REVOLUTIONIZING THE EVOLUTION OF THE CGIAR 2001 TO 2007

A contribution to the institutional memoir and some thoughts for the future

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CONSULTATIVE GROUP ON INTERNATIONAL AGRICULTURAL RESEARCH
About Change

“...there is nothing more difficult to arrange, more doubtful of success, more dangerous to carry through than initiating changes...
The innovator makes enemies of all those who prosper under the old order, and only lukewarm support is forthcoming from those who would prosper under the new. Men are generally incredulous, never really trusting new things unless they have tested them by experience.”

— Nicholas Machiavelli, 1513
FOREWORD

This account of the CGIAR reform program launched in 2001 is a valuable record of the program's objectives and outcomes.

Its authors have lived through the reform program, and are intimately familiar with its goals, impact, and future possibilities. Their sense of dedication and commitment to continuous improvement are clear throughout. Their recognition of the need for a pragmatic and practical approach to change management is also clear and welcome. There will obviously be other views on these matters, but I consider this a great first step forward.

We in the CGIAR System and our partners are committed to ensuring that the research we support brings maximum benefit to the poor and the hungry, and helps to protect the natural resources on which we all depend. We want the System to be efficient, we expect governance to be continuously improved, we look forward to programmatic alignments that will strengthen CGIAR-supported research for development, and we realize that without adequate funding priorities and programs that have been carefully planned cannot be transformed into action.

We are agreed, too, that moving forward with appropriate speed is better than slowing down, that existing bottlenecks need to be identified and eliminated, and that we must create for ourselves a vision for the next stage of the reform program accompanied by a concise, clear, and coherent plan that is practical and can be implemented, as the entry point to the next phase of reform.

The story of reform up to now as spelled out in this paper, the assessment of impacts achieved, and the questions raised for future action should provide us with much to learn from and think about as the CGIAR looks ahead and plans its future. This paper is valuable context for all those who advocate change in the CGIAR.

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SUMMARY

The CGIAR has changed over time although change has not always come easily, and not always at the pace required. The many external challenges that agriculture and development face require the CGIAR to address its internal challenges, giving continuity to the reform program initiated in 2001, if the CGIAR System is to continue to play an important role in development. The 2001-2007 reform program focused on efficiency, efficacy, transparency, accountability, and participation.

The four initial pillars of reform were:
1) The creation of major research for development programs that addressed key global issues and that necessarily required the mobilization of science and scientists from South and North alike, known as CGIAR Challenge Programs; 2) Streamlining governance and putting in place adequate mechanisms for nimble decision making, through the creation of an Executive Council, the elimination of several committees, and the abolishment of the Mid-Term meetings (MTM); 3) The creation of a science-focused Science Council to advise the Consultative Group, replacing the Technical Advisory Committee; and 4) The establishment of a System Office that would bring together, virtually, all units that provide service to the System, with a clear expectation that a single, integrated communication strategy, for coherent communication and fund-raising, would be developed.

Although impact that sustainably changes institutions can only be assessed in the mid- to long-term, initial evidence suggests that the impact of the reform program was, in many ways, immediate. Several of the initial initiatives are leading to more innovations. We believe the actions taken have led the CGIAR System in the direction of efficiency, efficacy, transparency, accountability, and participation.

A fundamental change has been the acceptance of the Consultative Group as a decision-making body, and not merely a platform for discussion. Based on these first elements, we believe that key internal issues that need to be tackled include:
1) Simplification of governance at Center level: Increased demands on accountability and several failures in the recent past (CIAT, CIMMYT, and ISNAR) indicate beyond doubt that “business as usual” in governance at Center level is not tenable; 2) Increased alignment among Centers and CGIAR Members: Alignment in terms of programs, provision of services and governance has finally begun to occupy a prominent space in the agenda of CGIAR meetings. For the
benefit of developing countries, much more is needed, and a focus on alignment to support the development of Sub-Saharan Africa is a good start. Increased stability in funding is expected to be a key outcome of serious alignment efforts by Members, which is important for Center management and long-term strategy;

3) **Reviewing and Adjusting Priorities:** The “System Priorities for CGIAR Research 2005-2015” are expected to help the System maintain its focus. The CGIAR needs to review and adjust the set of approved priorities and, equally important, Members need to discipline themselves in the kinds of projects or programs they would fund. These are major and complex challenges considering the Centers’ financial needs and the fact that Members need to demonstrate the short term impact of ODA resources; and 4) **Mobilization of Science and Technology:** The single new and perhaps most important element in the establishment of the Science Council was the creation of a standing panel to mobilize science. A preliminary assessment suggests that the objective of mobilizing science from Southern and Northern institutions to support the CGIAR mission simply did not take place, notwithstanding other important achievements by the Science Council.

All these issues demand immediate strategic attention. If, in order to meet these challenges, we need to plan new modes of operation, of governance and of management, we should be prepared to do so. The CGIAR needs to tackle the **unfinished business** responding to these key challenges which will allow the System to get ready to respond to the new ones which will undoubtedly come.
I. INTRODUCTION: GETTING THERE

On May 19, 1971, a small group of policymakers endowed with unusual foresight inaugurated the Consultative Group on International Agricultural Research (CGIAR). The CGIAR was created against the background of looming famine in Asia. Increasing food production in the tropics was therefore the dominant preoccupation of the CGIAR at its founding. The main objectives of the CGIAR were to focus international agricultural research on developing country problems, to ensure that the products of research would be freely available as public goods across national boundaries, and to promote the conservation and international mobility of germplasm. The CGIAR hoped to meet these objectives by supporting the work of existing international research Centers (known, thereafter as CGIAR Centers) and others yet to be established. Thirty years later, in May 2001, the CGIAR launched a comprehensive reform program that has had a dramatic impact on how the CGIAR functions today (See Chapter 5 below).

