evaluation** (M&E) along the lines discussed in Place and Hazell (2015) may be expected to pay high dividends on a number of fronts: by sustaining long-run support from developing country governments and donors alike, by providing learning and feedback loops, and by providing solid empirical data on outputs and with time, outcomes, perhaps reversing a common finding that IFPRI is not having as much policy impact as expected.

Ryan and Garrett (2003) argued early on that funding partners are no longer satisfied with activity-based progress reports. They expect output, outcome, and impact evaluation—in short an objective assessment of the actual effects of the funded program on the target population. Well-designed M&E can deliver and maintain databases of indicators for outputs, outcomes, and policy responses as the research progresses.³⁹ They also noted that the period between the conduct of policy research and the generation of lasting impact is often a long one, which makes the assembly of relevant data during the research an imperative.

Quantifying the value of impact requires data on the economic and social consequences for people, institutions, and countries. That such data are so rarely collected in IFPRI's impact evaluations must reflect, at least in part, the limited funds available for such studies. But it also reflects the absence of appropriate data collection during the implementation of the POR. Few POR projects build this kind of monitoring into their research plans, partly because theories of change are usually absent (and hence key stages or milestones in the research are not identified) and partly because the research funders or research managers fail to ask for collection of these data when the project is approved. Of course, requiring data collection may lead to an increase in costs, but that increase is likely to be small relative to the overall cost of research projects, let alone the value of positive policy change and welfare gains that may ensue. In cases where primary data collection is needed (for example, survey data on changes in crop yields or household incomes or assets) costs will be higher, but still worthwhile. Regrettably, experience shows that such data are only rarely available to the evaluators of IFPRI's POR when undertaking ex post impact studies. Among IFPRI's impact assessments, it is those where such data have been collected (or more commonly those

³⁹ Indicators have their greatest value when used to signal that the research process is on track and heading towards the intended outcome. They are measures of progress that should be built into the research project and result from relevant data collection during the research project. For example, in POR aimed at policy and/or legislative change a detailed record of all the dissemination and advocacy steps taken (as well as any adjustments to the policy) is valuable both for reassuring anxious funders that progress is on track and to later evaluators who seek to understand all elements in the process. The difficulty of defining and tracking appropriate indicators tends to increase as the size of the impact arena grows. For small, household-oriented projects, it may be sufficient to collect panel data from a sample of households, but for regional or global POR it may be necessary to track changes in policies and impacts at regional or global levels. When POR is to be evaluated in the aggregate, that is by thematic area, it is essential to select indicators that are comparable across projects and sites to allow for aggregation.

where the research project itself involved the collection of extensive empirical data) that impact has been successfully quantified (see Ryan 1999a and Behrman 2007). A methodological alternative that could help to overcome the foregoing difficulties is the use of

"... experimental or quasi-experimental approaches in the empirical assessment of POR impacts. Such methods essentially build evaluation and the quantification of impact into the research project. There has been an explosion of applications of experimental approaches to assess the impact of a variety of ARD-related topics, technology adoption and social protection/safety net programs being the most common (de Janvry, Dustan, and Sadoulet 2011). And a growing body of literature features quasi-experimental or randomized controlled trial approaches for assessing the impact of policies related to health care (Gertler and Vermeersch 2013), corruption (Olken 2007), teacher performance (Muralidharan and Sundararaman 2009), and school vouchers (Angrist et al. 2002). But to date there are no applications of these methods to agricultural policy outcomes" (Renkow and Byerlee 2014, 7).

IFPRI's Follow Up

Some recommendations arising from the impact studies have already been addressed by IFPRI. For example, the recent decentralization of many of IFPRI's staff to country-based project and regional offices and the development of country-specific strategy support programs (CSSPs) are expected to enable researchers to become more embedded, and hence influential, in local policy processes. IFPRI has also made progress in diversifying the disciplinary mix of its staff and publications (Box 9), and has expanded its communications budget and work to take advantage of new information technology opportunities, especially social media.

The funding environment for IFPRI has also changed in ways that place a much higher priority on M&E and the ability to demonstrate impact. About 25 percent of IFPRI's current funding comes from CGIAR Research Programs (CRPs), and these funds are tied to strategic reporting frameworks. Many of the larger bilateral donors (USAID, Bill & Melinda Gates Foundation, and the UK Department for International Development) also require demonstrated impact from their investments in IFPRI. These demands should not only help nudge IFPRI in some of the directions recommended by past evaluators, but should also help invigorate IFPRI's efforts to develop better ways of demonstrating and documenting its impact at country, regional, and global levels. At the time of writing, IFPRI was also in the process of developing a coherent strategy for its future capacity building work. As many of these changes entail some trade-offs in terms of costs and focus, the challenge will be for IFPRI to adapt to these new demands without risking the quality of its research programs or sacrificing the production of IPGs while continuing to seek greater impact in individual countries.

