

IMPACT ASSESSMENT DISCUSSION PAPER NO. 10

EXTERNAL IMPACT ASSESSMENT OF IFPRI'S 2020 VISION FOR FOOD, AGRICULTURE, AND THE ENVIRONMENT INITIATIVE

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ABSTRACT

The 2020 Vision initiative of the International Food Policy Research Institute (IFPRI) was launched late in 1993, at a time of growing global complacency regarding international food security questions. The first phase of the 2020 Vision initiative (1993–96) featured the development of an innovative forward-looking partial equilibrium model of the international food and agriculture sector; the hosting of an extensive series of high profile conferences, workshops, and regional meetings; the publication and distribution of numerous substantive discussion papers, policy briefs, and regional synthesis papers; and the regular publication of a topical newsletter. The goal was to refocus attention on current and future challenges in areas such as food security, 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 resolve food security concerns.

The present report is an independent effort, commissioned by IFPRI, to measure the actual impact, to date, of this ongoing 2020 Vision initiative. The impacts examined include impacts on three different *audiences*: researchers and educators, international policy leaders, and developing-country policy leaders. For each of these audiences, an assessment is given as to whether the 2020 Vision initiative significantly “reached” the audience in question with its materials and messages; whether 2020 had an impact on the policy thinking of this audience; and whether 2020 actually catalyzed any new policy actions by this audience. These were difficult assessments to make, since the audiences were large, diverse, and physically dispersed, and since the thinking and behavior of these audiences has recently been influenced by so many activities in addition to 2020. The information needed to make these difficult assessments was gathered from records kept by IFPRI of 2020 conference attendees and activities, from various surveys of conference participants, from solicited personal testimony by IFPRI staff and individuals involved in 2020 activities, from materials published by other organizations working in the food security and agricultural development area, and from materials gathered from donors, international organizations, and the nongovernmental organization (NGO) community.

To summarize the findings of this report, the impact of the 2020 Vision Initiative has varied audience by audience and activity by activity. These impacts are rated in descending order as either *highly significant*, *significant*, *noticeable*, or *not noticeable*.

1. Within the first community of international researchers and educators (this is IFPRI’s traditional audience), 2020 has had a **HIGHLY SIGNIFICANT** impact. 2020 has successfully reached this first audience with numerous 2020 materials, and many of those materials have been extended—through subsequent

duplication, citation, or classroom use—to an even wider circle of potentially influential individuals.

2. Within a second community of international policy leaders, the 2020 Vision initiative has had several kinds of impact:
 - ▶ 2020’s success in reaching this second community has been **HIGHLY SIGNIFICANT**, in the sense that numerous 2020 materials were consumed by the most important members of this second audience group, and many in this group were direct participants in 2020 Vision activities.
 - ▶ 2020’s success in catalyzing a consensus within this second community is assessed as **SIGNIFICANT**. IFPRI’s **IMPACT** model projections and other materials have become a visible part of the policy debate for most in this second audience, and for some (especially in the donor and NGO communities) a highly visible part of their thinking. The 2020 Vision initiative was also relatively successful in bringing skeptics and non-specialists from this second audience into a discussion of rural poverty and agricultural development issues.
 - ▶ 2020’s success in catalyzing new policy actions by this second community was assessed as **NOTICEABLE**. Here, the most important goal was to reverse the mood of complacency among international donors, and reverse the fall in financial resources committed by donors to agricultural research and to agricultural and rural development. Aggregate levels of multilateral and bilateral donor support to agriculture continued to fall during the first four years of the 2020 Vision initiative, but this fall was eventually halted in 1997–98, and in some cases it was noticeably reversed, and in some of these cases the 2020 Vision initiative played a noticeable role in this reversal.
3. A third audience, policy leaders within the developing world, was not the primary target audience of the first phase (1993–96) of the 2020 Vision initiative. Still, some impacts were noted here:
 - ▶ 2020’s success in reaching this third audience with materials was surprisingly **SIGNIFICANT**. A number of influential developing-country leaders did consume 2020 materials and did participate in 2020 Vision activities.
 - ▶ 2020’s success in catalyzing a new consensus within this third audience was uneven but in some cases **NOTICEABLE**. Regional 2020 Vision statements were developed, refined, and discussed among developing country policy leaders in Africa, Latin America, and South Asia, and other

2020 materials did at times enter the policy debate inside some developing countries, strengthening the hand of advocates for agriculture.

- ▶ 2020's success in catalyzing new policy actions among developing country governments was assessed, so far, as NOT NOTICEABLE. In some cases developing-country governments took policy actions of the kind that 2020 might favor, yet establishing a direct causal link to the 2020 Vision initiative in these cases proved difficult. Catalyzing action in the developing world was not, however, the primary goal of 2020 in its first phase.

Catalyzing policy actions within developing countries is precisely where a new second phase of the 2020 Vision initiative will concentrate its energies. The distinctive feature of this Phase II of 2020 is the creation of "subregional networks" (initially, in East and West Africa) where African policy leaders and technocrats will engage in *country-level* 2020 visioning efforts. At the first substantive meetings of these subregional networks, late in 1998, African researchers and government officials developed country-level strategy papers suitable not only for building a stronger internal policy consensus, but also for guiding donors in search of fundable projects in the food and agricultural sectors.

In summary, from the vantage point of early 1999, 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.

TERMS OF REFERENCE

This impact assessment has been undertaken within the terms of a June 1998 research agreement (9806200.PAA) between the International Food Policy Research Institute (IFPRI) and Robert Paarlberg, Professor of Political Science at Wellesley College. The terms of reference for that agreement call for:

“...an independent external assessment of the 2020 Vision initiative’s impact since its launch, specifically vis-à-vis its two primary objectives: (i) to develop and promote a shared vision and consensus for action for meeting food needs while reducing poverty and protecting the environment; and (ii) to generate information and encourage debate to influence action by national governments, nongovernmental organizations, the private sector, international development institutions, and civil society.”

In undertaking this assessment, Paarlberg was offered the support of a small advisory committee, drawn from membership of IFPRI’s larger 2020 Vision International Advisory Committee. He was provided a complete set of 2020 publications from 1994 to the present, a complete list of 2020 meetings and presentations from 1994 to the present, a copy of IFPRI’s Third External Programme and Management Review (February 1998), results of a Beresford Group survey of 2020 Vision readers (June 1997), a summary of 2020 communication activities from 1993 to the present, a copy of IFPRI’s 1998 submission of the 2020 Vision initiative for the CGIAR King Baudouin Award, and a copy of IFPRI’s 1998 annual report. He was also given IFPRI staff support in administering a survey of 2020 event participants; he was invited to interview relevant IFPRI staff; he was given access to those IFPRI board members who attended a December 1998 meeting; he was helped in making contacts with informants at International Centers Week 1998 in Washington, D.C.; and he was invited to attend and participate in the first meeting of IFPRI’s 2020 Vision Network for East Africa, in October 1998, in Entebbe, Uganda.

Paarlberg’s own position and previous contacts with IFPRI deserve brief clarification. Paarlberg is a U.S. citizen, and an independent scholar (political scientist) who writes on international agricultural policy issues. He has served as Scientific Liaison Officer between the U.S. Agency for International Development (USAID) and IFPRI’s board. In 1994 Paarlberg authored 2020 Vision Brief No. 4, on “Sustainable Farming: A Political Geography.” In 1996 Paarlberg chaired an internally commissioned external review (ICER) of IFPRI’s methodologies, including the outreach methods used by 2020.

In 1997, Paarlberg co-authored a Ford Foundation-funded IFPRI study of agricultural policymaking processes and institutions in Uganda.

IFPRI S 2020 VISION INITIATIVE: INTENDED IMPACTS

The 2020 Vision initiative was launched late in 1993, at a time of global complacency regarding international food security questions. World grain stocks were high, international prices were low, and partly as a result external assistance for agricultural development was falling. Total external assistance to agriculture had fallen from a peak level of \$17 billion dollars in 1988, to only \$11 billion in 1993, and down to less than \$10 billion in 1994 (FAO 1996, Document 10, Table 6). Support for international agricultural research was also in decline. Core funding for the Consultative Group on International Agricultural Research (CGIAR) system (of which IFPRI is a part) had declined in real terms (after inflation) by 11 percent in 1993, and another 10 percent decline was projected for 1994 (Action Group on Food Security 1994, Table 3).

IFPRI's (then) new director general, Per Pinstrup-Andersen responded to this complacency about future world food circumstances by launching a new "initiative" within the institute. Beginning late in 1993, IFPRI sought to refocus attention and stimulate debate on critical world food issues by initiating a new series of research reports and publications designed for wide popular distribution, and by organizing a series of seminars and workshops on specific food security topics and geographic regions in the developing world. In the first two years of this 2020 Vision initiative, in 1994–95, IFPRI published 9 special discussion papers, 29 short policy briefs, and organized 35 meetings and presentations to stimulate discussion and debate. The signature event in these first two years was an international conference ("A 2020 Vision for Food, Agriculture, and the Environment") held in Washington, D.C. in June 1995, attended by 500 people from 50 different countries, where some 30 speakers made presentations.

IFPRI's central policy message at this June 1995 conference was summarized by the director general in three main points:

- ▶ Although the current global food situation might seem safe, as we move toward 2020, tremendous human suffering will continue due to food insecurity, hunger, and malnutrition in large parts of the world, and natural resource degradation will remain rampant.
- ▶ The world's natural resources are sufficient to remove this suffering by 2020, but political will may be lacking.
- ▶ Removing this suffering by 2020 will require, first of all, policies designed to improve the performance of developing-country agricultural sectors (Pinstrup-Andersen 1995).

In order to conceptualize and quantify this message, economists at IFPRI had constructed a new global food model (the IMPACT model) capable of testing the effects of different policies on long-term food balances. A baseline run of this model confirmed that world food prices would continue to decline in the future, yet at the same time food security for hundreds of millions would not improve, and in some regions (Sub-Saharan Africa) numbers of malnourished might continue to increase. An even more troubling result was generated from a run of this model that assumed a continued decline in public investments in agricultural research. Under this scenario, world food prices would stop declining and the bleak nutritional picture would become even worse (Rosegrant 1995).

For the remainder of 1995, and also into 1996–97, IFPRI pressed its 2020 Vision message by publishing more discussion papers (13 more in 1996–97), more policy briefs (18 more in 1996–97), three regional synthesis papers (for Sub-Saharan Africa, South Asia, Latin America), 6 books or booklets, 2 policy reports, and regular editions of a 2020 *News & Views* newsletter. The 2020 Vision message unveiled at the June 1995 conference was also extended globally, through several dozen follow-up symposia, plus personal presentations by the director general and staff at meetings in Belgium, Canada, Denmark, Indonesia, Ireland, Italy, Mexico, South Africa, Switzerland, the United Kingdom, and the United States, and in other countries as well.

Phase I of the 2020 Vision initiative formally concluded in December 1996. A follow-on Phase II was initiated in January 1997. In this second phase, IMPACT modeling is to be refined and improved, and the international communication and consensus building efforts will continue, but a new activity is being undertaken as well. An effort will be made to help individual developing countries design and implement their own 2020 strategies, at the national level. This part of the Phase II effort is now concentrated in Africa, where national-level visioning efforts are being done collaboratively through two subregional networks, one in East Africa and one in West Africa. The East African network includes participation by policy officials and technocrats (organized as “country teams”) from Kenya, Malawi, Mozambique, Tanzania, Uganda, and (as an observer thus far) Ethiopia. The West African network includes participation by Benin, Burkina Faso, Côte d’Ivoire, Gambia, Ghana, Senegal, Togo, and (as an observer) Niger. IFPRI’s director general, along with IFPRI’s 2020 coordinator and network coordinator, participated in the first formal meetings of these two subregional networks in Entebbe, Uganda, and Accra, Ghana, in October 1998.

Because of the high activity level of the 2020 Vision initiative, and also because of the highly visible participation of the director general in so many different 2020 activities, an impression might be gained that IFPRI, since 1994, has largely given itself over to the 2020 Vision project. This would be an erroneous impression. The 2020 budget is only about 5 percent of IFPRI’s total budget on an annual basis. Almost all

2020 work has taken place in addition to the more traditional research programs of the Institute. The small staff and budget resources allocated to 2020 at IFPRI do not compete significantly with the much larger staff and budget resources available to the core activities of the four research divisions of the institute. These divisions continue to conduct 11 multicountry programs (MPs), five global research programs (GRPs), and two synthesis activities (SYNs). Formally, the 2020 Vision initiative is listed at IFPRI as a sixth GRP, managed out of the director general's office. IFPRI's total staff consists of 138 people, and only two of these (the 2020 coordinator and regional coordinator) spend a majority of their time on 2020 Vision activities.

In its first phase, the 2020 Vision initiative was managed by a full-time coordinator between the spring of 1994 and the autumn of 1995. Since March 1998, it has been managed in its second phase by one full-time, senior-level coordinator in the director general's office. This coordinator will soon be established in a separate office, reporting to the director general. The 2020 coordinator collaborates with IFPRI's research divisions and reports monthly to IFPRI's senior management team. Much of 2020's publication work is done with the assistance of external collaborators (half of 2020's discussion papers have been authored by non-IFPRI personnel) and many 2020 activities are partnerships or are co-hosted with non-IFPRI institutes and organizations (for example, the East and West African subregional networks, co-hosted with local partners, or the June 1998 workshop to develop a 2020 Vision for South Asia, co-hosted with the Marga Institute in Colombo, Sri Lanka).

Except for the coordinator's salary, the 2020 Vision initiative has been funded from a special projects budget, not IFPRI's core budget. And, since the launching of the 2020 Vision, IFPRI's total staff and budget resources have increased significantly, suggesting that the initiative has helped other institute activities to grow. Between 1992 and the end of 1997, IFPRI's overall funding level increased by nearly 40 percent, and its staffing level (which had actually been in decline through 1993) increased by nearly 25 percent (TAC 1998). This growth in total staffing and funding was largely attributable to growth in numbers of donors to IFPRI (from 32 donors in 1992 to 43 in 1997), and many of these donors have given specifically to the 2020 Vision initiative.

At least 25 separate donors have contributed directly to 2020, including foundations, traditional bilateral donors, some private-sector donors (such as Ciba-Geigy), some NGOs (such as World Vision), and a number of international institutions (such as the United Nations Environment Programme, the United Nations Children's Fund, and the United Nations Development Programme). This diversity in 2020's donor base has been a self-conscious goal. In 1998, the 2020 Vision initiative received funding support from six different donors: the Canadian International Development Agency (CIDA), the Danish International Development Agency (DANIDA), the International

Development Research Centre (IDRC), the Swedish Agency for Development Cooperation (SIDA), USAID, and World Vision Relief and Development, Inc.

