The CGIAR at 31: Celebrating Its Achievements, Facing Its Challenges

The Consultative Group on International Agricultural Research (CGIAR) was established in 1971 to scale up years of effort by the Rockefeller and Ford Foundations in supporting four international agricultural research centers, in Colombia, Mexico, Nigeria, and the Philippines. As the first global program to receive grants from the World Bank’s net income, the CGIAR’s original mission was a strategic, science-based focus on increasing “the pile of rice on the plates of food-short consumers,” as characterized by former Chairman David Hopper. It was to use the best science in advanced countries to develop technologies for the benefit of food-deficit countries and populations. Today it supports 16 international Centers, and from an initial 18, its membership has expanded to 62, including 24 developing and transition economies (box 1).

The Operations Evaluation Department (OED) of the World Bank has recently completed a meta-evaluation of the CGIAR as part of an overall evaluation of the Bank’s involvement in 70 global programs. At $50 million a year of completely unrestricted funds, the CGIAR currently receives 40 percent of the Development Grant Facility (DGF) grants going to global programs. Increasing competition for such grants to meet a variety of global challenges and the need for selectivity were among the factors leading OED to review the Bank’s involvement in global programs.

Findings
OED concludes that the CGIAR has been a unique instrument of international cooperation. Its productivity-enhancing research has had sizeable impacts on reducing poverty by increasing employment, raising incomes, lowering food prices, and releasing land from cropping—a phenomenon that has come to be known as the Green Revolution. Moreover, further improvements in sustainable agricultural productivity are critical to meet the international community’s Millennium Development Goal of halving poverty by 2015.
Box 1. Portrait of a Global Program

The CGIAR is the oldest and still the largest of the global programs supported by the Bank:

- The CGIAR supports 16 autonomous research Centers and 8,500 scientists and staff in more than 100 countries.
- It has 62 members, comprising 24 developing and 22 industrialized countries, 12 international/regional organizations, and 4 foundations.
- Co-sponsored by the World Bank, the Food and Agricultural Organization (FAO) of the United Nations, the United Nations Development Program, and more recently the International Fund for Agricultural Development, the System has a Secretariat housed in the Bank and a Technical Advisory Committee (recently renamed the interim Science Council) in FAO.
- The CGIAR has received upwards of $930 million of unrestricted funds from the Bank since its inception in 1971, out of $5.6 billion in total support from the international community.

But the CGIAR is facing huge challenges, and it is less focused on enhancing agricultural productivity than it used to be. Its current mix of activities reflects neither its comparative advantage nor its core competence. The CGIAR’s expenditures on *productivity-enhancing agricultural research*—which is a global or regional public good ideally suited to a publicly funded global network such as the CGIAR—declined by 6.5 percent annually in real terms between 1992 and 2001, while expenditures on *improving policies* and on *protecting the environment* increased by 3.1 percent annually during the same time period (figure 1).

At the same time, overall CGIAR funding has stagnated in nominal terms, declined in real terms, and become increasingly restricted over the past decade. Overall contributions grew at an average annual rate of 0.7 percent in nominal terms and declined by 1.8 percent per year in real terms between 1992 and 2001. The degree of restricted funding (as defined by the CGIAR’s own reporting system) increased from 36 percent of total funding in 1992 to 57 percent in 2001, with most of this increase in restricted funding occurring since 1998 (figure 2).

A Changing Context

Several factors explain the changing research mix and the increasing restrictions. First, germplasm improvement research has been unpopular in the constituencies of some key donors because of negative perceptions of the Green Revolution. Second, the CGIAR has correctly responded to the genuine second-generation environmental pressures on soils and water created by the radical change in farming systems during the Green Revolution. Third, the rise of environmentalism, the 1992 United Nations Conference on Environment and Development in Rio de Janeiro, and growing environmental advocacy in donor countries has pressured the CGIAR to respond to environmental concerns. Fourth, the failure of many governments of developing countries and their donor supporters (including the World Bank; see figure 3) to make the necessary investments in their national agricultural research systems (NARS) has led CGIAR donors to turn to the Centers to fill the national and local public goods gaps closer to the

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**Figure 1. Research with Proven Impacts on Poverty Has Declined Dramatically**

![Graph showing average annual change in Center’s expenditures by type of research activity (adjusted for inflation), 1992–2001. Source: Calculations based on CGIAR Financial Reports, 1992–2001.]

**Figure 2. Restricted Funding Has Increased**

![Graph showing total (cumulative) contributions to CGIAR research activities (adjusted for inflation). Source: CGIAR Financial Reports, 1988–2001.]

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farmer, which should ideally be filled by national systems. Collaterally, the maintenance and management of the CGIAR gene banks of 600,000 accessions, a unique global public good, has suffered from inadequate funding.