BOX 9: TRENDS IN THE DISCIPLINARY DIVERSITY OF IFPRI'S SENIOR STAFF

When IFPRI was founded in 1976, the initial PhD staff were all economists, with the exception of one nutritionist. Economists still account for 71 percent of the PhD staff, but recent years have seen significant diversification. There is now a sizeable contingent of nutrition and health specialists (11.9 percent), and a smattering of specialists in agricultural and environmental sciences, engineering, geography/GIS, anthropology and sociology, and political science.

Composition of IFPRI's PhD staff in 2015

	Number	Percentage
Economics	126	71.2
Nutrition and Health	21	11.9
Agriculture	6	3.4
Environment and Natural Resource Management (NRM)	5	2.8
Anthropology and Sociology	3	1.7
Political Science	5	2.8
Other	11	6.2
TOTAL	177	100.0

The disciplinary orientation of IFPRI's publications has also become more diversified. The share of papers published in ISI-tracked economic journals feel from 83 percent in the 1980s to about half since 2000, with a big expansion in the share of paper published in ISI-tracked nutrition, health, environment, <u>and climate change journals</u>.

The number and share of papers published in anthropology, sociology, and political science journals remains modest and shows little or no increase.

Discipline	1980s		1990s		20005		2010–2014		Grand Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Economics	69	83.1	173	71.8	330	55.2	317	50.4	889	57.4
Agriculture	0	0	9	3.7	38	6.4	31	4.9	78	5.0
Anthropology and Sociology	0	0	11	4.6	17	2.8	18	2.9	46	3.0
Political Science	3	3.6	4	1.7	20	3.4	23	3.7	50	3.2
Nutrition and Health	2	2.4	25	10.4	89	14.9	100	15.9	216	13.9
Environment and Climate Change	5	6.0	9	3.7	87	14.6	107	17.0	208	13.4
Others	4	4.8	10	4.1	16	2.7	33	5.2	63	4.1
TOTAL	83	100.0	241	100.0	597	100.0	629	100.0	1550	100.0

Trends in IFPRI publications in ISI-tracked journals, by subject matter

6. CONCLUSIONS

IFPRI has established itself as a premier research organization in the agriculture and food policy area, producing high-quality research outputs that are widely read and cited by peers. Stakeholders also appreciate the relevance and value of IFPRI's work. Impact assessment studies of IFPRI's research provide plenty of plausible narratives about policy impact. The few quantitative studies that have been undertaken suggest that, subject to some strong assumptions regarding attribution of impact, a handful of IFPRI's research could have generated sufficient economic benefits to justify about 75 percent of IFPRI's total costs over 40 years. The full benefits may be much larger. Not only are these few cases just the tip of the iceberg of IFPRI's work in individual countries, but they do not quantify the benefits that may have arisen from cross-country spillovers and regional and global public goods.

In sum, IFPRI has much to be proud of as it celebrates its 40th anniversary, yet external evaluators have identified areas where there is further scope for improvement. These include finding ways to bridge the research-to-policy gap, such as giving more attention to advocacy and communications that reach out to policymakers and broader nontechnical audiences, introducing more non-economic perspectives in its research, developing more explicit ex ante strategies in the form of theories of change for influencing policies, and being more strategic in selecting national partners who can help with outreach and policy influence as well as research. Other suggestions include being more systematic about its capacity building work and more rigorous in setting research priorities within countries. Finally, while there are inherent difficulties in evaluating POR and it may never be possible to rigorously measure the full extent of IFPRI's influence and impact, experience suggests that impact would be better measured in the future if IFPRI adopted more and better M&E systems in designing and managing its projects. For IFPRI, better M&E is a precondition for improved evaluation of its impact on poverty and a fuller assessment of its performance in fulfilling its primary mission.