In sum, the 2020 Vision initiative has not been a replacement for IFPRI's traditional research activities, but rather it has been an attempt to leverage the strong research reputation of the institute into a wider arena of international communication, consensus building, and policy mobilization.

MEASURING IMPACT

Impact assessment efforts have recently come into fashion within the CGIAR. They are promoted formally by an Impact Assessment and Evaluation Group (IAEG), created in 1995. This IAEG produced a pilot annual system-wide report on CGIAR impacts in 1997; a second annual report was then produced in 1998. The methods used for these system-wide annual reports were highly informal. Impact claims were solicited by the IAEG and self-reported by individual centers, without substantial independent evaluation. Currently under way in the IAEG is a somewhat more rigorous impact assessment of the CGIAR's crop germplasm improvement efforts on food production, with a report expected at the mid-term meeting in 2000. A study of the impact of CGIAR innovations on poverty is expected by October 2000 (IAEG 1998a).

IFPRI's own impact submissions to the IAEG have included both 2020 and non-2020 activities. Yet the impact measurement methods presented through the IAEG are not especially well suited to the 2020 Vision initiative, which focuses more on communication and consensus building than on basic research, and more on policy change than on material changes such as germplasm improvement.

The impact measurement approach used here is one designed around the multiple intent and multi-phased nature of the 2020 Vision initiative itself. The stated intent of the initiative, in both its phases, has been to catalyze consensus and action among a variety of international audience groups. Here we shall structure our evaluation of 2020's success precisely along these two dimensions. We first consider impact by *audience group* and then by the intended *activities* of these audience groups.

MEASURING IMPACT BY AUDIENCE

The 2020 Vision initiative in its various phases has been intended for three distinct audience groups:

- ▶ Researchers and educators
- ▶ Policy leaders outside of the developing world

► Policy leaders inside the developing world

Of these three audience groups, the first has been easiest for IFPRI to reach in the past, and the third may be the most important for IFPRI to reach in the long run. An impact assessment must determine the extent to which each of these groups has been reached and influenced by the 2020 Vision initiative. We define these three audience groups more precisely as follows:

Researchers and educators would include policy researchers first of all, but also other researchers (beyond as well as inside the CGIAR system) in a position to create and diffuse new knowledge on international hunger, poverty, and environmentally sustainable food production. These researchers might be inside universities, or government research organizations (such as Kenya Agricultural Research Institute, in Kenya, or the Economic Research Service at the U.S. Department of Agriculture), or international financial institutions (such as the World Bank), or private companies, think tanks, or NGOs. Many influential educators inside school systems and universities do not conduct their own research but are positioned to extend research results to their students and to other audiences. This first audience is an important one for IFPRI to reach, yet in the short run it may have limited influence on government policy. It was precisely a desire to reach beyond this traditional audience of like-minded researchers that motivated the 2020 Vision initiative in the first place.

Policy leaders outside of the developing world would include individuals with either decisionmaking or budget authority within donor government ministries, parliaments, assistance agencies, international financial institutions, the private sector, NGOs, or the media. This important audience resides primarily in Europe, North America, Australia, and Japan. Like IFPRI itself, the members of this audience frequent Washington, D.C., and frequently speak or write in English. Unlike professionals at IFPRI, however, this audience group does not conduct research or frequently read scholarly journals, and most individuals in this second audience group know (or perhaps care) very little about agricultural development. It was the ill-informed complacency of this second audience group that triggered IFPRI's decision to launch the 2020 Vision initiative in 1993.

Policy leaders and advisers in the developing world make up a third audience group. Included in this critical group are politicians (elected or otherwise) inside developing countries in Africa, Asia, and Latin America; government ministers plus the trained technocrats and civil servants who support them (mostly inside agricultural, food, finance, and planning ministries); influential local NGO spokespersons; local private sector leaders; and the local media. This is an audience group that does not conduct policy research. Some in this audience read scholarly journals, but most do not. Some

attend international meetings where scholarly research is presented and discussed, and some read technical publications from international institutes on a regular basis, but many in this group have limited access to such materials. Many in this third audience can read in English as well as in their own language, but many cannot. While some members of this third audience travel internationally on a regular basis, others are physically distant from IFPRI and hard to reach from the industrial world.

Most of the unsolved food, rural poverty, and environmental problems addressed by IFPRI's researchers can be found within the developing countries where this third audience group resides. Yet some members of this third audience group are not only physically remote from IFPRI, they may also be physically remote from poor rural village environments within their own societies. Policy leaders in many poor countries today are urban-born, urban-trained, urban-oriented, and as a result they may be urban-biased. Sometimes no less than policy leaders in rich countries, they are prone to distraction from issues of agricultural productivity, rural poverty, and rural resource protection.

Influencing this third audience group will be most critical to IFPRI's final success, since the policy and budget decisions IFPRI cares most about are firmly in the hands of this third audience group. Yet the physical dispersion of this third audience group, plus the cultural and physical distance between this third group and IFPRI, has traditionally made direct influence a challenging proposition, and it has made indirect influence, by first influencing researchers or international policy leaders, equally uncertain. It was in hopes of reaching this challenging third audience directly, that IFPRI launched the Phase II national-level activities of its 2020 Vision initiative in 1997.

MEASURING IMPACT BY ACTIVITY

Within these various audience groups, IFPRI's 2020 Vision initiative seeks to catalyze consensus and ultimately various kinds of action. A sequence of increasingly difficult steps must be taken to achieve these final impact goals. In some cases the 2020 Vision initiative may get materials to an audience, but those materials will never be consumed. In other cases where those materials are consumed, they may still have no visible impact on consensus formation or on the content of debate. And even if a new consensus is catalyzed, new actions or resource commitments may be slow to follow. Here we shall attempt to classify 2020 impacts in an ascending order as *reach only* impacts, or *reach and catalyze consensus only*, or as impacts that have ultimately catalyzed *both consensus and action*. It will naturally be easiest for IFPRI to reach an audience, more difficult to catalyze a consensus within that audience, and more difficult still to catalyze new actions by that group.

Attribution becomes an issue at this point. Certifying that any given activity has been a direct or indirect result of 2020, as opposed to being the result of some other influence, is not a simple task, and it becomes more difficult as we go from one activity level to the next.

- ▶ We can easily enough certify that 2020 has “reached” an audience group, if we can show that 2020 materials have been received and consumed by members of that group, or if we can show that group members have participated actively in 2020 activities. The size of the 2020 mailing list does not suffice as evidence here, since reaching an audience requires more than simply “contacting” that audience, but other sources of evidence to certify reach are widely available.
- ▶ Claiming that 2020 has “catalyzed a consensus” within an audience group is more difficult methodologically, since regularly updated statements of policy belief will seldom be available for the groups in question, and since it would be difficult in any case to certify that a convergence in those statements could be traced exclusively to the 2020 initiative, rather than to some other source of influence (such as FAO’s 1996 World Food Summit conference in Rome). One solution to this problem is to seek explicit references to IFPRI’s 2020 initiative in the published work of various audience groups; this will give a less than complete answer, of course, since the influence of 2020 is probably more often visible in the unpublished internal memos and documents of audience groups, which are in turn not easily accessible to outsiders. Another solution is to credit IFPRI with progress on consensus building if it managed through 2020 to bring to its meetings representatives of groups traditionally skeptical either toward the 2020 Vision message or toward each other.
- ▶ Certifying that 2020 has catalyzed new actions within an audience group will be most difficult of all, methodologically. Some actions by policy leaders can be precisely described (budget resources spent, policy choices made), but attributing those actions to 2020 rather than to some other source of influence is exceptionally difficult. We cannot know for certain what actions would have been taken in the absence of 2020, since history is not a laboratory in which controlled experiments can be run. Even if actions advocated by 2020 have been taken (such as more spending on agricultural research), how can we know that 2020 played the lead in prompting that action? Policy leaders seldom credit others for the decisions they take, since to do so is usually bad politics. Conversely, if budget spending for agriculture were to fall after 2020, how could we know it would not have fallen even more without 2020? And how can we take into account indirect as well as direct paths of influence, including long-term indirect impacts growing

out of educational use of 2020 materials? In the assessments that follow, we address these methodological challenges on a case by case basis.

COMBINING AUDIENCE AND ACTIVITY

Putting audience and activity together, we can imagine a two-dimensional matrix of potential 2020 impacts, which combines different audiences across the horizontal with different levels of activity down the vertical (Table 1).

Table 1 Matrix of intended 2020 Vision impacts: By audience and action

	Researchers and educators	International policy leaders	Developing-country policy leaders
Reach	Traditional IFPRI role	2020 Vision, especially Phase I	2020 Vision, especially Phase II
Catalyze consensus	Traditional IFPRI role	2020 Vision, especially Phase I	2020 Vision, especially Phase II
Catalyze action	Traditional IFPRI role	2020 Vision, especially Phase I	2020 Vision, especially Phase II

This matrix of intended 2020 impacts helps us to distinguish between easy versus difficult impact goals. The upper-left-hand cell in the matrix (“reaching researchers”) represents the easiest—but perhaps least valuable—potential impact from 2020. The lower-right-hand cell (“catalyzing action among developing-country policy leaders”) represents the most difficult and probably the most valuable long-term potential impact. Traditionally, IFPRI has spent a majority of its time and energy working on impacts in the upper-left-hand portion of this matrix. The 2020 Vision initiative was revolutionary for IFPRI, first because in Phase I it moved more of the Institute’s outreach efforts beyond the left-hand column (especially upper-left-hand cell) and squarely into the center column, where catalyzing consensus and policy action among international policy leaders (especially in the donor community) became a key emphasis. Reaching developing-country leaders was also important in Phase I, but it has emerged as even more important in Phase II. Especially in the subregional networking activities of Phase II, 2020 is now trying to have stronger consensus building and action impacts in the far-right-hand column, among policy leaders at the national level in the developing world. In the analysis that follows, efforts will be made to establish where in this matrix of potential impacts the 2020 Vision initiative has actually produced results.

The information needed to carry out this analysis has been gathered from numerous sources and communications channels. Information concerning which groups have so far been reached by 2020 comes from IFPRI's existing records of attendance at 2020 workshops and conferences, plus an existing 1997 survey of 2020 Vision readers, plus a more select 1998 survey of workshop and conference attendees, plus various bibliographic surveys. Information concerning 2020's role in catalyzing consensus comes from these same surveys, plus publications from other groups, plus records of meetings in which groups participated that were initially skeptical of IFPRI or of each other. Information concerning 2020's role in catalyzing action comes from surveys, from public records of government budgets and policies, and from private correspondence or conversations with first-hand or second-hand participants in various action processes.

GROUPS REACHED THROUGH 2020

The first potential activity impact of the 2020 Vision initiative was to reach new audiences—including policy leaders as well as researchers—with IFPRI's latest thinking about world food problems, rural poverty, and environmental protection in the agricultural sector. In pursuit of this goal, IFPRI since 1994 has organized a steady stream of 2020 workshops and conferences, and has distributed a flood of publications.

THE REACH OF 2020 PUBLICATIONS

Up through February 1999, IFPRI had produced and distributed through the 2020 initiative a total of 7 books and booklets, 2 food policy reports, 27 discussion papers, 59 policy briefs, 5 syntheses, and 16 newsletter issues. Roughly 394,000 separate publications had gone to those on IFPRI's 2020 mailing list, which contained the names of 5,522 individuals. Another 63,000 publications had gone to others by request. By region, 55 percent of mailing list recipients are in Europe or North America, while the rest are in Asia and elsewhere in the developing world.

All 2020 publications have been available in English, but selected items are translated into French and Spanish. Of those on the 2020 mailing list, 141 receive materials in French, and 108 receive materials in Spanish. Individual publications or selected research results have also been translated into Danish, Dutch, German, and Japanese. The 2020 initiative also keeps a website, which was visited by 30,000 people in 1998, with 22 percent of these visitors coming back 8 or more times. During 1998 alone, IFPRI's site received 530 separate e-mail requests for 2020 materials. When IFPRI first launched 2020, materials were often pushed onto intended readers; today, as often as not, these readers are pulling materials out of IFPRI.

Of those to whom 2020 publications are mailed, how many are actually “reached” in the more narrow sense that they have consumed these publications carefully enough to have an opinion about them? IFPRI could be reaching fewer people than it has on its mailing list, since some regular recipients of 2020 materials probably never read them. By another line of thinking, IFPRI could be reaching many more individuals than the 5,000 on its mailing list, since its materials may not only be read by the recipient, but also shared, copied, subdistributed to individuals not on IFPRI’s mailing list, or used in wide-ranging training and education activities. IFPRI’s 2020 policy briefs, in particular, lend themselves to this kind of secondary distribution and consumption.

At a minimum, we do know that a substantial number of those on IFPRI’s mailing list are appreciative consumers of the 2020 materials they receive. In 1997 the Beresford Group (Beresford Group 1997) sent a two-page survey to all 3,356 individuals then on IFPRI’s international 2020 publications mailing list, via the *News & Views* newsletter. Although this was a highly indirect method of soliciting responses, a total of 452 individuals nonetheless took the trouble to complete and return the survey questionnaire within the time allowed, a response rate of 13 percent. The final response rate was slightly higher, at 16 percent. Those who replied had an overwhelmingly favorable view of 2020 publications, with 74 percent finding these materials “very useful” and another 24 percent finding them “somewhat useful.”

There were indirect suggestions, from this questionnaire response, that 2020 materials were being widely shared. Of the 452 tabulated respondents to the survey, 136 (30 percent) were either teachers, journalists, or librarians, in a position to spread 2020 materials indirectly to many wider audiences. Almost two-thirds of the respondents from universities and educational institutions reported using 2020 materials in graduate or undergraduate courses. Senior academics confirm the frequent use of 2020 discussion papers in both graduate and undergraduate curricula.

What kinds of individuals are being reached by 2020 publications? If we take the demographic profile of the 452 reader survey respondents as possibly representative of the larger profile of all being reached, we can see that 2020 materials have been moving far beyond IFPRI’s traditional audience in the research community. Of the 452 respondents, only 21 percent classified themselves primarily as “researchers,” whereas a slightly larger share of these respondents (26 percent) classified themselves as primarily policymakers, policy advisers, or journalists. This is the “policy leader” audience that 2020 is most anxious to reach. Most of the remainder of respondents classified themselves primarily as teachers, librarians, or “general managers.” Regionally, 54 percent of researchers who responded worked outside the developing world (in largely West Europe and North America). Of the policy leaders responding, half worked outside of the developing world (the center column audience in the matrix shown above), and

half were actually policy leaders within the developing world (the harder-to-reach third column in the matrix).