The CGIAR has changed over time although change has not always come easily, and not always at the pace required. Difficulties in introducing new concepts or institutions into the CGIAR are illustrated by the various attempts to form a permanent “standing committee” that preceded the creation of an Executive Council as part of the reform program. Nevertheless, change and renewal have been a constant topic of interest within the Consultative Group, as well as within the wider “CGIAR System,” a loosely connected network of several components including the Consultative Group and partners, the science advisory body set up by the Group (originally, a Technical Advisory Committee or TAC but after the reform program, a Science Council), and the Centers. A major renewal effort was undertaken on the basis of decisions reached at the CGIAR Ministerial-Level Meeting held in Lucerne, Switzerland (February 1995).

A profile of change between 1971 and the present would include the following:

- **Membership:** Up from 18 founding Members in May 1971 to 64 as of April 2007.
- **Southern Members:** Developing-country Membership up from zero in 1971 to 24 as of April 2007.
Mission: The mission of the CGIAR has been periodically revised, from supporting research and technology for food production to achieve sustainable food security and reduce poverty.9

Centers: The number of CGIAR Centers increased from the initial four to 18 and now stands at 15.10

Research Agenda: From its initial concern with productivity, the CGIAR System has expanded its interests to include subject areas such as natural resource management, policy, agroforestry, forestry, fisheries, livestock and water management.

Partnerships: The CGIAR was developed from a “free-standing” instrument to one that is committed to creating and expanding partnerships as a means of increasing its effectiveness.


Some changes were the result of recommendations by the three “External System Reviews” that were undertaken during the 1972-2007 period. Some, such as the increase in Southern Membership and the initial demolition of barriers between the CGIAR and others in the agricultural research community, took place as a result of the renewal program to which reference is made above. Changes in the research agenda of CGIAR Centers came about as a result of initiatives within the Centers and pressure from CGIAR Members. Funding did not grow in a linear fashion but faced many fluctuations, mostly as a result of domestic trends within Member countries or institutions. If change did occur over the 30 years of its existence, was a reform program that dramatically changed the outlook and conduct of the CGIAR really necessary? Why a major reform program was considered necessary, how it was launched, how it differs from past changes within the CGIAR, and what the reform program has achieved, are the focus of this report which also outlines a vision for the CGIAR in 2015.
II. DRIVERS OF CHANGE

The drivers of change that led to the reform program of 2001 were both external and internal. Externally, as the World Bank’s “World Development Report” of 2000 pointed out, “destitution persists even though human conditions have improved more in the past century than in the rest of history.” The development agenda had grown more complex, as hunger and poverty defied numerous efforts to eliminate them. One-fifth of the world’s population was in absolute poverty, making do on the equivalent, wherever they lived, of less than US$1 a day, and almost half the world’s population lived on less than US$2 a day. Over 800 million people did not have enough to eat.

Numerous other challenges dominated the development agenda. The vulnerability of the global environment, climate change, ecological and natural resource management, natural disasters, public health and nutritional concerns all added new dimensions of complexity to the issues that the international community faced. Added to these were HIV-AIDS, the “hidden hunger” of malnutrition, water scarcity, land degradation, loss of biodiversity, and threats to the global environment. Additionally, trade issues as well as the risks of a breakdown in multilateralism were matters of concern.

The challenges were accompanied by opportunities. The frontiers of science were being rapidly extended. Dramatic developments in the biological sciences offered the hope of new scientific breakthroughs that could accelerate agricultural development. New knowledge could be more broadly shared as a result of spectacular developments in information technology; knowledge sharing became a science.

The challenges confronting agriculture, and the opportunities inherent in scientific developments, were formidable. Agriculture alone cannot solve all development problems, but agriculture, and one of its sustaining forces, agricultural research, were essential elements of any realistic effort to resolve the complex development issues that concerned the international development community. Was the CGIAR capable or rising to the occasion, of confronting the challenges, and grasping the opportunities?
Internally, the CGIAR was overwhelmed by uncertainty as to how it should confront a different and more complex set of challenges than its predecessors did. The CGIAR budget amounted to approximately 2 percent of global investment in agricultural research. How could it use its accumulated experience to stretch the effectiveness of that investment to its furthest limits? Some national agricultural research systems had developed into strong and capable networks, while others, unfortunately, faced enormous challenges, particularly in Sub-Saharan Africa. What should be the appropriate linkage between the strong NARS and CGIAR Centers? How best could the CGIAR and civil society organizations (CSOs) collaborate? How could the CGIAR tap into the resources, broadly defined, of the private sector that had the lion’s share of agricultural research in industrialized countries? What should be the balance between productivity-oriented research and research oriented to natural resources management? What impact did natural resources management research have, and how did it compare with the impact of productivity-oriented research?

These and many related questions cried out for answers — and action to match the answers. Both formally and informally, CGIAR Members and others acknowledged the need for the CGIAR to be more agile: flexible, responsive, and capable of rapid adjustments in a rapidly changing world. Coherent (“central”) strategies and procedures, coherent action, better communication and full use of the new information technology were required as well. Several Members expressed the need for stronger and broader linkages with national agricultural research systems — including CSOs — and the private sector at national, regional and international levels. These comments added up to an unavoidable reality: the CGIAR had to change at a faster speed or face obsolescence.

Two attempts at change immediately preceded the reform program. First, the Third System Review led by Maurice F. Strong, who had participated in the several rounds of negotiations that led to the creation of the CGIAR. The Third System Review, said then CGIAR Chair Ismail Serageldin, produced “a set of 126 recommendations, arranged under 26 thematic headings.” Initial response to the Third System Review was that it covered significant ground, but that responding to its core proposals was unnecessarily labor-intensive and tremendously complex, because the material was poorly organized. Over half the meeting time at the CGIAR meeting in 1998 — International Centers Week (ICW) as it was then known — was reserved for discussion of the report, 17 out of 32.5 total hours. The report was discussed in plenary as well as in working groups and, eventually by a Consultative Council (see Endnote iii) which would draft action proposals for consideration in 1999.