Two changes in the funding processes of the CGIAR since the mid-1990s have also increased the influence of individual donors (and their domestic constituencies) on the research expenditures of the CGIAR. First, in response to a funding crisis in 1993-94, the Bank changed the allocation of its own financial contribution from a “donor of last resort” model to a matching grant model. Under the former, the Bank’s contribution was used to fill gaps between the System’s research priorities as articulated by the Technical Advisory Committee (TAC) and the financial contributions to those priorities by other donors. Under the matching grant model, the Bank’s contribution indiscriminately matches funding from other donors, whether in support of System-wide priorities or not. Second, to create incentives for Centers to mobilize additional funding and to accommodate donors, the CGIAR expanded the definition of its “agreed research agenda” to include both the former “core” agenda (largely the high-return global and regional public goods research) and the “non-core” agenda (donor-funded, mostly downstream activities that TAC did not consider as high a priority).

The cumulative result of these trends has been the declining influence of independent scientific advice provided by the TAC, a concurrent transformation of the CGIAR’s authorizing environment from being science-driven to being donor-driven, and a shift in the System from producing global and regional public goods toward providing national and local services. Historically, the TAC played a powerful role in the CGIAR by recommending allocations of resources among Centers, programs, and activities; monitoring budgets; and conducting Center-level and System-level reviews. Today, donors’ preferences are largely determining resource allocations independently of TAC’s medium- and longer-term priority setting. The CGIAR experience demonstrates that the sum of the interests of individual stakeholders in a global organization need not define a global public good.

A System-Level Response is Needed
At the same time, the growing importance of genetic resource management, the biotechnology revolution, intellectual property rights (IPRs), and private sector research are pressuring the overall System, and call for System-level responses, strategies, and policies to deal with these System-wide challenges. As a result, the Third System Review (TSR) in 1998 recommended that the CGIAR adopt a corporate model and establish a legal entity in order to deal with IPR issues and public-private partnerships. For, unlike more recent global programs, such as the Global Environment Facility and the Global Fund for AIDS, TB, and Malaria, the CGIAR System has no formal or legal persona, written charter, or even a memorandum of understanding.

Although the CGIAR membership rejected this TSR recommendation in 1999, the CGIAR Committee of Board Chairs and the Center Directors’ Committee jointly recommended a decentralized Federation of Centers in 2000. While the two proposals differed in the degree of decentralization proposed, both acknowledged the need for a legal entity with a centralized board to enable System-level responses to IPR issues. But collective action problems created by the diverse interests of the CGIAR’s constituents have forestalled such fundamental organizational reforms in the CGIAR. The six founding principles that were adopted when the CGIAR consisted of fewer Centers and less diverse constituents are no longer suited to today’s politically driven authorizing environment, wider research agenda, and expanding membership (box 2.)

Since 2000, under the leadership of Chairman Ian Johnson, the CGIAR has instituted four reforms in its governance and management known as the Change Design and Management Process. These comprise establishing an Executive Council and a System Office, transforming the TAC into a Science Council, and initiating a programmatic approach to research in the form of Challenge Programs. Some of these reforms are creditable, but others need revisiting. The chairman gets high marks for establishing the long-overdue Executive Council. But OED is skeptical that the transformation of the TAC into a Science Council will achieve the objective of strengthening the role of independent scientific advice in the CGIAR, since the Science Council will focus primarily on science quality and play a small, if any, role in the important functions of priority setting and resource allocation.
OED also finds that the Challenge Programs are proceeding without first addressing the issues of System-level funding, priority setting, science quality, and governance raised in previous evaluations of the CGIAR. OED recommends that the CGIAR postpone the approval of new Challenge Programs (beyond the first two already approved) pending the installation of the Science Council, an assessment of System-level priorities, and a thorough review of the design and approval process of the first two programs to learn lessons for the selection, design, sequencing, and phasing of future Challenge Programs in the context of System-level priorities and strategies.

The World Bank plays multiple roles in the CGIAR—as convener and donor to the System, and as a lender to developing countries for complementary activities. As a result, the Bank has been the guardian of the CGIAR and the glue that makes the System coherent and larger than the sum of its 16 research Centers. Other donors view the Bank’s leadership role, its financial contributions, and its operational support as a seal of approval, giving them the confidence to continue to invest in the System. But conflicts of interest among the roles of the Environmentally and Socially Sustainable Development (ESSD) Vice President (who is also the CGIAR chairman), the CGIAR director, and other ESSD staff involved with the System, as well as inadequate Bank oversight (from outside the vice presidency of the Bank’s involvement in the CGIAR), have compromised the Bank’s capacity to exercise strategic leadership of the CGIAR and to press for reforms on the scale or at a speed that might be warranted. In particular, it is problematic for the CGIAR chairman to be both judge and advocate—to acknowledge the need for and to press for major reforms, while also making the case for continued funding to the Bank and donors.