Summarizing with reference to the matrix of potential impacts presented above, we can estimate that 21 percent of those reached by 2020 publications are primarily researchers, 13 percent are international policy leaders, and 13 percent are policy leaders from developing countries.

THE REACH OF 2020 WORKSHOPS, CONFERENCES, AND PRESENTATIONS

Between February 1994 and June 1998, IFPRI hosted or sponsored 88 separate meetings devoted primarily to 2020 Vision publications or activities. Some were two hour briefings, some were two-to-four-day seminars, some were brainstorming sessions, and some were consensus-building dialogues. Significantly, all but about a dozen of these meetings were held away from IFPRI headquarters in Washington, D.C. Following the international conference of June 1995, follow-up activities took place in more than 40 industrialized and developing countries around the world.

Significant numbers of individuals have been reached by these conferencing activities, including those who attended (500 attended the June 1995 meeting alone), and the smaller number who were active participants as invited speakers. When asked in 1998 to compile a complete list of invited speaking participants at these various 2020 meetings, IFPRI staff assembled a list of 213 individuals, from around the world. When a confidential survey was then mailed (from Paarlberg) to the last known addresses of these 213 individuals in August 1998, a total of 68 of them (32 percent) eventually responded.

We can assume that those interested or loyal enough to respond to this 1998 survey have definitely been reached by the 2020 Vision initiative. Who are these people? Of the 68 respondents, 30 were researchers or administrators from research institutes (though all but 5 were from beyond the CGIAR system), while among the 38 nonresearchers, 23 worked in the industrial world and 15 worked in the developing world. Compared to those reached by 2020 publications, actual speaking participants at 2020 meetings have therefore been slightly more oriented toward research (44 percent versus 21 percent). This reflects the fact that the role of most speakers has been to share research results. This group of speakers has also been more often located in the category of "policy leaders." Within the developing world they have included a deputy prime minister, regional directors and subregional representatives of UN special agencies, a principal economist with a regional development bank, a senior adviser to a minister of agriculture, a central bank economist, the head of a farming systems program, and chair

of a resource-protection NGO. This suggests that the 2020 audience has already grown to include significant numbers of individuals from column three in the matrix above.

The confidential opinions expressed by these speaking participants about 2020 were largely positive along two dimensions. When asked if they had subsequently “made professional use” of the information or of the personal contacts gained through the 2020 Vision event in which they participated, all but two of the 30 researchers said yes, and 29 of the 38 nonresearchers said yes. When asked if their past or present associations with 2020 had helped them to be “more effective in doing their job,” 22 of the 30 researchers said yes, and 30 of the 38 non-researchers said yes. When this survey group was asked parenthetically about the value of 2020 publications, 59 percent cited 2020 discussion papers as especially useful, 47 percent cited policy briefs, and 21 percent cited the *News & Views* newsletter.

The results of this survey suggest that a substantial portion of the 213 individuals who were invited to participate as speakers in 2020 events (judging from the 32 percent who responded to the survey) had a positive experience, and came away from those events personally and professionally more attentive to IFPRI research products and to the 2020 message. One of IFPRI’s goals in designing these 2020 events was to gain the attention of nonresearchers, especially policy leaders. The fact that more than half of those responding to the 1998 survey were from the “policy leader” category again suggests that some success was achieved here.

Meetings and conferences were also indirectly useful in triggering local and international media attention to the 2020 Vision initiative. IFPRI prepares and disseminates news releases and invites local and international media to all major 2020 meetings. A 2020 Vision workshop in South Africa in June 1996 was covered by 11 local newspapers. Overall, the 2020 Vision initiative has been mentioned in more than 300 newspaper and magazine articles, including features in the *New York Times*, *Financial Times*, *Asian Wall Street Journal*, *Toronto Globe & Mail*, *Berlingske Tidende* (Denmark), *Yomiuri Shinbun* (Japan), and *India Monitor*. Interviews with 2020 researchers and communicators have been broadcast by the BBC, CNN, Channel Earth Television, National Public Radio, and Voice of America, plus many local radio and TV outlets, especially within developing countries.

We may conclude in this section that the reach of 2020 Vision publications and meetings has been highly significant. Phase I of 2020 has helped extend IFPRI thinking about world food, poverty, and environmental concerns far beyond the rather narrow cadre of researchers and academic journal readers that had earlier been the Institute’s most attentive core audience group. Policy leaders have been reached by this initiative,

including (even in Phase I) a significant number of policy leaders in the developing world.

CATALYZING CONSENSUS THROUGH 2020

Beyond the task of reaching influential individuals, the 2020 Vision initiative was designed to “promote a shared vision and consensus” among those individuals. Direct evidence of 2020’s impact on the shape of opinion or on the direction of a policy debate is naturally going to be harder to assemble, as noted above. Here we shall concentrate on two kinds of indirect evidence. First will be evidence that 2020 has catalyzed consensus by successfully bringing together individuals with differing points of view. Second will be indirect evidence of 2020’s impact on debate in the form of references to 2020 in published, unpublished, or testimonial materials, from various members of 2020’s larger intended audience.

BRINGING TOGETHER DIVERSE POINTS OF VIEW

Building a consensus requires bringing together individuals with differing points of view, especially views that differ from the 2020 Vision itself. To assess 2020’s performance here, we can begin by imagining three categories of individuals who probably did not share the 2020 Vision initially, when the initiative was first launched late in 1993.

- ▶ First would be international policy leaders and policy advisers with little or no background in agriculture, and hence with no clear understanding of the role agricultural productivity growth can play in more rapid economic development and poverty reduction, and with little knowledge of the need for regular investments in agricultural research.
- ▶ Second would be leaders from within the commercial private sector, who may be well informed about the performance of food and farm markets, but who are often less well informed about those living in rural poverty who are not visible users of these markets. Leaders from this sector are also not primarily concerned with the “externalized” environmental effects of markets.
- ▶ Third would be nonagriculturalist leaders from private foundations or the NGO community (or elsewhere within the noncommercial private sector), who are often attentive to poverty and environmental externalities but have recently grown

mistrustful of markets and skeptical toward the benefits of science-based agricultural productivity growth.

How well represented have these various “skeptical” groups been in 2020 activities to date, either as members of the 2020 international advisory committee, or as authors of 2020 publications, or as participants in 2020 meetings and activities?

A number of nonagriculturalist public officials can be found among the members of the 2020 international advisory committee (IAC). Of the 47 individuals listed as committee members on February 1, 1999, as many as half might be classified by affiliation in this category. Many of these IAC nonagriculturalists do, however, come from within the larger development cooperation community. In this regard they can be useful instruments for increasing attention to food and agriculture within that development community. A problem would remain, however, of selling the 2020 Vision to a wider political audience skeptical of all development cooperation efforts.

The 2020 IAC does include a number of NGO representatives. The majority, however, are from nutrition, development, or population-oriented NGOs, rather than from the environmental NGOs that are most prominently skeptical toward IFPRI's embrace of science and market-based rural development. At the same time, largely missing from the IAC is significant representation from the profit-making private sector. The difference of views represented within the 2020 IAC is thus significant, but mostly along a dimension of how large a role agricultural productivity growth should play in international development assistance and cooperation efforts. Given the recent decline in agriculture's fortunes among some donor governments, it is perhaps appropriate that an IAC for 2020 has been constructed to embrace both sides of this divide within the development community.

The authors of most 2020 publications are a less diverse group. This is partly to be expected, since the discussion papers (and the briefs that traditionally grew out of these papers) have been primarily research reports, rather than pieces of advocacy. This avoidance by 2020 of pure advocacy tends to confine the authorship of discussion papers and briefs to a somewhat narrow range of researchers and academics. For consensus-building purposes, it is advantageous that many of the researchers and academics that have authored these publications have at least been from non-IFPRI, non-CGIAR institutions.

While most discussion paper authors have been food or agriculturalist researchers who largely share the professional background and vantage point of IFPRI's own researchers, the 2020 policy briefs have recently come to provide a more diverse set of viewpoints. Less than half of the briefs now being published are merely summaries of

longer discussion papers, and an increasing number are being authored by nonacademics. The current practice at IFPRI is to stress much greater diversity in the commissioning of policy briefs. It is now the practice to commission “collections” of six to eight separately authored briefs around single controversial topics (for example, agricultural trade negotiations, agribiotechnology). This so-called “2020 Focus” format will move the policy briefs farther away from reporting isolated academic research results and closer to reporting differing views on current policy issues. This could strengthen the consensus-building capacity of 2020 considerably.

Until now 2020 has made its most self-conscious efforts at consensus building through publication of its *News & Views* newsletter, which regularly features a wide variety of viewpoints. A review of individual remarks directly quoted in the first 16 newsletter issues (up through November 1998) reveals quotations from a total of 187 individuals, including 28 public or government officials from nonfood or nonagricultural organizations and 29 individuals from (primarily) nonfood or nonagricultural NGOs, including a number of population, environmental, habitat, and gender-focused NGOs. One *News & Views* issue that focused on the population boom quoted six different individuals from nonfood, nonagricultural NGOs. Another issue on environmental matters quoted three nonfood, nonagricultural NGO spokespersons. An issue on women quoted five different non-food, non-agricultural individuals, including three public officials alongside two NGO spokespersons. *News & Views* issues on urbanization and violent conflict were comparably diverse in the sources quoted.

Private company officials were almost never quoted directly in these *News & Views* issues, but individuals obviously sympathetic to private companies (from the media or from independent think tanks) were given room to speak. One newsletter issue featured two directly contrasting critiques of the 1996 World Food Summit, one from an anti-poverty NGO leader on the left and the other from a defender of capital-intensive farming in the United States on the right. This kind of diversity is rare among publications in the field of food policy and agricultural development. IFPRI's publication of this *News & Views* newsletter may be a highly indirect indicator of consensus formation, but it is significant nonetheless, since before 2020 no publication containing this same breadth of views on food, environmental, and developmental issues had ever been produced.

Significant numbers of 2020 meetings and conferences have also featured the kind of diversity that makes consensus formation possible. In April 1995, a 2020 conference on land degradation included not only top academics and CGIAR scientists, but also activists, project managers, and an analyst from an environmental think tank. A May 1995 conference on pest management included not only top representatives from several agrochemical companies (Monsanto, Ciba-Geigy), but also a selection of environmental

researchers and advocates (from the World Wildlife Fund and the World Resources Institute). One agrochemical representative who attended this conference reported later that “The experience of being locked up for several days with adversarial greens provided useful insights and development for me.” In September 1998, the 2020 project revisited the pest management topic by hosting a panel discussion in Washington, D.C., which featured well known participants from academia, industry, and an NGO (though in this case it was the academic participant, rather than the NGO participant, who most directly opposed industry). This single panel discussion attracted more than 70 non-IFPRI participants. In December 1998, 120 people attended a discussion on U.S. agricultural aid to developing countries, hosted by 2020, featuring a subcabinet level official from the U.S. Department of Agriculture and a top official from a leading U.S. farm lobby group, the National Association of Wheat Growers. For consensus-building purposes, some of IFPRI’s most successful 2020 meetings are those that bring together individuals with divergent views.

Not all 2020 meetings have been designed with consensus building in mind. Many 2020 meetings are simply briefings by IFPRI staff, which will naturally tend to attract audiences of the already converted, and some 2020 conferences are designed from the start to include primarily the like-minded (for example, a November 1994 conference of mostly CGIAR scientists on “ecoregions of the developing world”). The June 1995 Washington conference that launched the project was itself notably light on representation by the environmental NGO community, and it attracted almost no participation by the profit-making private sector (admittedly, not a priority audience for 2020 at that point).

It should be noted that IFPRI as an institution is exceptionally well positioned to pursue the consensus-building mission. In Washington, D.C., the debate on development policy tends to be heavily and self-consciously dominated by the World Bank, and it therefore breaks down quickly into a polarized contest between “pro-Bank” and “anti-Bank” views, sometimes silencing those who would want to take a middle ground. IFPRI researchers, who often take positions somewhere between Bank and anti-Bank views, manage to retain credibility in both camps. The anti-Bank camp respects IFPRI’s emphasis on hunger alleviation and poverty reduction, while the pro-Bank camp respects IFPRI’s technical competence. The 2020 Vision initiative has capitalized on this positioning and credibility advantage, by bringing individuals and institutions with differing views into the 2020 project together, in a setting where they can talk and listen to each other.

INFLUENCING POLICY DEBATE

Beyond the bringing together of differing points of view at 2020 events or in 2020 publications, is there any evidence that the 2020 Vision initiative has influenced actual policy debates? Here we consider four different settings in which such an influence might be noticed: international institutions, NGOs, donor governments, and developing-country governments. But first we examine 2020's single most prominent instrument of influence, the IMPACT computer model, which makes policy-sensitive projections about future food production and consumption circumstances.

The IMPACT Model

Some of 2020's strongest impacts in the area of consensus building have come through development and use of IFPRI's International Model for Policy Analysis of Agricultural Commodities and Trade (IMPACT). This global partial equilibrium model of the food and agricultural sector covers 37 countries and regions and 18 commodities (including livestock products). It is specified as a set of assumed country-level supply and demand relationships, linked through trade. This model is capable of generating estimates not only of future food consumption, but also lack of consumption (such as estimates of child malnutrition). IMPACT was used to generate the baseline and alternative scenarios out to the year 2020 widely publicized at the June 1995 conference, and it has been used prominently for a variety of related purposes since that time.

The IMPACT model has brought IFPRI views and concerns about food consumption and food markets into the arena of public debate. Past debates about world food prospects were often dominated by competing projections from the World Bank, FAO, or USDA, plus the prognostications of independent think tanks such as WorldWatch Institute. Since development of the IMPACT model, projections from IFPRI have routinely been included in any review of future world food balances. In 1995, when a heated international controversy emerged over China's likely future grain import needs, IFPRI emerged as a major player in this debate by using its own independent IMPACT model projections (Huang, Rozelle, and Rosegrant 1995). In 1998, when a financial crisis swept through East Asia, the IMPACT model was available to generate contingent projections for impact on food production, consumption and trade (Rosegrant and Ringler 1998). The IMPACT model is undergoing constant improvement. For example, water constraints have recently been incorporated into the model. Pending financial support, fisheries products might be added as well. The 1998 Technical Advisory Committee (TAC) of the CGIAR review suggested that IFPRI also consider upgrading IMPACT into a full CGE model (TAC 1998, 34).