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ANNEX 1: LIST OF IFPRI'S IMPACT ASSESSMENTS

- 1. **IFPRI and the Abolition of the Wheat Flour Ration Shops in Pakistan: A Case-Study on Policymaking and the Use and Impact of Research**, by Yassir Islam and James L. Garrett (December 1997)
- 2. **Measuring the Benefits of Social Science Research**, by Vincent H. Smith (July 1998)
- 3. A Proposal for Measuring the Benefits of Policy-Oriented Social Science Research, by Donghyun Park (August 1998)
- 4. **Adding Value through Policy-Oriented Research: Reflections of a Scholar-Practitioner**, by C. Peter Timmer (October 1998)
- 5. **Some Useful Methods for Measuring the Benefits of Social Science Research**, by Henry E. *Kilpatrick, Jr. (October 1998)*
- 6. **Policy for Plenty: Measuring the Benefits of Policy-Oriented Social Science Research**, by George W. Norton and Jeffrey Alwang (December 1998)
- 7. **The Value of Economic Research**, by David Zilberman and Amir Heiman (January 1999)
- 8. Assessing the Impact of Rice Policy Changes in Viet Nam and the Contribution of Policy Research, by James G. Ryan (January 1999)
- 9. **Returns to Policy-Related Social Science Research in Agriculture**, by Bruce L. Gardner (May 1999)
- 10. External Impact Assessment of IFPRI's 2020 Vision for Food, Agriculture, and the Environment Initiative, by Robert Paarlberg (June 1999)
- 11. **Assessing the Impact of Policy Research and Capacity Building by IFPRI in Malawi**, by James G. Ryan (December 1999)
- 12. **A Review of Food Subsidy Research at IFPRI**, by Curtis Farrar (January 2000)
- 13. Impact of IFPRI's Policy Research on Resource Allocation and Food Security in Bangladesh, by Suresh Babu (February 2000)
- 14. **The Production and Diffusion of Policy Knowledge: A Bibliometric Evaluation of the International Food Policy Research Institute,** by Philip G. Pardey and Jason E. Christian (January 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)

- 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)
- 17. **Evaluating the Impact of Agricultural Projection Modeling Using the IMPACT Framework**, by James G. Ryan (February 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)
- 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)
- 20. **The Impact of Economic Policy Research: Lessons on Attribution and Evaluation from IFPRI,** *by James G. Ryan and James L. Garrett (October 2003)*
- 21. Impact Assessment of IFPRI's Research and Related Activities Based on Economywide Modeling, by Kym Anderson (December 2003)
- 22. The Impact of the Food-for-Education Program in Bangladesh on Schooling Outcomes and Earnings and the Contribution of IFPRI Research, by James G. Ryan and Xin Meng (November 2004)
- 23. Strengthening Food Policy Through Gender and Intrahousehold Analysis: Impact Assessment of IFPRI Multicountry Research, by Cecile Jackson (April 2005)
- 24. **Regional Policy Networks: IFPRI's Experience with Decentralization**, by Robert Paarlberg (April 2005)
- 25. **Impact Assessment of Food Policy Research: A Stocktaking Workshop—Synthesis Report,** by Jock Anderson, Maria Soledad Bos, and Marc J. Cohen (December 2005)
- 26. **The Impacts of IFPRI's Global Research Program on the Sustainable Development of Less-Favored Areas**, by John English and Mitch Renkow (September 2007)
- 27. The International Food Policy Research Institute (IFPRI) and the Mexican PROGRESA Anti-Poverty and Human Resource Investment Conditional Cash Transfer Program, by Jere R. Behrman (December 2007)
- 28. Impact Evaluation of Research by the International Food Policy Research Institute on Agricultural Liberalization, Developing Countries, and the WTO's Doha Negotiations, by Joanna Hewitt (September 2008)
- 29. **The Food Crisis of 2008: Impact Assessment of IFPRI's communications Strategy**, by Ingeborg Hovland (*December* 2009)

- 30. **Case Study on the International Food Policy Research Institute (IFPRI) and conditional Cash Transfer (CCT) and Non-Conditional Cash Transfer (NCCT) Programs**, by Jere Behrman and Maria Cecilia Calderon (December 2009)
- 31. **Impacts of IFPRI's "Priorities for Pro-Poor Public Investment" Global Research Program**, by Mitch Renkow (October 2010)
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- 38. **Impact Assessment of IFPRI's Capacity–Strengthening Work, 1985–2010,** by Arie Kuyvenhoven (December 2014)
- 39. **Ex-Post Evaluation Study of IFPRI's Research on High-Value Agriculture, 1994–2010**, by Jonathan Kydd, (June 2015).
- 40. **Ex-Post Impact Assessment Review of IFPRI's Research Program on Social Protection, 2000– 2012**, by Suzanne Nelson, Tim Frankenberger, Vicki Brown, Carrie Presnall and Jeanne Downen (August 2015)
- 41. Workshop on Best Practice Methods for Assessing the Impact of Policy-Oriented Research: Summary and Recommendations for the CGIAR, by Frank Place and Peter Hazell