Next Steps
Further reforms are needed. The governance of the CGIAR should be reconfigured to promote greater efficiency, tougher priority setting, and scientific excellence without sacrificing legitimacy and ownership. The strategic priorities of the CGIAR should respond more actively to changes in the global research context, giving more prominence to basic plant breeding and germplasm improvement, and reshaping natural resource management research in the areas of the CGIAR’s comparative advantage to focus tightly on productivity enhancement and sustainable use of natural resources for the benefit of developing countries.

OED recommends:
• The Bank should lead a concerted effort at the highest level, much as when the CGIAR was established, to
achieve fundamental reforms in the organizational structure, finance, and management of the CGIAR—particularly to encourage donors to reverse the trend in restricted funding and to establish clear targets for an increased share of unrestricted funding.

- The Bank should address its corporate governance responsibilities in the management of the CGIAR, separate oversight and management functions within the Bank to address the conflicts of interests that exist among the Bank’s roles in the CGIAR, and exercise oversight consistent with the major roles that its plays in the CGIAR.
- The Bank should abandon the current matching grant model and ensure that its financial resources are allocated strategically in support of global and regional public goods that contribute to agricultural productivity and poverty reduction, based on long-term priorities as articulated by the Science Council.
- The CGIAR should ensure that a strong, qualified, and independent Science Council is established and vested with the role and resources to establish System-wide priorities, policies, and strategies, and to monitor and report to the membership on the uses and allocations of CGIAR resources toward fulfilling these System-wide measures.
- The CGIAR should adopt a written charter that delineates the roles, responsibilities, and accountabilities of the officers and bodies that govern the System, as well as a mechanism to reform the System’s cumbersome governance. It should also analyze the advantages and disadvantages of establishing all or part of the CGIAR as a separate legal entity attuned to deal with today’s realities for partnerships.

If these reforms are achieved, there is a strong argument for increased funding for the CGIAR, including exploring the use of grant funds for the provision of regional public goods, and eventually global public goods, that reduce poverty. As a lender to developing countries, the Bank also needs to increase lending to agricultural research, education, extension, and training, especially in Sub-Saharan Africa, in order to enhance the performance of NARS.

**World Bank Management Response**

Management concurred with most of the report’s recommendations, while noting that many of these reflected actions already taken or planned by the CGIAR. Management agreed that restricted funding by some donors allocated to projects preferred by those donors has diverted some activities of the CGIAR Centers from their core research programs. However, Management saw the report’s claim that “the CGIAR is less focused” as potentially too sweeping. The CGIAR broadened its strategic focus to include natural resource management 12 to 15 years ago at the urging of several external panels of experts and with the full support of investors and clients alike. Nonetheless, Management does see a need to continue to focus on productivity research and to be alert to the risk that increasing the focus on natural resources may dilute the Centers’ contribution to global public goods if they become more heavily involved in local development activities.

Management disagreed that conflicts of interest among the Bank’s roles and inadequate Bank oversight have compromised the Bank’s strategic leadership of the CGIAR. However, Management agreed to establish a clearer distinction between the Bank’s oversight and management functions. Management agreed that further reforms of the CGIAR may be necessary, but not to slow down or significantly shift the direction of the current reform effort. While recognizing that the CGIAR members have previously rejected the idea of a single legal entity, Management agreed to press key donors and other members to again give serious consideration to the creation of a legal entity covering the CGIAR’s central oversight and fund allocation functions.
World Bank Executive Directors’ Perspective

The Committee praised the CGIAR’s achievements in providing global and regional public goods and increasing agricultural productivity in developing countries. However, it also concurred that the CGIAR is facing many new challenges and generally endorsed OED’s recommendations for reform of the System in several areas:

- The Bank should lead an international effort to reform the CGIAR and to encourage donors to provide less restricted funding for the System. However, the Committee made a distinction between “restricted funding” as defined by the CGIAR and certain donor “requirements” (such as a priority on Africa) that may be consistent with development needs.
- The Bank should separate oversight and management functions within the Bank in order to avoid any perception of conflict of interest. The Committee welcomed the announcement that the Senior Vice President and Chief Economist would be responsible for the oversight function.
- The CGIAR should establish a strong and independent Science Council, vested with the role and resources to establish System-wide priorities and strategies.
- The CGIAR should slow down the approval of new Challenge Programs to first see the initial results of the ongoing pilots and to allow the Science Council to get established.
- The CGIAR should increase its focus on agricultural productivity and on the provision of global and regional public goods.
- The CGIAR should adopt a written charter, and further analyze and debate the pros and cons of establishing the CGIAR as an independent legal entity. Many of the challenges facing the CGIAR (including IPRs and public-private partnerships) require System-level responses and make a completely decentralized System unworkable.

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