While the IMPACT model is operated by IFPRI, its results have been used or repeated widely beyond IFPRI. Officials inside USAID report that they value this 2020 model because it generates estimates of numbers of malnourished people, and because IFPRI staff are so responsive in running alternative scenarios through the model. Some of IMPACT's heaviest use has been within the CGIAR system itself. Almost every CGIAR center uses the IMPACT model in one way or another. The director general of the International Irrigation Management Institute reports attaching his own numbers on water results, so as to generate additional spin-off estimates. The director general of the International Livestock Research Institute reports having used 2020 materials on livestock product demand in combination with IMPACT model estimates, to improve his own institute's medium-term planning operations. IMPACT model results have also been used by the TAC, as an alternative to the less formal "congruence" analyses done by FAO.

Compared to the "congruence" approach used by FAO, the 2020 IMPACT model is more credible because its assumptions are more transparent. Even the private sector has made use of the IMPACT model. Monsanto, after participating in a 2020 roundtable discussion at IFPRI, asked the IMPACT model to run scenarios based on possibly large future yield increases for various crops. IFPRI's policy is to make its responses to such requests publicly available as well as available to the company in question. Armed with IMPACT model projections, IFPRI has emerged since 2020 as one of the top players in public debate surrounding future world food prospects.

The precise influence of 2020 activities (including the IMPACT model) on actual policy debate is of course difficult to measure. It has varied across different institutions and settings. One way to estimate this varying influence is to solicit testimony and review relevant published and unpublished materials from a range of relevant institutions, including international institutions, NGOs, donor governments, and developing country governments.

International Institutions

Food and Agriculture Organization of the United Nations (FAO)

The 2020 Vision initiative appears to have had only a light influence on thinking at the Food and Agriculture Organization (FAO) of the UN, no doubt because of FAO's heavy prior investment in developing its own institutional views on many of the same subjects. FAO had published its own "Agriculture Toward 2010" study just prior to the launch of the 2020 Vision project and has naturally tended to draw most heavily on the projections its own staff had made in this respected and widely circulated document.

Also, it must be said that top leaders at FAO initially viewed IFPRI's 2020 Vision initiative as something of a rival activity, though this attitude has diminished with time. FAO staff and IFPRI maintained personally close and highly productive working relationships throughout the period, sharing information and analyses prior to both the 2020 Vision conference of 1995 and FAO's World Food Summit conference in Rome in 1996.

IFPRI staff commented on the technical papers that were in preparation prior to the Food Summit, and IFPRI's director general gave a special 2020 seminar in Rome (at IFAD) just prior to the formal opening of the summit. When FAO finally published its three volumes of technical documents for the summit (FAO 1996), it referenced 2020 only lightly in its summary statement on food production and environmental impact. In its summary statement on food security and nutrition, both 2020 and non-2020 IFPRI materials were referenced heavily, partly because the principal author of that section (Joachim von Braun) had close IFPRI ties.

FAO's policy preferences are not substantively different from most of IFPRI's 2020 Vision themes, so influencing debate at FAO was never a strong 2020 priority. In the one area where FAO and 2020 have had clear differences (FAO's preference for stressing "high-potential areas" in Africa versus IFPRI's emphasis on the importance of agriculture in low-potential areas), there is little evidence that FAO's views have been modified as a result of 2020.

World Bank

Formal policy positions taken by agriculturalists at the World Bank seem to have been affected only slightly by 2020. Soon after the 2020 initiative was launched, the Agricultural and Rural Development Division within the World Bank drafted a new rural sector strategy. This new strategy document, drafted between mid-1995 and mid-1996, makes only slight reference to 2020. The document (World Bank 1997) cites IFPRI projections of world cereals production trends and of world urbanization trends, but it does not borrow directly from any 2020 materials when it goes on to raise the alarm about declining resource commitments to agriculture and agricultural research. Senior Bank officials presiding over the drafting of this document had been members of the 2020 international advisory committee and had participated in the 1995 Washington conference, and these senior agricultural policy officials inside the Bank report that they did value the 2020 Vision initiative, because they saw it reinforcing their own "reasoned and rational discussion of food security issues." Yet they are reluctant to say that 2020 altered their own views in any way.

2020's larger impact inside the Bank was on nonagriculturalists, for whom issues such as hunger or rural poverty had recently been declining in priority, and on some senior generalists. Ismail Serageldin, the Bank's vice president for environmentally sustainable development, CGIAR chair, and a member of the IAC, spoke at IFPRI's 2020 conference in June 1995, and testified there to the influence of 2020 on his own thinking. He said he had "carefully followed your deliberations, read the drafts of studies produced in preparation for this conference, and been actively engaged in some of the preparatory events leading up to it." Serageldin has subsequently asserted that inside the Bank, 2020's one-page policy briefs had been of value in convincing others to refocus on food and agriculture. Serageldin testifies that 2020 materials were heavily used in preparation of the Bank's background paper on global food supply prospects, prepared for the 1996 food summit. Indeed, half a dozen references to 2020 materials are found within that World Bank document (Ingco, Mitchell, and McCalla 1996).

The impact of 2020 materials on Bank President James D. Wolfensohn is described by some informants as less visible, partly because Wolfensohn already had strong views on agriculture, dating from his visits to the International Maize and Wheat Improvement Center (CIMMYT) years ago with the Rockefeller Foundation, and partly because rural development advocates inside the Bank itself provided a more proximate source of sensitization for him on these issues.

Among the materials most often cited by Bank staff as influential on debate, the most prominent is Gordon Conway's book, *The Doubly Green Revolution*. Here, IFPRI and 2020 can claim some indirect impact, since Conway acknowledges that his writing of this influential book was based in part on 2020 materials (he had become familiar with IFPRI's 2020 work while serving as an IFPRI board member). Others testify that inside the Bank, particularly at the critical country director level, 2020 materials and activities have helped advocates for agriculture make their case, whenever rural development projects have had to compete with other priorities.

United Nations Development Programme (UNDP)

The United Nations Development Programme, in New York, appears to have made only slight use of any IFPRI materials, 2020 or otherwise. Individual UNDP officials are strong supporters of 2020, and UNDP Assistant Administrator Anders Wijkman spoke at the June 1995 conference, where he endorsed the emphasis on small farmers that IFPRI had built into 2020, but published UNDP Human Development Reports make little or no reference to 2020 materials or to other IFPRI materials for that matter. This is in part because they are seldom focused directly on rural development issues. The 1998 Human Development Report focused on consumption issues, and did

make one reference to IFPRI's 1997 policy report, a 2020 report entitled *The World Food Situation*, but FAO was cited eight times in this same UNDP report (UNDP 1998).

A closer relationship between UNDP and 2020 now seems to be in the offing. Gustave Speth, the UNDP administrator and an IAC member, has initiated closer coordination between UNDP country representatives and the IFPRI 2020 Vision initiative. This coordination makes sense, given the natural synergy between many of the national level "visioning" activities promoted by UNDP and the new national level thrust of Phase II of 2020 at IFPRI.

World Food Programme (WFP)

Officials at WFP in Rome have drawn extensively on 2020 publications and analyses when preparing policy proposals for presentation to their Executive Board. WFP's policy dialogue with its membership, on future policy directions for "food aid for development" drew prominently on 2020 Vision materials.

African Development Bank (ADB)

Officials at ADB drew heavily from 2020 materials and themes when drafting their new agricultural sector strategy.

Inter-American Development Bank (IADB)

IADB has been a strong partner in the 2020 initiative, and has helped sponsor a number of workshops in the region. This, in turn, has fed back into IADB's own operations. Ruben Echeverria, senior economist at IADB, reports having used 2020 materials to prepare internal agricultural and rural development guidelines and strategy documents.

Nongovernmental Organizations (NGOs)

A number of private research and advocacy NGOs have made substantial use of 2020 materials.

World Resources Institute (WRI)

WRI, a foundation funded environmental policy think tank in Washington, D.C., has incorporated 2020 materials directly into its periodic examinations of "food and agriculture" issues. For basic food production and consumption data the WRI still

depends most heavily on FAO, but in its forward looking analysis it turns in part to IFPRI and 2020 materials. The *World Resources 1996-1997* report from WRI summarized 2020 projections alongside FAO projections, made explicit references to "IFPRI's model" (the 2020 IMPACT model), cited three 2020 publications, and ended its discussion with an explicit reference to the 2020 Vision project and with a direct citation of six policy steps for the future that were endorsed from early 1995, a 2020 Vision document (WRI 1996).

Bread for the World (BFW)

BFW likewise makes heavy use of 2020 materials. For example, BFW's 1997 *Annual Report on the State of World Hunger* cites 2020 Vision projections for food production and consumption in Africa alongside FAO's projections for 2010 and reproduces several vignettes on hunger, verbatim, from a 2020 Vision booklet (BFW 1997).

BFW also made extensive use of 2020 Vision materials in the drafting of a successful legislative proposal later introduced into the U.S. Congress, called "Africa: Seeds of Hope." Beginning late in 1997, Bread for the World staff drafted this measure in part by using 2020's Africa regional synthesis paper. Additional information was gathered through direct conversations with IFPRI research staff, especially Chris Delgado (one of the authors of the synthesis document). A wider variety of 2020 publications was used in drafting the educational and support materials for this Seeds of Hope bill, which BFW then mailed out to mobilize its membership. The bill, which was passed by the U.S. Congress in the fall of 1998, now requires USAID to develop improved plans for microenterprise in Africa and to coordinate U.S. support for agricultural research, gives USDA new authority to purchase commodities for food assistance, and encourages the Overseas Private Investment Corporation (OPIC) to expand its work with Africa's rural populations. This new law also imposes reporting requirements to ensure that its objectives are met.

Further synergies between 2020 and Bread for the World are now developing. BFW has been given a grant to prepare a national curriculum on agriculture for groups in the United States, such as the Future Farmers of America, and the authors of this curriculum are drawing heavily on 2020 Vision materials, especially 2020 issue briefs.

WorldWatch Institute

WorldWatch Institute, a highly visible private think tank operated by IAC member Lester Brown, does not make a practice of citing IFPRI or 2020 materials, and at times WorldWatch projections and IFPRI's IMPACT model projections have been sharply at

odds. Brown nonetheless testifies personally to the larger value of 2020 materials. Brown cites, in particular, a 2020 discussion paper produced in 1997 on water resources in the 21st century. Brown also notes the value of having IFPRI focus, more openly through 2020, on *future* world food prospects, as it helps him encourage others to take a more forward-looking view as well.

The Union of Concerned Scientists (UCS)

UCS made early contact with the 2020 Vision initiative, at a half-day seminar held at IFPRI in September 1994. Until his untimely death early in 1999, Henry Kendall was an IAC member.

World Vision

World Vision is the largest privately funded NGO in the world, with an annual budget of \$430 million, roughly 40 percent of which now goes for development. In 1995, the Washington, D.C. office of World Vision/USA drafted a "Food Security Strategy Paper," which drew heavily on participation in 2020 briefings and events and on 2020 materials. The principal author of the World Vision strategy paper reports finding IFPRI's 2020 materials to be more useful than comparable materials from the World Bank, FAO, or USDA. The 2020 IMPACT model projections that saw hunger increasingly centered in Africa squared with World Vision's own rapidly developing interest in doing more food production work in Africa. This new strategy paper—which contained explicit references to the 2020 Vision project—caught the attention of top World Vision leadership. A synopsis of this report received a favorable response when presented to World Vision's international board in the fall of 1998, paving the way for larger World Vision investments in food production work in Africa. In its efforts to extend valuable food production technologies in Africa, World Vision is now partnering with a number of CGIAR centers, including most recently with IFPRI. World Vision has even become a modest donor to the 2020 Vision initiative.

Consortium for International Earth Science Information Network (CIESIN)

The Consortium for International Earth Science Information Network (CIESIN), a Washington-based organization that promotes international assistance to agricultural research and development, reports making heavy use of 2020 Vision materials. CIESIN's deputy director for Washington operations values the condensed, information-rich format of 2020 materials (making them useful for briefing busy and distracted congressional staff, in particular). She also values the responsiveness of IFPRI's 2020 Vision staff, who are able to supply her with appropriate materials on short notice.

EuronAid

In Europe, Bernd Dreesmann, secretary general of EuronAid, testifies that 2020 Vision has directly strengthened the hand of development-cooperation advocates inside the European Union (EU), in debates over assistance policy. Dreesmann notes that the 2020 Vision initiative helped push the EU Commission to shift its position on use of agricultural surpluses from a traditional “food aid” posture to a more progressive “food for development” posture, and helped in creating, within the EU, a new regulation (number 1292/96) focused explicitly on “operations in support of food security.” This new regulation was the result of a multiannual policymaking process, which included EU member states, the EU Parliament, and especially NGOs. IFPRI’s 2020 materials were widely used by the NGO community in particular as resources in this process. According to Dreesmann, “There were, of course, also other inputs from FAO, ODI, SOLAGRAL, etc., but Vision 2020 played, as to my personal conviction, a major role due to the amount of information it is providing.” (Dreesmann 1998). The NGO community within the EU also used 2020 materials inside the Joint Food Security Group (JFSG), a partnership between EuronAid and the NGO/EU Liaison Committee, and Dreesmann credits 2020 materials with assisting in the creation, inside DG-VIII, of a new Unit A1 with the name “Environment, Rural Development and Food Security.” Dreesmann notes this is the first time an administrative unit has been created inside the European donor community with a name reflecting the precise nexus of issues stressed by 2020.

Cargill, Inc.

International corporations have also made effective use of 2020 materials. Cargill, Inc., often uses 2020 discussion papers and briefs. Cargill’s public affairs division publishes a high-circulation magazine-style *Bulletin*, which has drawn frequently on IMPACT model projections and on 2020 Vision publications and briefs.

Donor Government Agencies

IFPRI’s 2020 Vision initiative was targeted especially at the donor community in its first phase from 1993–96, and there is abundant evidence of substantial impacts within that community on policy debate. Agriculturalists within the donor community have used 2020 materials to help make their case for increased attention to food and agricultural issues. Nonagriculturalists value these materials for their accessibility and high information content. Increasingly, officials from the donor community will initiate requests for 2020 materials from IFPRI, or ask for 2020 briefings when in Washington, D.C. The impact of 2020 on donor community debate has nonetheless varied considerably, with some donor agencies embracing the initiative more than others.