The Third System Review was supportive and complimentary. It said, for instance, that “investment in the CGIAR has been the most effective use of official development assistance (ODA) bar none. There can be no long-term agenda for eradicating poverty, ending hunger, and ensuring sustainable food security without the CGIAR.” Over time, several of its 126 recommendations served as the basis of action by the CGIAR System. The Review failed to ignite a spark of enthusiasm probably because of the breadth of the
recommendations and the lack of focus on a few critical elements of reform. It did not lead to the decisions that could have enabled the CGIAR to break from some of the traditions and practices that held it down.

The second attempt at change immediately preceding the reform program was led by the Technical Advisory Committee, now the CGIAR Science Council, which was entrusted with the task of crafting a new vision for the CGIAR. TAC did as it was requested and the CGIAR adopted the new vision — a “food secure world for all” — at its mid-year meeting (known within the CGIAR as a “Mid-Term Meeting”) in May 2000. The essence of the new vision was summarized in seven “planks”:
1. poverty alleviation;
2. modern science;
3. priority to South Asia and Sub-Saharan Africa;
4. regional approaches to research planning;
5. integration of CGIAR activities with partners in developing regions;
6. adoption of a task force approach; and
7. service as a catalyst within the global agricultural research system.

The CGIAR, which adopted the seven planks as constituting a work-plan was, however, ambivalent about the organizational and structural changes (if any) that would be required to fulfill the new vision. In an effort to generate clarity, several sub-groups of the CGIAR and its partners carried out a series of discussions — at seminars, retreats, and electronically — to define the most effective means of moving forward. The outcomes of these efforts varied. They received some degree of acceptance but not total support. The need for entering a new phase in the evolution of the CGIAR was acknowledged. The precise nature of the changes required had yet to be defined. It was in these circumstances that the CGIAR gathered in Washington, DC, in October 2000 for International Centers Week.

Several developments helped to propel the CGIAR forward at ICW2000. Indeed, the very inconclusiveness of preceding discussions acted as an incentive to stimulate more intensive efforts to reach consensus on the next steps required. The increase in the number of Southern Members created a new dynamic within the CGIAR, with greater emphasis than before on linking agricultural research to poverty alleviation. At the same time, there was growing concern among Members that if the Group could not adapt itself to changing global circumstances, it would lose credibility and an erosion of its funding. Doubts were already beginning to surface among Center scientists about the long-term viability of the CGIAR System. The greatest fear, of course, was that inaction might cause the CGIAR to lose its anchor — the World Bank’s continuing leadership and financial support.
III. THE PROCESS UNFOLDS

The CGIAR moved towards the reform program under a new leadership, with a new Chair (Ian Johnson) having recently assumed office, and a new Director (Francisco J. B. Reifschneider) expected to take up duties shortly. The designation of Director, CGIAR, was proposed by the World Bank’s representative in the Search Committee which, in its initial discussions, was looking for a new Executive Secretary, the designation that the CGIAR used from 1971 to 2001.\textsuperscript{14} The designation of Director was consistent with the Bank’s own nomenclature as a member of senior management. Moreover, the new Chair was expected to give much less of his time to the CGIAR than his predecessor, so a strong Director was required to function as the CEO of the CGIAR. The new leadership team could be expected to benefit from the “grace period” that accompanies most changes of leadership in an institution. The Consultative Group made remarkably quick progress in agreeing that the key tasks ahead were:

- Maintaining science and research at the Centers at the highest levels;
- Transforming the CGIAR into a “new age” institution characterized by lightness, agility, responsiveness, and cost-efficiency;
- Strengthening the CGIAR’s position as a producer of global public goods;
- Redefining a framework for partnerships;
- Keeping CGIAR funding stable and secure; and
- Devising the most effective means of linking CGIAR research with national development programs.

The Group agreed, too, that it should focus both on actions that would provide “quick wins,” and on others with a medium- or long-term perspective. They decided that the entire CGIAR System should “elevate their game” by undertaking research, in partnership with others, that would make the CGIAR a major player on the global research for development scene. To capture the “spirit of change” and maintain the momentum that had been created, a “Change Design and Management Team” (CDMT)\textsuperscript{15} was established, with the following terms of reference:

- A restructuring action plan for the entire CGIAR System with a clear rationale for program integration and/or consolidation of Centers (including analysis of options);
A governance plan that streamlines decision making and clarifies the roles of all components (including Cosponsors, the Consultative Council and other committees) and brings net efficiency gains; and

- A business plan for:
  - increasing efficiency in the provision of common services;
  - coordinating System-wide programmatic activities; and
  - reducing Center and System overheads in order to transfer more resources to research.

The team was requested to table its report at the next CGIAR meeting, scheduled for May 2001 in Durban, South Africa. The Consultative Group agreed that opportunities for stabilizing long-term financing should be available on a parallel track, with details available later in 2001.

The CDMT was chaired by Margaret Catley-Carlson, a former president of the Canadian International Development Agency (CIDA). Other members were Stein W. Bie (ISNAR), Selcuk Ozgediz (CGIAR Secretariat), Samuel Paul (India), Martin Pineiro (Argentina), Timothy G. Reeves (CIMMYT), and Mandivamba Rukuni (Zimbabwe).

The team was supported and guided by a steering committee drawn from across the CGIAR System, which consisted of Andrew J. Bennett (UK/chair) — at that time, chair of the CGIAR Oversight Committee which has since been dissolved — Sam Dryden (USA, chair, Private Sector Committee), H-Jochen De Haas (Germany), Jacques P. Ekebil (FAO), Hank Fitzhugh (ILRI), Christine E. Grieder (Switzerland), Ruth Haug (Norway), Robert D. Havener (ICARDA), Robert W. Herdt (Rockefeller Foundation), Ian Johnson (CGIAR Chair), Tetsushi Kondo (Japan), Bongwe Njobe-Mbuli (South Africa), Kurt Johannes Peters (ICLARM/WorldFish), Per Pinstrup-Andersen (IFPRI), Eliseo R. Ponce (Philippines), Francisco J. B. Reifschneider (Brazil), Juan L. Restrepo (Colombia), Gilles Saint-Martin (France), Emmy M. Simmons (USA), Robert L. Thompson (World Bank), Ann Waters-Bayer (co-chair, NGO Committee), Longyue Zhao (China).

The CDMT report, which was presented to the 2001 CGIAR MTM (the last of its kind) at Durban, proposed that the CGIAR should redefine itself in a contemporary mode:

- to see itself in terms of outputs, outcomes, and impact;
- to seek alliances in order to extend the potential impact of its important work and address development problems; and
- to equip itself with internal management arrangements for better System decision-making and real follow-through.

Under the broad umbrella of change described above, the CDMT made the following cluster of recommendations:

1. Adoption of a programmatic approach to research activities — the development of Global Challenge Programs in association with partners;
2. Enhancing and fully mobilizing the capabilities of NARS;
3. Transforming TAC into a Science Council that will advise the CGIAR on major science policy questions, and ensure that the science practiced in the CGIAR System meets world-class standards;
4. A fund-raising canvas of potential new donors and other measures to strengthen and expand resource mobilization;
5. Reduction of the annual meetings of the Consultative Group from two to one — creation of an Executive Council representing shareholders and with ex-officio members;
6. Establishment of a System Office with an integrated communication program, with Centers determining among themselves how they wish to improve the organization of common services; and
7. Adoption of an evolutionary approach to restructuring the Centers.

The CDMT report was shared with CGIAR Members in advance of the 2001 MTM. Initial reactions were mixed. CGIAR Chair Johnson and Director Reifschneider (who assumed duties in January 2001) worked closely with CGIAR Members — making full use of their "grace period"— to ensure that consensus could be reached on key areas in which reform was essential, and on action points of reform within those areas. In a letter to CGIAR Members, Johnson pointed out that:

"The time for introspection and study has ended. It is now a time to act… The change initiative launched at International Centers Week last year (2000) grew out of an explicit understanding that the CGIAR System must change, and must be seen to change, both in form and function. We did not, and do not, seek change for the sake of change, but to fulfill a vision of a transformed CGIAR whose future relevance, impact, and viability can be guaranteed and increased."
IV. FOUR INITIAL PILLARS OF REFORM

In their consultations with Members, Johnson and Reifschneider canvassed the view that the principles of reform should be **efficiency, efficacy, transparency, accountability, and participation**. These principles, they urged, should form the bedrock on which pillars of a reform program could be constructed. This had to be a true reform program and not merely an exercise in the rhetoric of reform. After substantial discussion during the weeks leading up to the meeting in Durban, and at the meeting itself, CGIAR Members fully committed themselves to four initial pillars of reform which were written into decisions reached at Durban. The four pillars as defined in these decisions were:

1. **Challenge Programs**

   The CGIAR will incorporate a programmatic approach to research planning and funding, to complement existing approaches, and initiate the formulation and implementation of Challenge Programs.

2. **Executive Council**

   (a) The CGIAR as a whole will meet once a year. The CGIAR will create an Executive Council, which will report to and carry out responsibilities delegated to it by the Consultative Group.

   (b) An Interim Executive Council will be constituted

   (c) The Interim Executive Council will function from May to October 2001 and will be dissolved upon the appointment of the Executive Council at the 2001 Annual General Meeting.

3. **Science Council**

   TAC will be transformed into a Science Council.
4. System Office

(a) The CGIAR will establish a System Office.
(b) A single, integrated communication strategy, for coherent communication and fund-raising, should be developed by the System Office, the Centers, and Future Harvest.¹⁹

On the issue of restructuring which was a central feature of the CDMT’s Terms of Reference, the CGIAR endorsed the evolutionary approach as described in the CDMT report, and agreed that the CGIAR System should accelerate the process of enhancing efficiencies and increasing effectiveness throughout the CGIAR System.
Although impact that sustainably changes institutions can only be assessed in the mid- to long-term, initial evidence suggests that the impact of the reform program was in many ways immediate. Several of the initial initiatives are leading to more innovations. As the encapsulation below indicates, the actions taken have led the CGIAR System in the direction of efficiency, efficacy, transparency, accountability, and participation. A fundamental change has been the acceptance of the Consultative Group as a decision-making body, and not merely a platform for discussion. As important, the CGIAR System as a whole has recognized the roles of the Executive Council as a facilitator of decision-making, as a decision-making body when delegated by the CGIAR, and as an instrument for monitoring the progress of decisions to actions. This is the central change that made it possible for other changes to be made in a timely manner, thereby “revolutionizing the evolution of the CGIAR.” However, more needs to be done, and change must be a constant in the CGIAR, not simply a reaction to internal and external events. Some of the most significant changes of the reform program, and their impacts, are:

**Streamlining Governance**

The inauguration of an Annual General Meeting (AGM) coupled with the establishment of an Executive Council (ExCo) tightened up the decision-making process and provided a clear line of accountability from ExCo to the CGIAR as a whole. Equally important was the use of e-communication by both ExCo and CGIAR Members to reach decisions, a change that has allowed a much higher number of issues to be handled at a faster pace when compared to the handling of business in face-to-face meetings only.

ExCo takes a first look at issues likely to appear on the CGIAR agenda, and submits a set of recommendations to Members both virtually and to the face-to-face AGM. Initial data indicates that most of the discussions of the general Membership are guided by ExCo’s own discussions. Furthermore, ExCo has looked at issues that may not have been thoroughly discussed by Membership, when warranted or considered of high priority. The results are positive in that the Consultative Group has been able to reach clear consensus on a number
and variety of important issues in the space of two days, the length of the AGM Business Meeting. The general Membership feels more and more comfortable with ExCo and is therefore delegating additional responsibilities to the Council. It is generally recognized by Membership, as reflected by the responses to the annual surveys at AGM and our first Stakeholder Perception Survey, that communication in the CGIAR and between the CGIAR leadership and Members has also vastly improved, and that acceptable mechanisms have been put in place for the conduct of business in a transparent and accountable way.