AusAID

Direct impacts by 2020 on the policy debate have been strongly visible in Australia. Here, a parallel Crawford Fund effort had been under way since 1993, supporting increased spending for international agricultural research and training in particular. A strong synergy developed in Australia between this Crawford Fund effort and the 2020 Vision initiative. Derek Tribe, senior associate at the Crawford Fund, credits 2020 with helping reduce the stridency of environmental lobby opposition to international agricultural research in Australia, and also with helping turn Australian farm organizations from opponents of international research into supporters. Tribe acknowledges an unusually large role for 2020 in this process: "The Fund has taken the information released by IFPRI, and other international centres, and brought it to the attention of appropriate authorities and communities in Australia. In this context, the shining example of cooperation and success has been IFPRI's 2020 Vision..." (Tribe 1998). 2020 Vision materials were disseminated in 1996 to key politicians in Australia and their staff, to bureaucrats, NGOs, and the media, and a national seminar was held in Parliament House, followed by dinners at which IFPRI staff plus Australian policy leaders spoke. Australia's minister of foreign affairs chose a 2020 Vision event as a platform to announce a review of his nation's overseas aid program and announced that a "significant increase in support for rural development" would be one of his goals for this internal review (ACIAR 1996).

DANIDA

When considering 2020 impacts on policy thinking in the donor community, some of the strongest impacts have been seen in Denmark's development agency DANIDA. In 1996 DANIDA published an "agricultural sector policy" booklet, which cited no fewer than 30 separate 2020 Vision books, booklets, discussion papers, and policy briefs (DANIDA 1996). Ebbe Schiøler, head of DANIDA's research section, credits 2020 materials with helping to move DANIDA's strategy formulation process in a direction compatible with IFPRI's Vision. Schiøler also credits 2020 with "educating" developmental and environmental policy specialists in the Danish media, and with providing a healthy balance, in public debate, to some more sensationalized or alarmist accounts of world food prospects (Schiøler 1998). Klaus Winkel, head of DANIDA's Department of Research, concurs that "the information provided by 2020 Vision has contributed to the shaping of a DANIDA policy focusing more on agricultural development, not least in the field of research." Winkel notes that presentations by IFPRI staff in Denmark have been an important supplement to published 2020 materials.

Deutsche Gesellschaft für Technische Zusammenarbeit, GmbH (GTZ)

Officials inside Germany's GTZ report that several 2020 discussion papers (especially one by Badiane and Delgado 1995) were helpful in the drafting of its concept paper on rural development in Sub-Saharan Africa.

Swedish Agency for Development Cooperation (SIDA)

Top officials in the Swedish agency SIDA report drawing upon 2020 materials when preparing speeches about development cooperation.

CIRAD

In France, the Centre de Cooperation Internationale en Recherche Agronomique pour le Development (CIRAD) is more of a research organization than a donor to developing countries, yet it is an important player in policy debate. In November 1995 CIRAD organized its own international meeting to follow up on the 2020 meeting in Washington earlier in the year, and CIRAD has made heavy use of the 2020 IMPACT model. Michel Griffon, an IAC member, reports that 2020 materials have been useful at CIRAD for the purpose of reinforcing an already strongly held conviction regarding the importance of research, in particular.

Japan International Cooperation Agency

In Japan, IFPRI organized a one-day policy seminar on key findings of relevance to Japan from the 2020 project in April 1995 and held a follow-up symposium one year later. Officials from Japan's International Cooperation Agency attended the June 1995 meeting in Washington. 2020 materials presented at these various meetings were translated into Japanese, at the initiative of Japanese counterparts, and were subsequently distributed to Parliament. Informants indicate that 2020 reports were "widely circulated in Japan," and were "extremely educational."

CIDA

2020 materials have also been conspicuously useful to development assistance advocates inside the Canadian International Development Agency (CIDA). Five Canadian parliamentarians attended IFPRI's June 1995 conference in Washington, D.C., and in June 1996, IFPRI's director general visited Canada and used 2020 materials to gain the attention of skeptical politicians at a joint meeting of the Parliamentary Standing Committees on Foreign Affairs and Agriculture. The director general is said to have used 2020 materials to respond fully and effectively to the concerns of parliamentarians, and to

“challenge government managers on current programming priorities.” CIDA officials also observe that 2020 policy briefs are “routinely” appropriated by Canadian development assistance officials and institutes and recycled, often without direct attribution to IFPRI, into official reports and statements. Canadian officials continue to show a strong interest in 2020. Early in 1999, a delegation of 25 Canadian parliamentarians who had heard about IFPRI through the 2020 initiative asked for a briefing from the director general during a visit to Washington, D.C.

USAID

In the United States, agriculturalists inside USAID testify that they value 2020 materials for their technical strength and for their utility in selling the rural development cause to skeptical or distracted top administrators. When IFPRI launched 2020 in an effort to revive the priority of rural development concerns, many top leaders inside USAID were not immediately sympathetic. USAID’s top administrator since 1993, J. Brian Atwood, has served on IFPRI’s 2020 international advisory committee and even delivered the keynote address at the June 1995 2020 kickoff conference, yet Atwood has been personally more committed to issues such as democratization and was not originally drawn to concerns such as agriculture and rural development. In this difficult environment, agriculturalists inside USAID have welcomed the 2020 Vision initiative and report making heavy internal use of its various products.

Nevertheless, for the purpose of promoting a pro-agriculture consensus inside USAID, IFPRI’s 2020 Vision initiative was apparently less influential than either FAO’s 1996 food summit or the workings of a special commission on international agricultural development assistance sponsored in the United States in 1996–97 by the National Center for Food and Agricultural Policy (NCFAP). In each case, IFPRI’s 2020 Vision initiative played at least a supporting role.

- ▶ *Food Summit:* Interagency preparations for the FAO food summit were an important attention-focusing mechanism inside USAID prior to November 1996. The U.S. position paper for the summit employed 2020 projections alongside World Bank and FAO projections (USDA 1996). A resolution at the summit itself then obliged the U.S. government to form an interagency working group to develop a national food strategy to meet the summit’s objectives. Agriculturalists inside USAID used these summit-related activities as an opportunity to promote their concerns. In 1998, the Office of Economic Growth and Agricultural Development inside USAID’s Global Bureau commissioned a study, intended to influence USAID’s budget planning process, of what it would take to implement the food summit goal of reducing the number of undernourished people in the world to 400 million by the year 2015. The consulting firm that produced this

study relied heavily on 2020 Vision materials and even used IFPRI's 2020 IMPACT model in generating its core scenarios. USAID's follow up to the food summit was also monitored by the U.S. university community, through the Board for International Food and Agricultural Development (BIFAD), and the leadership of BIFAD again used 2020 materials to make its case with the agency.

- ▶ NCFAP's 1996–97 Commission on International Trade, Development, and Cooperation was also important in focusing USAID's attention on agriculture, partly because the administrator was maneuvered by NCFAP into endorsing the Commission's findings at a Brookings Institution conference early in 1997, and partly because the Commission included a number of prominent national agricultural leaders, such as farm organization presidents, plus an influential former administrator of USAID. IFPRI's 2020 Vision initiative played an important supporting role in this NCFAP activity, however. The NCFAP Commission report drew heavily from 2020 materials, particularly from a 1995 study entitled *Foreign Assistance to Agriculture: A Win-Win Proposition* (Pinstrup-Andersen, Lundberg, and Garrett 1995). In subsequent briefings of this Commission's findings to U.S. Congressional staff, former USAID Administrator (and currently President of Michigan State University) Peter McPherson made a habit of citing the numerical findings of this 2020 study to support his arguments.

Impact on Policy Debates Within Developing Countries

In Phase I of 2020, a majority of the initiative's consensus-building efforts focused on policy debates and policy leaders within the donor community, international financial institutions, and international NGOs. Phase I of the 2020 Vision initiative nonetheless had a noticeable impact on policy debates within developing countries. Some of these were indirect impacts through the donor community (for example, when 2020 materials or viewpoints found their way into donor policies in developing countries), yet a number of direct impacts can be confirmed as well, region by region.

Many of these impacts in the developing world grew out of the "regional vision" initiatives launched in Phase I of 2020. These initiatives, led by officials from developing countries, brought 2020 work closer to the "column three" decisionmakers and policy leaders shown in the matrix presented earlier.

- ▶ In Africa, two dozen researchers, technical experts, and policymakers from 15 different countries participated in a four-day workshop in Saly Portudal, Senegal, in December 1994. A drafting committee of eight Africans, both Anglophones

and Francophones, then prepared a regional vision document laying out sustainable growth strategies and priority objectives for the next 25 years.

- ▶ In South Asia, some 19 South Asian researchers, technical experts, and officials participated, along with IFPRI staff, in a regional workshop in Kathmandu, Nepal, in March 1995, to produce a synthesis document laying out strategies and objectives for the region.
- ▶ In Latin America, also in March 1995, a workshop was jointly sponsored by the Inter-American Institute for Cooperation on Agriculture (IICA), Centro Internacional de Agricultura Tropical (CIAT), and IFPRI, in Cali, Colombia. In this case roughly 30 Latin American specialists participated in the workshop.

To judge the actual “impact” of such efforts, and of other Phase I 2020 efforts, at the developing-country level requires gathering testimony from participants. A sampling of such testimony indicates that some noticeable impacts on the policy debate were felt.

Africa

Significant Phase I impacts in West and Central Africa are described by Baba Dioum, coordinator general of the Conference of Ministers of Agriculture of West and Central Africa (CMA/WCA). The December 1994 seminar in Senegal provided an opportunity for significant consensus building among regional experts. The fruits of this effort, which were later published through 2020 in a 1995 regional synthesis document for Sub-Saharan Africa, were then communicated at the June 1995 Washington conference by Dioum in person. Dioum later incorporated elements of the 2020 Vision into the national report of Senegal to the 1996 FAO World Food Summit and the position paper of member countries of the FAO Regional Conference held at Ouagadougou (Dioum 1998). Elsewhere in West Africa, a principal economist with the African Development Bank in Abidjan testifies that 2020 materials were useful in redirecting the funding activities of other multilateral banks and of national development programmes in the region.

In northeast Africa, Egypt's Deputy Prime Minister and Minister of Agriculture and Land Reclamation Youssuf Wally reports that the 2020 Vision initiative has provided useful input into Egypt's food security program planning, it has strengthened the hand of Egyptians calling for more private sector participation in agriculture, and has helped generate stronger financial allocations to research and extension, especially for small-scale farmers. In Ethiopia, 2020 materials were cited frequently at the 1997 FAO Regional Conference in Addis Ababa, a conference which brought together the Ethiopian president, the secretary general of the Organisation of Africa Unity (OAU), and an

ensemble of ministers from African states. A senior regional adviser with the UN Economic Commission for Africa in Addis confirms that 2020 materials (especially materials touching on water policy and investment) have been presented to national planners in the region and then used in local publications.

In Central Africa, high-ranking leaders from the government of Uganda have participated from the start in 2020 Vision activities. President of Uganda H.E. Yoweri K. Museveni, has served from the outset as Chair of the 2020 International Advisory Committee; the first meeting of the committee took place in Entebbe. The Vice President of Uganda, who is also Minister of Agriculture, Speciosa Wandira Kazibwe, delivered the welcoming address at the June 1995 Washington conference. The vice president stated on that occasion that developing-country leaders wanted to be “players in this initiative, not spectators,” and the vice president has remained in close contact with the 2020 Vision initiative ever since. She reports that she has become a regular consumer of 2020 materials on agricultural development and testifies to the advantage she has gained from being able to reference 2020 materials in regular cabinet discussions, when working with technocrats inside her own ministry, and also when engaged in substantive international dealings with policy analysts from FAO and the World Bank. She routinely refers to 2020 materials in discussions with other heads of state in the region. The President of Rwanda, in one such discussion, expressed interest in learning more about the initiative. With national-level payoffs from 2020 particularly in mind, Vice President Kazibwe became an early advocate, within the International Advisory Committee, of locating more 2020 Vision activities within the developing world.

In Southern Africa, substantial regional participation from political leaders and NGO representatives, as well as agricultural technocrats, was attracted to a 2020 Vision symposium in June 1996, in Johannesburg. FAO’s subregional representative for South and East Africa reports using 2020 materials to advantage—as an alternative and a supplement to FAO documents—when preparing presentations and speeches.

South Asia

Some impacts on the policy debate have also been visible in South Asia, especially following the March 1995 workshop in Kathmandu. This workshop was co-hosted with the Institute for Integrated Development Studies (IIDS), and the executive chair of IIDS subsequently testified that the Kathmandu meeting provided inputs into an Agricultural Perspective Plan then in the making in Nepal. Statistics from 2020 documents were included in briefing materials that went to Nepal’s Ministry of Agriculture. A regional director for UNICEF who participated in the Kathmandu meeting has testified to its value in bringing a forward-looking perspective to his own thinking. A 2020 Vision regional synthesis document for South Asia was published later in 1995.

In June 1998, a second regional meeting was held to revisit the regional 2020 Vision for South Asia. This meeting was held in collaboration with the Marga Institute, in Colombo, Sri Lanka, and was timed to take place just prior to a scheduled meeting of the South Asian Association for Regional Cooperation (SAARC), so that the latest 2020 consensus could be fed into the preparations for that regional summit. Strong Marga Institute leadership by Godfrey Gunatilleke, who is also an IFPRI Board member, ensured that 2020 materials were in conspicuous view at the summit. The Marga Institute was subsequently given primary responsibility for preparing a conceptual paper for implementation of a social charter for South Asia. Presumably, Marga and the other participants in this meeting—from all the states of the region—will now be in a position to build some of IFPRI's 2020 Vision perspectives into that regional social charter, and then bring 2020 themes (for example, targets on reduced child malnutrition) to the attention of future ministerial meetings of SAARC.

2020 Vision events, particularly the June 1995 Washington conference, also had a noticeable impact on policy debate in India. Union Minister of Agriculture Balram Jakhar participated in the Washington conference and subsequently encouraged the agricultural research community in India to initiate its own 2020 visioning exercise. Jakhar reports that 2020 materials have been useful to the 83 institutions participating under the Indian Council of Agricultural Research (ICAR) and helped make a strong case in India for increasing the plan outlay from its present level of just 0.30 percent of agricultural GDP up to the 1 percent goal advocated by 2020. I. G. Patel confirms that 2020 materials were used by those seeking to counter a "let markets do everything" view that emerged in India under structural adjustment. M. S. Swaminathan confirms that the agricultural research community in India was energized by 2020 and notes that 2020 materials have become widely available in India. They were used in preparations for the 1996 FAO Food Summit (though several other Indian participants in 2020 Vision events later testified that they did not find 2020 materials especially useful in their own work). As for overall impacts in India, Swaminathan does note that IFPRI will never be able to rival the policy influence of an international financial institution such as the World Bank, which can condition its loans directly on policy change.

Middle East

A number of national planners and research managers in the Middle East have made direct use of 2020 materials, including a senior economist in the Ministry of Agriculture in Morocco, the head of an important olive commission in Tunisia, and a recent director of planning in the government of Jordan. One top Jordanian official was especially impressed with 2020 materials, became an avid reader, and asked for more materials that were linked specifically to his country's circumstances. This extension of 2020 materials into national-level policy channels was initially facilitated through

IFPRI's joint Mashreq/Maghreb project with ICARDA and eight countries from West Asia and North Africa, a project that predated 2020 but then emerged as a useful venue in which to promote 2020 materials. The strongest impacts in this region have come with Anglophone policy elites, and greater reach might be possible if more 2020 materials could be translated into Arabic or French.

Latin America

In Latin America, the 2020 Vision initiative centered initially on a core group of about 30 researchers, technical experts, and policymakers who participated in a regional workshop in Cali, Colombia, in March 1995. This conference generated a regional synthesis document, and additional publications followed. The Inter-American Development Bank took a strong interest in this work, and with IADB support four follow-up workshops were then held in Latin America, more than in any other region. One of these was in Buenos Aires in 1996, organized by former Minister of Agriculture Lucio G. Reca, and featured presentations from a wide range of regional agricultural policy specialists. The published proceedings of this conference, reproduced later in Spanish by the Inter-American Development Bank, begin with a lengthy recap of IFPRI's 2020 Vision initiative and its implications for Latin America. These proceedings were later adopted for academic use.

In Haiti, a country where IFPRI had no prior history of operations, the 2020 Vision initiative almost had a decisive impact on policy debate. Following his appointment in March 1996, Haiti's Prime Minister Rosny Smarth became interested in the 2020 Vision initiative (his senior adviser on agriculture and the environment had attended IFPRI's June 1995 conference in Washington) and began plans for a national-level 2020 conference in Haiti. IFPRI and the World Bank offered assistance, but conference organization never came together adequately at the Haitian end, in part due to the prime minister's subsequent resignation in a dispute with the former president of Haiti.

East Asia

Impacts on policy debate at the national level have been less conspicuous in East Asia, perhaps because so many governments in this region were already converts to the core of the 2020 message regarding investments in agricultural productivity growth and broadly based rural poverty reduction. The 2020 initiative nonetheless strengthened IFPRI's visibility and influence in this region, as indicated by a recent Asian Development Bank request that IFPRI take a lead role in the design of its new rural development strategy, and a recent request for IFPRI advice from Viet Nam, regarding

rice market liberalization. Without the 2020 initiative, IFPRI would probably not have received such requests.

One of the most important national-level policy debates in Asia during Phase I of 2020 took place in China. In 1994–95, inflationary monetary policies in China, plus rigidities in agricultural production, trade, and input supply policy, combined to produce a momentary surge in grain imports. A sensationalized analysis of these imports by the WorldWatch Institute led in China to anxieties that grain production might soon go into decline. Some of the resulting policy changes in China—including higher state purchase prices for grain and more spending on agricultural research—represented the kinds of changes that IFPRI's 2020 Vision might support, yet there is little evidence that the 2020 initiative had any direct influence over these changes.

China also took a number of measures, such as massive investments in grain storage and renewed administrative controls over grain markets, which the 2020 Vision would not so clearly support. Analysts at IFPRI (also FAO, USDA, and the World Bank) had rejected the exaggerated WorldWatch projections for China and had sought to persuade Chinese officials not to panic. IFPRI used its 2020 IMPACT model to offer production and trade projections that would provide a more reasonable basis for policy choice, and the elite international media (the *Financial Times*, for example) duly publicized these IFPRI projections as a credible alternative to the WorldWatch view. On several occasions IFPRI staff presented their projections to policy audiences in Beijing, and this diligent work to some extent may have helped inform the policy debate in China. It is difficult, however, to confirm any significant impact.

TRIGGERING POLICY ACTIONS THROUGH 2020

The impact of 2020 on consensus building and policy debate is important, but even more critical for the ultimate goal of hunger or poverty reduction is the final impact of 2020 on actual policy actions. In this next section we look in three different settings for evidence of actual policy changes linked to 2020: within international financial institutions, within donor governments and institutions outside the developing world, and within governments in the developing world.

INTERNATIONAL FINANCIAL INSTITUTIONS

World Bank

By far the most important supplier of public resources for agricultural development is the World Bank. In the previous section, we noted a modest impact from 2020 on policy debate inside the World Bank, and we cited testimony (from Ismail Serageldin) that the 2020 initiative was useful in raising the profile of rural development and hunger issues among the Bank's non-agriculturalists. In terms of actual policy actions, were more of the Bank's lending resources committed to hunger or rural development programs as a result of the 2020 initiative?

Evidence of a direct 2020 impact on actual World Bank resource commitments remains somewhat elusive. Total World Bank lending for agriculture and rural development, which was in decline before 2020 began, did finally stabilize and eventually even recovered a bit following the launch of 2020, but there is no sure way to connect this stabilization of overall lending to 2020.

Total World Bank lending for agriculture and rural development (ARD) was in a troublesome decline when 2020 was launched. Between 1986 and 1993 total ARD lending on an annual basis fell from nearly \$6 billion to only \$4 billion (in constant 1996 U.S. dollars). This decline continued through 1996, when total ARD lending by the Bank fell to just \$2.7 billion. In the next three years a small recovery did take place, as ARD lending in 1997 increased to \$4.0 billion, then dipped in 1998 to \$3.2 billion, then rose a bit again in 1999 to \$4.2 billion (actual and pipeline). Was this eventual stabilization of Bank lending for agriculture and rural development in any way a result of the 2020 Vision initiative?

Advocacy efforts such as 2020 were one background element to this slight turnaround in ARD lending at the Bank, but not the only or most prominent background element. Much of the increased Bank lending in 1997 was going either to China (where high grain prices and the WorldWatch alarm about import dependence were swamping all other factors in triggering concerns for agriculture), or to formerly socialist industrial states, such as Russia and Romania, where IFPRI's 2020 work had never been concentrated. Some of the Bank's new ARD lending was for rural infrastructure in poor countries (such as feeder roads), which was a priority often mentioned in 2020 documents. But independently authored World Bank documents also stressed this priority (including the Bank's new 1996 agricultural sector strategy), so a direct connection to 2020 is hard to establish.

At one important moment in 1994, the Bank did increase significantly its support for international agricultural research, but 2020 does not seem to have played a significant role in this important gain. As noted much earlier, core funding for the CGIAR system was falling sharply in the early 1990s, and by 1994 it was 31 percent lower in real terms than it had been five years earlier. This CGIAR funding crisis was then substantially rectified in May 1994, when the World Bank—under Serageldin’s leadership—offered US\$20 million of special matching funds as an inducement to other donors to make new commitments. New commitments were promptly made from other donors, and as a result overall support for the CGIAR research agenda was increased over the next two years by approximately 15 percent (World Bank 1997, 58).

It appears that in May 1994, IFPRI’s still very new 2020 initiative played only a small role in this important action. The decisive role was played instead by an ad hoc “Action Group on Food Security” organized by retired U.S. Ambassador Robert Blake (from the World Resources Institute), a group that included David Bell, Jessica Tuchman Mathews, Robert McNamara, and Peter McPherson. Rather than hold public meetings or try to place stories in the media or pressure legislators, this group (apparently at McNamara’s suggestion) used personal connections to go straight to the president of the Bank with an influential report (authored principally by Montague Yudelman) which outlined the magnitude of the CGIAR funding crisis and recommended that the Bank step in with stabilizing resources (Action Group on Food Security 1994, 14). The Bank’s president agreed with this approach and authorized Serageldin to take charge of the financial rescue effort.

Serageldin states that by the time of the June 1995 IFPRI conference, 2020 was certainly helpful in “undergirding” this new Bank financing for the CGIAR, but he agrees that the policy breakthrough came before the 2020 initiative was fully operational. After temporarily increasing in 1994 and 1995, total Bank financing for the CGIAR in any case fell back somewhat in 1996 and 1997.

DONOR GOVERNMENTS

Overall bilateral external assistance to agriculture, from donor governments in the developed world, was in sharp decline when the 2020 Vision initiative was launched in 1993–94. Between 1988 and 1994, bilateral external assistance to agriculture declined in real terms by 62 percent, from \$9.24 billion in 1988, to just \$3.55 billion in 1994, measured in constant 1990 U.S. dollars (FAO 1996, Document 10, Table 2). After 1994, this decline in bilateral external assistance to agriculture was finally halted and to some extent reversed, at least slightly. In both 1995 and 1996 bilateral assistance to agriculture exceeded \$4 billion in constant 1990 U.S. dollars (FAO 1998, 24). IFPRI’s 2020 Vision

initiative did play a role in this stabilization of bilateral assistance to agriculture, although with more success in some countries than in others.

In terms of bilateral commitments to agriculture, FAO reports that Japan was the major donor in 1996, accounting alone for about half of all bilateral commitments from the OECD Development Assistance Committee (DAC) countries. Japan's official development assistance (ODA) to international agriculture had actually been increasing at the time 2020 was launched in 1993, in sharp contrast to the trend among other donors. This trend toward increased assistance to agriculture continued after 2020 was launched. Considering grant and credit aid together, Japan's ODA to international agriculture increased by 55 percent between 1993 and 1997, from 104.8 billion yen up to 162.5 billion yen. These figures do not include Japan's sizable contributions to food aid or to international agricultural research.

What role did the 2020 Vision initiative play in sustaining this strong performance? A reliable answer to this question would require considerable added research into Japanese decisionmaking processes. Informants suggest that the impact was at least a noticeable one. As mentioned above, materials from the 2020 Vision project were advantageously employed by agricultural development advocates inside Japan's International Cooperation Agency and were subsequently translated into Japanese and distributed to Parliament. It is thus plausible that Japan's strong financial commitments to agriculture through 1997 were in part supported by 2020 activities.

Among the other DAC members, FAO reports that significantly increased contributions to agriculture were also made in 1996 by Australia, Canada, and Denmark. Once again, IFPRI's 2020 Vision initiative met a particularly favorable response in 1996 in each of these three critical donor countries. The connections in these cases between 2020 Vision efforts and larger resource commitments are especially plausible:

- ▶ *AusAID*. In Australia, 2020 activities and materials had a clear and strong impact on that nation's actual spending levels for international agricultural research. When Australia's Crawford Fund began its campaign, the national budget for international agricultural research was Aus\$11million. The IFPRI director general and staff made high-profile presentations of 2020 materials in Canberra in May 1996. The Crawford Fund leveraged these 2020 Vision efforts into its own advocacy actions. By 1998, Australia's national budget for international agricultural research had grown to Aus\$40 million.
- ▶ *CIDA*. CIDA officials reported making substantial direct use of 2020 materials in their battle to halt declines in Canada's agricultural development assistance funding, particularly following an IFPRI 2020 visit to Ottawa in June 1996.

Actual spending records indicate that in 1996 CIDA's country-to-country ODA for agriculture did stabilize. Agriculture spending fell sharply from Cdn\$181.4 million in 1991/92 down to Cdn\$65.54 in 1995/96, but then stabilized at approximately Cdn\$70 million in both 1996/97 and 1997/98. How much credit 2020 can take for this stabilization (compared with other factors such as the FAO food summit or higher commodity prices) is not certain, of course. Moreover, even with this stabilization, Canada's country-to-country agricultural ODA spending was substantially lower in 1997/98 than it had been in 1993/94 when the 2020 initiative began.

- ▶ *DANIDA.* As noted above, IFPRI's 2020 Vision initiative was one factor that helped reorient DANIDA's bilateral aid toward agricultural development. Prior to 2020, DANIDA's bilateral agricultural development funding had been declining (it fell from US\$77.2 million in 1992 to US\$32.0 million in 1994). Beginning in 1995, however, DANIDA began spending more on agriculture, and between 1995–98 overall, bilateral agricultural development spending recovered to an average of US\$71 million annually. Between 1995 and 1998, the agricultural share of total DANIDA bilateral spending also increased, from 6.7 percent up to 8.4 percent. Officials at DANIDA describe this stronger 1998 figure as "the start of an upward trend." DANIDA officials acknowledge that IFPRI's 2020 Vision initiative contributed to this positive outcome for agriculture.

A somewhat more difficult bilateral donor for 2020 to influence was the United States. USAID resource commitments to agriculture were in decline before the 2020 Vision initiative was launched in 1993, and they continued in this decline for some years after 2020 was launched, despite complaints from numerous advocacy groups and organizations, including 2020. Total USAID obligations in agriculture fell from \$594 million in 1992, to \$399 million in 1994, to \$259 million in 1996, and then to a low of \$245 million in 1997 (U.S. fiscal years in each case). Between 1992 and 1997, agriculture's share of the USAID budget fell from 10 percent to less than 5 percent. In FY 1998 and FY 1999, this fall in levels of obligations for agriculture was finally stabilized. In FY 1998 USAID obligations for agriculture totaled \$294 million, and in FY 1999, \$305 million (USAID 1998). USAID's funding for agriculture is currently stabilized at roughly \$300 million, and protected at that level from competing claims through a bureaucratic device called a "soft earmark."

What role IFPRI's 2020 efforts may have played in this final stabilization of U.S. funding for agriculture is not clear. Most informants inside USAID believe any role 2020 played was at best indirect. Stronger and more direct contributions were apparently made by the February 1997 NCFAP conference at the Brookings Institution (mentioned above) at which Administrator Atwood was pressured to endorse some refocusing on agricultural

programs, plus follow-up lobbying on Capital Hill and inside USAID by NCFAP commission member Peter McPherson.

Other informants point to the pressures that had been placed on Atwood by national stakeholding agriculturalist groups such as the Board for International Food and Agricultural Development (BIFAD), including pressures to produce a credible U.S. national program following the 1996 FAO Rome Food Summit (See USAID 1998). Still others point to the action-forcing anticipation of President Clinton's 1998 trip through Africa. Prior to this Africa trip, a Food Security Advisory Committee (FSAC) was formed as a subcommittee of BIFAD, chaired by G. Edward Schuh (an IFPRI board member). This strengthened the hand of those inside USAID who argued that the fall in spending for agriculture and food security had to be stopped.