Earlier, with two substantial meetings a year, each lasted a week, and was preceded by a week of peripheral meetings. A great deal of time was taken — in some instances, up to two years—for the Consultative Group to reach closure on a single issue. Members themselves were irked by the slow pace of deliberations, by the lack of clarity in decisions, and by the fact that some decisions were not carried out.

Under the reform program, AGM is organized in such a way that the CGIAR as well as its partners from civil society, the wider science community and the private sector participate in a well-focused one-day CGIAR AGM Stakeholder Meeting. Thereafter, CGIAR Members are engaged in a decision-making Business Meeting that lasts two days. Members use the more intimate setting of the Business Meeting to review and agree on opportunities for coordination in such areas as funding for CGIAR System priorities, or realignment; and to make difficult decisions such as the closure of a Center, as seen in 2002. As a further incentive to coordination and consistency, in 2004 the Consultative Group adopted The Charter of the CGIAR System which serves as a reference point that strengthens coherence. This has been a major decision reached by the Group which has disciplined the conduct of business in the System as a whole.

**Opening up the System**

The launching of Challenge Programs (CPs) provided opportunities for the CGIAR System to develop additional partnerships with scientists and policy makers from compatible institutions, and also to attract funding from new sources. From the programmatic point of view, the CPs allowed the System to mobilize internally (i.e., from the 15 Centers) and, to a much more limited extent, externally, the enormous institutional capacity of both Southern and Northern countries. The first four Challenge Programs approved by the CGIAR and now in operation deal with water use, genetic resources and molecular biology, micronutrient content of staple crops and the revival of agriculture in Africa.

In a subsequent call for evidence of interest in a new round of Challenge Programs, 41 concept notes were received by the February 2007 deadline and are currently under discussion by ExCo. ExCo and the CGIAR Membership carefully considered all aspects of the CP process, and have diligently monitored both the initial call as well as the subsequent ones. This is key to the continued success of CPs which naturally run risks of being limited to the “inner circles” of the Centers and a few close partners.
Another important mode of opening up was through reformulated relations with CSOs, and with a continuing effort to collaborate with the private sector. Relations between the CGIAR and its partners were reviewed by an external panel, against the background of a NGO partnership committee that had been established earlier lapsing into dormancy. The external panel’s assessments and recommendations were reviewed by ExCo and broadly endorsed by the CGIAR.

One result of these developments was that the CGIAR AGM 2006 Stakeholder Meeting took the form of a CSO-CGIAR Forum at which future relations between the CGIAR and CSOs were debated in a spirit of transparency, accountability, and creativity. The Forum was accompanied by a competition at which prizes were given for examples of productive and innovative collaboration between CSOs and CGIAR Centers. Following up the discussions at the Forum, the CGIAR has launched a process of competitive grants that will provide additional opportunities for collaborative research. The Private Sector Partnership Committee, meanwhile, serves as a conduit for consultation, collaboration, and a continuing exchange of ideas and experience, focusing on a few programs of joint interest, such as sharing knowledge on research management.

Science

The new Science Council was mandated to break away from the emphasis on number-crunching minutiae that occupied much of the attention of its predecessor, TAC, without any impact on the mode of operation. The Science Council is a small group consisting of six members and a Chair, who are expected to work with links to the global science community. It is supported by a secretariat located at FAO, Rome. One of the first acts of the Science Council has been to draw up a new set of suggested priorities, geared to the production of global public goods. This has been the starting point of a dialogue among Members aimed at securing funding coordination that will ensure financial support for priorities recommended by the Science Council and adopted by the Consultative Group. This not only brings in a greater degree of order into funding mechanisms but also provides the Centers with confidence to build their programs based on the new priorities. The Science Council Secretariat together with the CGIAR Secretariat have considerably improved and streamlined the System’s evaluation mechanisms as well, and particularly the external reviews of the Centers and Challenge Programs.

The Centers

CGIAR Centers have responded to the changes not only by carrying out first-class research but also by seeking to bring about among themselves the kinds of cohesion and integration that is a characteristic of reform. An Alliance of CGIAR Centers has been formed, with an Alliance office, to support Center-wide integration. Programmatic alignment has been initiated in Sub-Saharan Africa, with moves underway to develop other forms of collaboration as well. Corporate services alignment as well as limited governance alignment are being actively pursued by some Centers. The effective programs of one Center (ISNAR) have been
merged with another (IFPRI) and ISNAR itself has closed down. Center boards have been helped by a System-wide review of Center governance, improved board orientation programs, and the revision of board guidelines. A Performance Measurement System, coordinated by the CGIAR Secretariat and established as part of the reform program, enables Centers and CGIAR Members to monitor Center effectiveness and efficacy. The performance of Centers is measured in terms of **results** (outputs, outcomes, impacts), **potential to perform** (quality and relevance of research, institutional health, financial health), and **stakeholder perceptions** (perceptions of CGIAR Members and Center Partners). The Performance Measurement System provides both Centers and CGIAR Members with benchmarks against which effectiveness and efficacy may be assessed over time. It is obviously a boon to the world’s poor and hungry who benefit from effective agricultural research for development, and an asset to Members who need to be assured that CGIAR-supported research provides “value for money.” Thus, the Performance Measurement System is a great step forward. Others are required. Alignment at governance, programmatic, and/or corporate services level of autonomous institutions is a permanent challenge that requires external incentives and push for it to occur and for inertia to be broken.