IFPRI's 2020 initiative may not have played a lead role in these belated USAID funding stabilization actions, but it did play an indirect role. As mentioned above, the part of the NCFAP Commission report that was referenced most often by Peter McPherson in his lobbying efforts was the 2020 finding, prominently cited in that report, that assistance to farming abroad was a "win-win proposition" for U.S. farmers. The lobby efforts of BIFAD were also in part bolstered through use of 2020 materials. Per Pinstrup-Anderson was invited to participate in some of the interagency meetings inside the U.S. government that led up to the President's Africa trip, where he took the opportunity to present 2020 materials.

When we look more narrowly at donor contributions to the CGIAR in particular, similar contrasting patterns emerge, donor by donor. Among European donors (both EU and non-EU), contributions to the CGIAR increased in real terms steadily (measured in 1994 U.S. dollars) over both the 1980s and the 1990s. In Japan, contributions to the CGIAR increased sharply in the 1980s and during the first half of the 1990s, but then they began a significant decline later in the 1990s, as Japan's economy weakened. In Australia, contributions to international agricultural research increased nearly threefold in the 1990s, partly as a result of Crawford Fund and 2020 efforts. In the United States, USAID's unrestricted core support to the CGIAR was cut nearly in half between 1992 and 1996, to a level of just \$22.4 million, then increased in 1997 to \$26 million (most of this increase being in support of expanded research linkages with U.S. universities). USAID attributes this small and belated recovery in research outlays mostly to the impact of FAO's World Food Summit. This wide variety of observed trends reinforces the impression that 2020, along with other events of the mid-1990s, produced different impacts among different donors.

GOVERNMENTS IN THE DEVELOPING WORLD

Governments in the developing world were not the primary target of 2020 in Phase I, so we should not necessarily expect large policy action impacts within this audience group. Nor can we easily attribute to 2020 some of the policy actions that were taken by this group.

Some of the developing-country policy actions called for under 2020 included de-regulating markets, enforcing rules and property rights, working with NGOs, ensuring local participation, delegating policy responsibility to local authorities, and making policy predictable and transparent. Many developing countries have been taking such reforms in the 1990s, but attributing such actions to the 2020 Vision initiative can be problematic, for at least two reasons. First, the period of most intense market-oriented reform among developing-country governments came in the mid-1980s, a decade before the 2020 Vision was launched. Second, the influence of the 2020 initiative in the area of market reforms has been completely swamped by far more powerful forces and actors, including pressures from international financial markets and from international financial institutions (such as the World Bank and the International Monetary Fund).

When looking for distinctive markers of 2020 influence within the developing world, one possible set of actions to consider would be spending on agricultural research. Here, IFPRI's 2020 Vision did stake out a strong and distinctive position. IFPRI's 2020 Vision advised developing-country governments to spend more of their own resources on research:

If the 2020 Vision is to be realized... low-income developing countries must sharply expand their investments in agricultural research. A minimum target of 1 percent of the value of total agricultural output is appropriate for most low-income developing countries, with a longer-term (5–10 year) target of 2 percent (IFPRI 1995, 29)

IFPRI's 1 percent goal presented a significant challenge, because up until the early 1990s, the developing countries as a whole were spending only about 0.5 percent of their agricultural GDP on agricultural research. Some middle-income developing countries (such as Malaysia or Thailand) were spending 0.6–0.7 percent of agricultural GDP on research, but other less wealthy countries (such as Pakistan or the Philippines) were spending only about 0.2 percent. Particularly in Sub-Saharan Africa, where research spending was low and where the rate of growth of that spending had recently fallen (from a healthy 2.5 percent rate of growth in the 1970s to a sluggish 0.8 percent growth rate in the 1980s), meeting the IFPRI goal was going to require a major turnaround in existing trends (Alston, Pardey, and Roseboom 1998). Still, given the extremely high returns to

agricultural research in developing countries (rates of return above 50 percent are not unusual), it would be significant if the 2020 Vision initiative increased research investments in poor countries by even a small amount.

A comprehensive estimate of 2020 impacts in this area is unfortunately beyond the reach of this report, in part because recent data from the 1990s on agricultural research and development spending by national governments are not easily available in one centralized location, and in part because of a natural lag in policy action response. If the 2020 Vision were to have an impact on research spending in developing countries, that impact might not be seen in the form of actual budget outlays for several more years.

The evidence that is available to confirm a 2020 impact on actual research and development spending levels in developing countries is not strong. In some cases where 2020 materials did seem to influence the debate over research spending levels (for example, within the African Development Bank and the governments of Egypt and India), within the Government of Egypt, and within in the Government of India), it has not been possible to gather actual data on recent spending levels. Specialists suspect that since the early 1990s in most countries the "research intensity ratio" (spending as a share of agricultural GDP) has gone down rather than up. In several exceptional cases—including Brazil and China—agricultural R&D spending was to some extent revived in the 1990s, but from exceptionally low levels and without 2020 playing a visible role. In Brazil, the final passing of the 1980s debt crisis was more important to reviving agricultural R&D spending than 2020. In China, the food price and import dependence scare of the mid-1990s was decisive. China, in 1991, spent only 0.36 percent of its agricultural GDP on research. In subsequent years it did improve on that performance, and IFPRI may have played some role in this improvement through a 1992 report on Chinese R&D (Fan and Pardey 1992), but this report was written before 2020 was launched.

In Nepal, public investments in agricultural R&D have increased significantly since 2020's 1995 regional vision seminar in Kathmandu, but the increase was from an exceptionally low level, and it was mostly due to the arrival of several large World Bank loans, plus some accounting idiosyncrasies surrounding bilateral assistance flows from Great Britain. In Africa, efforts through 2020 to boost national investments in agricultural research and development have been stymied in the 1990s in part by the nonsupportive role of the donor community. Agricultural research in Africa is heavily dependent on donor funding (traditionally 61 percent in francophone countries and 36 percent in anglophone countries outside South Africa) and when that funding declines—as it has in the 1990s—national governments are seldom able or inclined to make up the difference with their own resources.

At some point, after more time has passed, it will be useful to take a more comprehensive look at the most recent national agricultural research spending trends, to look for evidence of impacts from Phase I of 2020. A more appropriate approach would probably be to examine these trends, some time in the future, within countries that had committed themselves to participation in the subregional networks of Phase II of 2020.

ANTICIPATED IMPACTS FROM PHASE II OF 2020

The analysis until now has focused on Phase I of the 2020 Vision initiative, which operated from 1993–96. Phase II of 2020, initiated in January 1997, is still too young to permit a confident impact evaluation. We can, however, examine some of the most important Phase II activities to date, and then anticipate how their impacts might differ from the various impacts seen so far following Phase I.

As noted above, in Phase II of 2020 some already established activities will continue. IMPACT modeling will continue with various refinements and improvements, and some of the international communication and consensus-building efforts that characterized Phase I will be continued as well. 2020 publications in Phase II will include fewer “synthesis” papers and more papers on emerging issues, such as food safety, the role of livestock, and biotechnology. Authorship of these Phase II papers will become more diverse, with greater emphasis placed on spokespersons from the NGO community. As noted above, policy briefs will be published in “collections” around controversial topics, with a range of views represented.

What sets Phase II apart, however, is its emphasis on country-level work. Developing-country leaders themselves, in Phase I of 2020, asked that more attention be given by IFPRI to national-level visioning efforts. IFPRI agreed, and concluded that “The 2020 Vision will only be realized if individual countries in the developing world conduct their own 2020 Vision-type research and outreach activities and engage in their own 2020 Vision-type dialogue within their own policymaking circles...” (IFPRI 1998).

With support from DANIDA, IFPRI’s 2020 staff in 1998 undertook the formation of two subregional networks, one in East Africa and one in West Africa. The East African network includes participation by country teams of policy officials and technocrats from Kenya, Malawi, Mozambique, Tanzania, Uganda, and (as an observer thus far) Ethiopia. The West African network initially includes participation by Benin, Burkina Faso, Côte d’Ivoire, Gambia, Ghana, Senegal, Togo, and (as an observer) Niger. The first formal meetings of these two subregional networks were held in Entebbe and Accra in October 1998, with IFPRI’s director general and 2020 coordinator in attendance.

This national-level activity has a strong rationale, since the policy instruments most important for reaching the 2020 Vision goal (including the power to tax, spend, or regulate inside the rural sector of the economy) are all in the hands of national governments. Where national policies falter, donor policies may have little chance to succeed, international financial institutions and private investors will stay away, and eventually NGOs may have to shift from development to relief.

The goal of the policy networks is to move the 2020 initiative beyond its donor-centric origins and get ownership of the visioning process into the hands of developing-country policy elites. Handing over ownership to developing-country elites will not be easy, if the larger experience of the CGIAR system is any guide; only 4 percent of funding for core CGIAR programs comes from developing countries, and fewer than 10 percent of attendees at annual Centers Week meetings are delegates from governments in the developing world. What progress has been made toward this Phase II 2020 objective so far?

SUBREGIONAL NETWORKS IN THEORY

The creation and operation of IFPRI's subregional networks will go through several phases (There will be a Phase I and a Phase II for the networks, just as there is for 2020 itself).

- ▶ As the first step, IFPRI's 2020 leadership in Washington used DANIDA funding to plan, organize, and finance the creation of small country-level "teams" consisting of individual researchers and policy technocrats. Most of the team leaders were western trained, previously known to IFPRI, and comfortable with IFPRI's 2020 Vision, but the selection of the teams themselves—which vary in size from just two or three people to perhaps a dozen—was not under IFPRI's control. Each of these teams was then tasked with drafting a separate "Country Note," to be presented at a subregional workshop—either in Entebbe or in Accra—in October 1998.
- ▶ In a second step, country teams will revise their country notes and identify separate country-level priorities for future research activities, training, capacity-strengthening, and dissemination. At the same time IFPRI's 2020 staff will draft subregional "proposals," drawing upon cross-country themes that were identified at the subregional network meetings.
- ▶ In a third step (originally intended to take place February–March 1999), country teams, with IFPRI support, will conduct one-day "in-country seminars" intended

to communicate country-level priorities and cross-country themes to national policymakers, and also to donors.

This project design is intended to encourage country-level “ownership” of the initiative, including the research and policy priorities being identified through the initiative. All drafts of country notes are being done by independent country team members, not IFPRI staff. Secondly, this approach is intended to stimulate contact and coordination among like-minded researchers and technocrats across countries within subregions. Within both East and West Africa, this sort of coordination across countries is both useful for sound policy analysis and reassuring to the donor community.

IFPRI’s research output and IFPRI’s research staff in Washington, D.C. were a critical component of 2020’s Phase I, but in the network portion of Phase II, it is donor funding (primarily from DANIDA) plus the talent and initiative of IFPRI’s administrative staff that provide most of the fuel. IFPRI’s research staff are significantly disconnected from the management operation of the networks. This disconnection is intentional; its purpose was to give officials and researchers in developing countries more space to take their own initiatives.

The impact of these network activities is difficult to assess at this early point in the process. To some extent these activities are investments in longer term personal and institutional relationships in the region, and a full impact assessment may not be possible for a decade or more. Some preliminary observations can be made, however. On the strength of what has taken place so far in the subregional networks, it is clear that some dangers have been successfully avoided, and a foundation is being laid for potentially significant future gains.

DANGERS AVOIDED

Outsiders seeking to create new institutions in Africa must avoid several dangers. Most of all, when they bring in resources to create new institutions they must take care not to undermine the operation of existing institutions. In Africa, where so many donors are active, it is important, when creating a new network, not to undermine the activities of existing networks. In the area of East African agriculture, by one count, there are already 18 different agricultural research and policy networks in place—including 3 different networks for upland forest management alone. Care must also be taken not to ask too much of local counterparts. Governments in Africa have meager budgets for policy analysis, and in some policy areas (such as food and agriculture) there may be only a small number of trained analysts experienced in dealing effectively with international institutions or the donor community. These specialists are under enormous pressure to

deliver proposals to donors and technical advice to their ministers. When IFPRI asks such analysts to prepare original “country notes,” travel to participate in international workshops, and then plan in-country seminars, it is making new demands on a scarce resource. If the result is either duplication or distraction from analytic efforts already under way, then the scarce time of these valuable country-level specialists may not have been used well.

Judging from first-hand observations at the East Africa subregional network workshop held in Entebbe in October 1998, IFPRI has successfully avoided such dangers so far. The process of country note preparation complemented rather than detracted from the other responsibilities of country team members, and supplemented rather than undercut the activities of other policy networks in the region. For a detailed review of how these potential dangers were overcome, based on first hand observations from the Entebbe network meeting, see the Appendix to this report.

POTENTIAL FOR POSITIVE GAINS

Having overcome some potential dangers, IFPRI’s 2020 Vision networks in Africa now face the problem of delivering tangible gains. These networks are already a gain for IFPRI’s own institutional visibility in the region, but do they promise any gains for the region itself? Here we can draw a distinction between gains for the region that must be continuously sustained from the outside, through a combination of IFPRI staff resources and donor funding, versus gains for the region originally catalyzed by 2020, but then sustained internally, without a need for continued external support. IFPRI’s Phase II 2020 activities in Africa are well on their way to providing the first kind of gain. They will face a number of difficult challenges in providing the second kind of gain.

Externally Supported Gains

IFPRI’s support for subregional networks can produce a positive regional and country-level impact for as long as the support continues. This impact will come, first, from increased utilization of human resources that are already trained in food and agricultural policy and in place in Africa but underfunded and undernetworked (and hence insufficiently utilized). While training is still inadequate overall, many African countries do have a top layer of world-class food policy and agricultural policy technocrats currently in place within their ministries or universities. These individuals might typically be PhD’s in agricultural economics, trained at a top western institution (such as Michigan State University) 10–15 years ago. They are now less effective than they could be, for lack of financial, informational, or networking resources. As internal and international funding for agriculture has dried up in recent years in Africa, and as the

focus of most international financial institutions has shifted from sector-specific expertise to a fixation on the macroeconomy, these talented and well trained agriculturalists have had trouble staying in touch with wider international research and policy networks. In many cases they have consequently lost status within their own countries, making them less effective advocates for food and agricultural policy. IFPRI's 2020 networking activities are a useful source of renewed empowerment for these weakened agriculturalist technocrats.

The subregional quality of the networks is also important, since in the future Africa's food markets and food marketing policies across subregions will almost certainly be more open and deeply integrated than they are today. The talented individuals who have been drawn into IFPRI's 2020 networks are destined to take on more policy responsibilities in the future as their careers mature, and when they finally rise to positions of senior policy leadership, they will be able to face issues of regional and subregional policy coordination knowing more about the public officials and institutions of neighboring states.

IFPRI's 2020 Phase II networking activities also help these in-country agriculturalists re-connect to newly sympathetic funders in the donor community. As it becomes apparent to the donor community that agriculture needs more attention in Africa, a search will begin for credible, fundable national agricultural development and investment plans. IFPRI's 2020 networking activities are intended to provide just that: a full set of forward-looking country "vision" papers, technically sophisticated and regionally coordinated, yet locally authored, and already locally endorsed (at in-country seminars) by key stakeholders. In this sense, 2020 hopes to play a bit of a brokering role. It will help in-country agricultural technocrats, who need more resources, make a more effective case in presenting their investment priorities and plans to those in the donor community who are now looking for ways to revive agricultural and rural development investments.

It is still too early to evaluate with confidence the likely success of this brokering strategy, since at this writing the country notes for East and West Africa have not all been revised, and the in-country seminars have not yet been held. Yet we can provide a high rating for the fundamental logic and sophistication of the strategy itself. It is a strategy that recognizes the importance, to donors, of receiving technically sound and locally generated (hence locally owned) funding proposals. In Phase I of 2020 IFPRI worked primarily within the donor community to boost the "demand" for new investments in agriculture and rural development. In Phase II of 2020, IFPRI is now working in Africa to help produce a "supply" of credible, fundable investment proposals capable of satisfying any new demands that do arise.

Possible Gains Following Withdrawal of IFPRI Support

A much greater challenge for Phase II of 2020 in Africa will be sustaining gains in the region once IFPRI's own direct involvement comes to an end. The dangers here are obvious. When the broker leaves, the relationship to the donor community might break down.

Without donor funding to cover regional coordination, travel, and conferencing expenses, the networks would not have formed in the first place and probably would not be able to continue. And without administrative leadership from IFPRI's 2020 staff, and without personal involvement by IFPRI's director general, donor funding might disappear. Agricultural technocrats in the donor community might be able to recognize good proposals from African network members even if IFPRI were not presiding over the process, but they would have trouble selling these proposals to skeptical non-agriculturalists back home without the involvement and endorsement of IFPRI. Without continuing IFPRI involvement, the networks could be put at risk.

Country team participants in the October 1998 East Africa workshop in Entebbe made clear their own hopes for a deeper and more open-ended IFPRI commitment to remain involved. Whenever IFPRI staff mentioned a possible three-year time horizon for IFPRI's involvement, African counterparts would suggest that at least five years would be more realistic. IFPRI staff generated a nice list of "what IFPRI expects from the individual countries in the network" (research collaboration, national coordination, monitoring and evaluation, mobilization of resources, dissemination and advocacy, and so forth), but the network members generated an even longer list of what they expected from IFPRI, including coordination in the region, publication of work, methodological support, support in fund raising, training, seed money, communications capacity building, and support for establishment of national coordinators. When the workshop ended there was a sense among the African network participants that they would do their part—so long as IFPRI did its part. This kind of joint venture relationship could provide substantial benefits in the region, as noted above, but IFPRI may have to remain a full partner in the project for the benefits to continue.

It may be entirely appropriate for IFPRI in Phase II of 2020 to take on these new institutional roles, as a full partner with its newly created subregional networks in Africa, and as a broker between the countries in those networks and the donor community. The impacts are likely to be positive and significant. The trick will be to find a means, eventually, to encourage more independence on the part of network members, and less dependence on IFPRI's involvement in the minds of the donor community as well.

SUMMARY AND CONCLUSION

The best way to summarize the overall impact of IFPRI's 2020 Vision initiative is to return to Table 1, the matrix of potential impacts presented earlier. Drawing on the many separate impacts that have now been mentioned in this report, we can provisionally rate the overall impact of 2020 Phase I, for each of the cells of this matrix. It is still too early to provide such a summarizing judgment for the subregional policy networks, or for other aspects of Phase II of 2020.

When filling in these cells, I draw upon my own narrative and rate the impact of 2020 to date as either (in descending order) HIGHLY SIGNIFICANT, SIGNIFICANT, NOTICEABLE, or NOT NOTICEABLE. Table 2 presents summary ratings, using this scale, that emerge from this report.

Note that the distribution of impacts summarized here is not entirely surprising. Audiences in column two were more heavily impacted than audiences in column three, but this was to be expected, since it was all along the intent of Phase I to focus on international as opposed to developing-country policy leaders. Also, impacts on debate and consensus formation were generally more visible than impacts on policy action in this first phase of 2020, partly because action is more difficult to influence than debate and partly because action tends to lag behind debate.

In one sense, the distribution of impacts shown in Table 2 is a bit surprising. IFPRI's hope in Phase I of 2020 was primarily to reach and influence the "international" audience in column two. Less time and effort was devoted, in this first phase, to reaching column three leaders who worked and lived exclusively within the developing world. Nonetheless, a significant number of such leaders were successfully reached in Phase I of 2020, and policy debate among these leaders was on some occasions even altered to a noticeable degree. When IFPRI launched 2020, its ability to reach and influence this more remote audience in column three was uncertain. The success achieved here in Phase I of 2020 suggests that even stronger impacts on this column three audience should be available in the subregional network activities of Phase II of 2020, where this audience is the principal target from the start. The only cell in this matrix where an impact from Phase I of 2020 was "not noticeable" (the bottom right cell) is precisely where Phase II of 2020 intends to concentrate much of its effort.

It can also be noticed along the way that IFPRI's methods for generating the various impacts summarized in Table 2 reflect well on everyone that has been associated with the project. At no time in this campaign to draw attention to food and agricultural issues did IFPRI personnel bend their professional judgments on matters of substance; at no time did they stoop to sensationalizing the hunger or poverty issue. Indeed, when

world grain prices temporarily spiked upward in 1995–96, IFPRI staff participating in 2020 activities steadfastly refused to play on popular fears that the world was soon to run out of food. At a time when others were imagining the onset of global food shortages, the 2020 exercise predicted (correctly) that the upward spike in world prices would be strictly temporary (ACIAR 1996, 26). These high professional standards maintained by the 2020 initiative are one reason it came to be trusted by both donors and developing-country policy leaders.

As an additional concluding comment, we should note that we have not attempted here to provide an estimate of the "cost effectiveness" of the 2020 initiative. We have sought to measure impact alone, without linking any of these individual impacts to the associated program costs. We can guess, however, that the cost-effectiveness of 2020 has been extremely high, because significant impacts have been realized even though program costs have remained exceptionally low (only about 5 percent of IFPRI total annual budget).

From the still somewhat early vantage point of 1999, then, the impacts of Phase I of IFPRI's 2020 Vision exercise have been at times highly significant and in most other instances either significant or at least noticeable. Where Phase I of 2020 did not produce significant impacts, Phase II of 2020 is poised to step in. And in all cases the cost-effectiveness of 2020 activities in Phase I can be presumed to be high.

Table 2 Matrix of impacts to date from 2020 Vision initiative, Phase I

	Researchers and Educators	International Policy Leaders	Developing-Country Policy Leaders
Reach	<i>Highly Significant Impacts:</i> Numerous 2020 materials were consumed by this audience group, and then extended (for example, through classroom use) to other audience groups as well.	<i>Highly Significant Impact:</i> Numerous 2020 materials were consumed by the most important members of this audience group. Many in the audience group were direct participants in 2020 Vision activities.	<i>Significant Impact:</i> A significant number of influential developing-country leaders did consume 2020 materials and participate in 2020 Vision activities, even though this audience group was not the primary target for Phase I.
Catalyze consensus	<i>Not Examined:</i> Consensus building specifically within the research community was not stressed by 2020.	<i>Significant Impact:</i> IMPACT model projections and other materials from the 2020 Vision exercise became a visible part of the policy debate, particularly in the case of some bilateral donors and some sympathetic NGOs. The 2020 exercise also managed, at times, to engage skeptics and nonagriculturalists.	<i>Noticeable Impact:</i> Regional 2020 visions were developed, refined, and discussed for Africa, Latin America, and South Asia. These documents plus a variety of other materials from Phase I of 2020 did at times enter the policy debate inside some developing countries, strengthening the hand of advocates for agriculture.
Catalyze action	<i>Not Examined:</i> Catalyzing action by the research community was not stressed by 2020	<i>Noticeable Impact:</i> Aggregate levels of multilateral and bilateral donor support continued to fall during most of Phase I of 2020. Still, among some bilateral donors where 2020 activities had been most prominent and 2020 materials most widely circulated, this fall was either avoided or eventually halted and reversed.	<i>Not Noticeable Impact:</i> Little evidence emerges of developing-country governments changing their policies, or noticeably increasing their investments in agricultural research, in direct response to 2020 Phase I.

Appendix
**REVIEW OF EAST AFRICA SUBREGIONAL NETWORK MEETING
Entebbe, October 1998**

The five separate country teams that prepared draft country notes for the Entebbe workshop organized their own efforts in diverse ways. *Uganda* took the most ambitious course, by assembling as its country team a “task force” that included high-ranking representatives of that nation’s Economic Policy Research Centre (EPRC), the Ministry of Agriculture, the Agricultural Policy Secretariat, the National Agricultural Research Organization, a national farmers association, Parliament, and the Office of the Vice President. Each member of this team wrote a portion of the final draft country note and presented that portion at a “national consultative workshop” at EPRC in July 1998. It should be noted how rare it is in most countries (including some donor countries) to see senior representatives from so many diverse institutional constituencies come together for substantive discussions on policy priorities in the area of food, agriculture, rural poverty, and the environment. If the subregional networks can continue to catalyze this sort of broad national-level policy dialogue in countries such as Uganda, that achievement alone could justify its efforts.

The national-level efforts of the Uganda country team have not apparently detracted from other national-level planning and visioning efforts. In fact, Ugandan officials were already engaged with UNDP in an economy-wide visioning effort (not just food and agriculture) called “Vision 2025,” and Uganda’s 2020 country note on food and agriculture can now be fed efficiently into that other visioning process. A representative of the 2525 project in Uganda was included on the 2020 vision task force to ensure effective information sharing between these efforts.

The *Tanzania* country note was not based upon such an ambitious process. It was based on “consultations” with stakeholders. Prior to the Entebbe workshop the authors of the Tanzania paper did present a version at a workshop in Dar, but the Tanzania paper was less of a jointly written consensus document. This came through in some of the national policy goals laid out in the paper, including a dubious plan to increase the agricultural share of total government spending sixfold. As in Uganda, however, the Tanzania country note was complementary with rather than competitive with other policy planning activities underway, including once again an economywide “Vision 2025” exercise with UNDP.

The drafting of the *Mozambique* country note, by two well-connected academics, was apparently useful in getting that country’s agriculture minister to participate in a forward-looking policy exercise (since the country note was vetted, and edited, through the ministry). The final version of the country note is also expected to get careful attention at the political level, since the government has been positioning itself for

upcoming elections. The government of Mozambique is comfortable using IFPRI as a venue for forward-looking policy work, having contracted with IFPRI to produce a national “food sector strategy” in 1996. Mozambicans acknowledge that their policy planning resources are stretched thin, obliging them to “pick and choose” between the large number of international and regional networks available to them. They have valued the policy advice and information they get from IFPRI, in part as a counterpoint to what they get from the World Bank, since they embraced a more liberal set of economic policies in 1992.

The *Kenya* country note presented at the Entebbe workshop was a remarkable paper, because it focused so heavily (and unexpectedly) on the issue of “governance.” This paper, authored and presented at Entebbe by some of Kenya’s top agricultural policy technocrats, was implicitly a criticism of political leadership within Kenya itself. The Kenyan country team leaders appeared to value the opportunity, presented by the Entebbe workshop, to get this criticism of their own policy system out on the table. IFPRI normally seeks to avoid governance issues, so as to avoid jeopardizing its necessary working relationships with some of the governments in question. It was healthy for this topic to arise spontaneously at the workshop; it was a sure sign that the country teams IFPRI had recruited were not simply reiterating official policy rhetoric.

The *Malawi* country note was an interesting document because it borrowed so heavily from an already existing “Malawi Vision 2020” project, once again a national visioning and planning effort sponsored in part through UNDP. The UNDP process is highly participatory and based on a distinctive five-step “African futures” methodology that originated in Côte d’Ivoire. This parallel economywide visioning process was launched in Malawi in early 1996, and the outcome received a presidential endorsement in the spring of 1998. However, most government officials (outside of the planning ministry) remained somewhat outside the process. The agriculturalists on Malawi’s 2020 country team valued the Entebbe workshop in part because it gave them a chance to publicize the food and farm sector goals of this earlier visioning exercise, and in part because of their expectation that Malawi’s director of planning for agriculture (who was sent to attend the workshop by his boss, a principal secretary in the Ministry of Planning) will now be able in several ways to do a better job advocating for agriculture inside the ministry. He will have substantive information from the workshop itself to report, and he will also be able to point to the strong possibility of future donor funding for Malawi if a country-level consensus document can be produced and convincingly endorsed. This sort of advocacy for agriculture will also feed into the larger government planning process in Malawi, where expenditures for the important but politically weak agricultural sector must every year be defended against those calling for alternative uses of scarce public sector resources.

We also see evidence that IFPRI's new subregional network in East Africa has so far not significantly undercut the activities of other related policy networks in the region. The greatest danger here was a competition for resources between IFPRI's new network and an existing Eastern and Central Africa Programme for Agricultural Policy Analysis (ECAPAPA), which is in turn a recently created policy analysis unit for yet another network, the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA). IFPRI's solution to this potential competition has been to run its East Africa subregional network in a "partnership" with ECAPAPA. In the ECAPAPA countries in the region, existing secretariats will be used for 2020 operations. Only in non-ECAPAPA countries will 2020 have to create new secretariats.

This solution makes good sense for both partners in the short run, since ECAPAPA is a network with a coordinator in Entebbe and an electronic newsletter, but only a small budget, while IFPRI's 2020 operation came to the region with a more significant budget but with no network. A smooth working connection between 2020 and ECAPAPA has been maintained so far through the efforts of senior influential leaders in the region, especially Harris Mutio Mule, who chairs the steering committee of ECAPAPA while also serving as a senior consultant to IFPRI on the 2020 networks, and as a member of the 2020 IAC.

In the longer term there is some risk to ECAPAPA from the new 2020 initiative in the region. IFPRI's better financed and better staffed 2020 operations in the region could stunt the independent capacity and reputation of ECAPAPA. Already ECAPAPA seems to have fallen into the role of a somewhat passive junior partner. When IFPRI in several years completes its 2020 work in the region, ECAPAPA may be left a weaker organization than it was when IFPRI first arrived. Both IFPRI and ECAPAPA staff are aware of this danger, and are already talking about ways to "fold 2020 into ECAPAPA" when the 2020 project is finally terminated.

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