**Strategic Communications**

A strategic, science-based communications program has enabled the CGIAR to reach out to and build strong links with parliamentarians, scientists, policy makers, and gatekeepers of public opinion in both South and North. Communications and public information activities that were fragmented and, therefore, less than fully effective, have been fully integrated as required by the Consultative Group in its decisions at Durban, as noted earlier. The communications program includes targeted events for a range of key constituencies, enhanced and expanded the use of the CGIAR web site, developed a strong structure of media relations, encouraged professional science writers to concentrate some of their work on CGIAR-supported research, vastly expanded the existing publications program, and geared internal communications to the principles of transparency and accountability. The CGIAR has initiated a program of media training workshops for mid-level media professionals, with the first of these taking place in China and Morocco. The workshops were well received and plans for more such workshops in other countries are in the pipeline. Centers together with the CGIAR Secretariat have supported a CGIAR Marketing Group which has made considerable progress in aligning communications across the System, with a clear focus that is adjusted yearly. The Marketing Group takes an approach to its work that is both System-oriented and practical. An example of the latter is that for the first time in the history of the CGIAR System, a set of “Visual Identity Guidelines” applicable to all communications provides guidance to all System Office units as well as Centers. The guidelines are a joint product of Centers and the CGIAR Secretariat. What has so far been achieved can be enhanced by greater virtual communication within the System. The speed with which we have moved, for example, to use the Centers’ intranet (the CGXchange) as effectively as it could be has been disappointingly slow.
Corporate Services

The establishment of a System Office which has united the existing corporate services of the System and created new ones as well has made a strong contribution to coherence, transparency and accountability, with a budget of US$10.6 million in 2006.

The System Office is a virtual organization in that it is not a physical consolidation of existing units. The locations and activities of units comprising the System Office may continue to be geographically and institutionally dispersed. Components of the System Office are:

(a) Central Advisory Service on Intellectual Property (CAS-IP), whose major activities are to provide and facilitate expert advice and enhance the exchange of knowledge and experiences;

(b) CGIAR Secretariat, which is the central service unit of the CGIAR System;

(c) Chief Information Officer's Unit (CIO), which helps to plan and coordinate information technology, information management and knowledge management in the CGIAR System;

(d) Gender and Diversity Program (G&D), which helps the Centers to leverage their staff diversity to improve research management and excellence;

(e) Internal Auditing Unit (IAU), whose goal is to provide a cost-effective, shared internal auditing service to improve operations and strengthen internal controls at participating Centers;

(f) Media Unit, which helps participating Centers and the CGIAR Secretariat to develop and implement media strategies for garnering coverage of the achievements and impacts of Centers;

(g) Science Council Secretariat, which is the service arm of the Science Council;

(h) Strategic Advisory Service for Human Resources (SAS-HR), which assists participating Centers and the CGIAR Secretariat in defining needs, developing and implementing sound people strategies through strategic approaches, and monitoring the impact and success of human resources policy and practice; and

(i) Alliance Office, which administers common activities in keeping with the objectives of the Alliance of CGIAR Centers.

Regular contact among System Office staff has enhanced their professionalism and their commitment to the mission of the CGIAR. Policies and practices that affect the System have been codified and clarified, new joint activities which build on the competencies of the different units have been launched, and overlaps have been avoided.

The creation of new units is based on the needs expressed within the CGIAR System, by either the Centers or the CGIAR Secretariat. In some instances, as with the IAU, the SAS-HR and the Media Unit, expressions of interest were limited to a few Centers and the CGIAR Secretariat was instrumental in setting them up. Over time, their clientele has gradually expanded with many more Centers availing themselves of their services. For instance, the IAU was established as an initiative of three Centers (IRRI, WorldFish, Bioversity) and the CGIAR Secretariat. Today all 15 Centers are IAU clients. In the light of such experience,
the CGIAR Secretariat has always been willing to help set up units, if they are likely to be of practical value bringing financial savings to Centers, avoiding duplication, and sharing knowledge. The most recently established unit, created with the support of the CGIAR Secretariat, is the Media Unit, which has proved its effectiveness in a relatively short time.

**Funding**

CGIAR Members have appreciated the changes set in motion, as demonstrated in their responses to an externally conducted survey. The most practical manifestation of support has been a very significant increase in funding in the past few years, a recognition not only of the immense challenges still faced by developing countries in their rural sectors but also the important research for development work conducted by the Centers and partners. Fourteen years ago, the CGIAR, convinced that it faced a continuing slide of funding, decided that plans should be made to reduce the number of Centers, solely on the basis of anticipated financial drought. All Centers have not benefited equally from increased funding, and the question of restricted vs. unrestricted funding continues to be a source of contention. System-wide funding has increased, however, as stated earlier, and the percentage of agricultural ODA allocated to the CGIAR has increased from 1.5 percent in 1980 to 10.9 percent in 2004. New funding modalities have been explored by Members. Fiduciary standards are being aligned with internationally acknowledged best practices. Guidelines on financial management have been updated. No doubt the sharpened strategic communication efforts greatly assisted the CGIAR System in its financial growth, although some volatility of funding remains due to either real changes in funding or to adjustments in the disbursement processes used by some Members, as observed in 2006 with the European Commission funds.

**International Recognition**

The strong communications program undertaken as part of reform has enabled the world at large to know more about the CGIAR, and about agriculture. The World Summit on Sustainable Development held in 2002 (Johannesburg, South Africa) explicitly acknowledged the link between agriculture and development. Two consecutive summit meetings of the Group of 8 (G-8) recognized the importance of agriculture, especially as a means to reduce poverty and hunger in Africa, and endorsed the work of the CGIAR System. The effectiveness and efficacy of the reformed CGIAR have been recognized at the United Nations where, during consideration of the Millennium Development Goals (MDGs), ODA donors were urged to increase the CGIAR budget to $1 billion that would support research in agriculture, nutrition, and improved natural resources management. The reputation of the CGIAR is also well established among members of the Group of 77 developing countries, now with a membership of 132 nations, and elsewhere. Increasingly, the CGIAR is seen as a strong catalyst of research for development, as an exemplary advocate of agriculture and agricultural research, and as a producer of international or global public goods of relevance to development.
VI. UNFINISHED BUSINESS: SOME KEY CHALLENGES

The reform program initiated in 2001 and its initial results suggest that overall the impact of the reform is positive, but that we should consider this an unfinished business. In fact, we believe that institutions need to be constantly changing and adjusting to the key internal and external challenges that, themselves, are dynamic in nature. We confront a formidable agenda. The challenges ahead are many and complex: biological, biophysical, institutional, and more. However, complexities are not and can not be an excuse for inaction.

As we look to a future in which we expect transformed agriculture to help transform human lives, a number of specific external issues challenge us. It would be important to highlight the following, as the CGIAR Chair reminded us at AGM06:

- **Climate variability** and change pose threats to development in general and to agriculture in particular, as the conclusions reached by the Intergovernmental Panel on Climate Change, and numerous other reliable research findings, have repeatedly affirmed. The UK Government’s chief economist (Sir Nicholas Stern) has warned that climate change may cost the world as much as 20 percent of GDP — US$6 trillion at today’s prices — by the next century. The CGIAR and its partners need to apply first-class science to helping poor farmers adapt to the effects of climate change, and benefit from the opportunities for carbon sequestration and carbon farming.

- **New pests and diseases** are constant risks. Recent examples of unexpected risks are Avian influenza, and Ug99, a virulent form of stem rust. Over 150 million poultry have died or been culled in Southeast Asia, to prevent the spread of Avian influenza. FAO has estimated that the economic cost to the countries concerned is around US$10 billion. Poor farmers suffered the most. Ug99, if left unchecked, can cause massive losses of wheat yields, pushing up the global price of this staple grain and possibly leading to serious food shortages.

- **Micronutrient deficiency.** An estimated three billion people suffer from the “hidden hunger” of micronutrient deficiency which can cause premature death, disease, and cognitive impairment. Facing this problem, the CGIAR Challenge Program HarvestPlus...
seeks to breed nutrient-dense staple foods through biofortification. Initial results are promising. Equally important is the emergence of focused partnerships — a key objective of Challenge Programs.

- **Loss of biodiversity.** The world has been recklessly losing biodiversity. Half the world’s forests have been lost in our own lifetime. Agrobiodiversity must be conserved for the future. Genetic resources must be sustainably utilized and made available to poor farmers. The world’s agricultural legacy is protected in genebanks at CGIAR Centers. A recent agreement that brings these genebanks into the framework of the “International Treaty on Plant Genetic Resources” ensures that farmers and plant breeders will have access to these invaluable resources.

- **Water Management.** The 2006 annual Human Development Report estimated that the number of people living in water-stressed countries will increase from around 800 million to some 3 billion people by 2025, at current trends. The “good news” is that small investments in infrastructure for water can yield big returns. This was a major finding presented at the World Water Week, hosted in 2006 by the Stockholm International Water Institute. Representatives of several CGIAR Centers and of the “Water and Food” Challenge Program participated.

- **Marine fisheries** are so over-exploited that 29 percent of all fished species had collapsed by 2003, according to a recent study led by Canadian ecologists. The study projected that unless trends are reversed, the world could run out of seafood by 2048.

- **Fossil fuel and alternatives.** Developing countries are the hardest hit by fluctuating prices of fossil fuel because they are the least able to cope with them. Research to develop renewable sources of energy, and to understand the impact of agro-energy products on food production, water and the environment need to be pursued vigorously. Such research will need to include the development of biofuels, whether these are derived from energy crops, food crops that can be put to many uses, or agricultural waste.

- **Fair access to fair markets.** Global trade affects poor farmers as well. OECD agricultural subsidies continue to dwarf ODA budgets. As some world leaders have reminded us, investments in agriculture alone will not improve farm incomes and rich countries must end agricultural subsidies that distort prices and restrict market access for poor farmers. Successful liberalization of trade is as important for enabling people to escape from poverty as are increases in aid or debt relief. Fair access to fair markets is indeed critical.

- **A focus on Africa.** Many of these issues are especially relevant in Africa which has not gained from the green revolution as Asia and parts of Latin America did. Although significant improvements have been made in some countries, serious poverty and hunger persist. Close to 300 million people survive on average incomes of less than US$1 a day. Most African countries are not expected to reach the MDGs by 2015. Every effort needs to be made to make Africa’s growth pro-poor, and agriculture has to be at the heart of this process. CGIAR Centers working in Africa need to speed up adjustments that lead to more efficient interaction with and support to African countries. The situation today continues to be complex, albeit a higher level of coordination among Centers will hopefully facilitate the interaction with the different actors in the Sub-Saharan Africa countries.
These are enormous challenges which certainly need a concerted effort from many different actors, in both industrialized and developing countries, if we are to be successful. Furthermore, these external challenges requires the CGIAR to address its internal challenges if it is to continue to play an important role in development. Key internal issues include:

- **Simplification of governance at Center level**: Increased demands on accountability and several failures in the recent past (CIAT, CIMMYT, and ISNAR) indicate beyond doubt that “business as usual” in governance at Center level is not tenable. The Center governance model established by the CGIAR at its inception has served the System well, but the frequency and dimension of recent failures clearly indicate that change is now essential. Postponing change can only harm the Centers, Center scientists, and their potential beneficiaries. Furthermore, the fact that the CGIAR System with a total budget of about US$500 million sustains about 200 board members makes it clear that in the medium-term there is a need to consolidate boards, to hire professional board members, to ensure that boards are balanced in terms of expertise (including financial management and communications), and that they do exert oversight over management, rather than being managed by management. Finally, it is matter of common sense that boards and management must be fully accountable to the Consultative Group if Centers are to receive financial sustenance from this Group.

- **Increased alignment among Centers and CGIAR Members**: Alignment in terms of programs, provision of services and governance has finally begun to occupy a prominent space in the agenda of CGIAR meetings. The Member Coordination Forum, held in December 2006, (which dealt with funding for System Priorities, Harmonization, and Evaluation) and the forthcoming Alignment Forum, CGIAR’s first, are good examples of the multiple facets of alignment. Clearly, serious attempts are being made towards improved harmonization, alignment and managing aid for results as envisaged in the “Paris Declaration on Aid Effectiveness.” There are some initiatives being implemented by Centers, and others by Members. In both cases, it would be fair to say they represent just a modest start. For the benefit of developing countries, much more is needed, and a focus on alignment to support the development of Sub-Saharan Africa is a good start. Equally important is the need to constantly nurture Center-led alignment initiatives. Clear focus and clear goals need to be established for all alignment efforts for both Centers and Members. Increased stability in funding is expected to be a key outcome of serious alignment efforts by Members, which is important for Center management and long-term strategy.

- **Reviewing and Adjusting Priorities**: The “System Priorities for CGIAR Research 2005–2015” approved at AGM2005 are expected to help the System maintain its focus where it has comparative advantage. However, as expressed by many during the priority-setting exercise, with so many priorities that basically cover all the activities being implemented by Centers, it is difficult to understand which are the real priorities, if the Centers are to continue as providers of international public goods. There is a vast number of development activities which should not be undertaken by Centers. In this respect, discipline of Members and adherence to the agreed principles of full cost recovery, as well as a clear set of priorities is necessary. The CGIAR needs to review and adjust the set of approved priorities and, equally important, Members need to discipline themselves in the kinds of projects or programs they would support or not. These are major and complex
challenges considering the Centers’ financial needs and the fact that Members need to demonstrate the short-term impact of ODA resources.

- **Mobilization of Science and Technology:** The single new and perhaps most important element in the establishment of the Science Council, one of the initial pillars of the reform program, was the creation of a standing panel to mobilize science. A preliminary assessment of the operation of the Science Council in its first three years suggests that the objective of mobilizing science from Southern and Northern institutions to support the CGIAR mission simply did not take place, notwithstanding other important achievements by the Science Council such as the improvement of evaluation processes and products and the priorities exercise.

- **Intellectual Property (IP) Issues:** IP issues are extremely complex and linked to different instruments and conventions. As the Centers develop closer partnerships with the private sector at national, regional, or international level, the internal weaknesses to effectively handle and mobilize IP to support research for development become more obvious. There are alternative mechanisms that are being utilized and should be further explored to ensure universal access to the public goods being generated by the Centers. Finally, we must consider not only the IP issues of our greatest assets — germplasm—but also of the other products generated by the Centers.

All these internal and external issues demand attention. If, in order to meet these challenges we need to plan new modes of operation, of governance and of management, we should be prepared to do so. The CGIAR needs to tackle the **unfinished business** responding to these key challenges, and getting ready to respond to the new ones which will undoubtedly come.
VII. CONCLUSION: WHAT NEXT?

From its inception, when it was founded as a response to the global challenge of food scarcity, the CGIAR has found itself reacting to external pressures. The reform program, too, was a considered response to fundamental changes in the world beyond the CGIAR, together with a recognition by the CGIAR leadership that change and only change could revitalize the CGIAR System as the key global producer of international agricultural research public goods. CGIAR Members were persuaded that “business as usual” would not enable the CGIAR to remain effective and that it had to redesign itself in many areas from governance through communication to science management. Reform, it might therefore be argued, was in the nature of “catching up.” The “reinvention” of the CGIAR as a modern, 21st century institution with a major global role drove the reform business.

Global (and regional) circumstances do not remain static. They continue to change at varying speeds and intensities. If the CGIAR is to remain at the forefront of agricultural research for development, it cannot afford to work only in a “catch up” mode. It needs to lead, to change when it perceives the need for change because its internal institutions have reached the point when the alternative to change might be obsolescence. In leading, it has to be at the forefront of external change. An interesting example of this leadership has been CGIAR’s Performance Measurement System, today recognized by multilateral organizations and bilateral supporters of the CGIAR Centers as an outstanding system promoting accountability and transparency.

It would be naïve to prescribe in detail the next changes that need to take place in the CGIAR System. We believe it would be useful for the CGIAR to ask itself specific questions in preparing for the leadership role described above. This role requires a clear recognition that we have a major opportunity to align Centers and their activities; a need to tackle Center governance; and a major golden opportunity to mobilize science and technology from both developing and industrialized countries, making use of creative mechanisms — and, most important, that we need to act swiftly
avoiding the temptation of once again creating many task forces to deal with the different issues, as done in the past:

- As ExCo receives increased powers delegated to it by the Group, what adjustments in ExCo composition and mode of operation are necessary?

- How can we best address the governance issues at Center level, recognizing that as self-perpetuating boards the drivers for major changes will have to come from the Consultative Group itself? Using the evolutionary approach and thinking about simplification of governance, can we think about a few boards overseeing all Centers in the System? Eventually, one board?

- What is the ideal number of Centers in a rapidly changing external environment? How can they maintain an emphasis on science and technology products that have an impact on development without moving into technical assistance? How can shareholders be guaranteed better linkage at the Center-specific level?

- How can CGIAR Members better follow agreed decisions, fully recognizing the sovereignty of Members?

- As Challenge Programs increase in relevance, what kind of institutional/programmatic matrix does the CGIAR feel can best deliver the international public goods to the developing world? From our pilot CPs, what have we learned? How can we use the CPs to truly open up the System, avoiding the normal “introgression”?

- Do the Centers need an Alliance? If so, should it not be a really effective mechanism to support harmonization, working to satisfy the expectations of CGIAR Members?

- How can we simplify the still very complex governance of the mostly very small System Office Units to enable them to deliver benefits to the System more effectively?

- How can we effectively mobilize science and technology? Does the CGIAR need a Science Council as presently constituted or could we have a different instrument such as a chair supported by ad hoc panels and a strong secretariat?

- What is the most effective mechanism for continuously reviewing and, as necessary, renewing and redefining priorities for the CGIAR System and, above all, ensuring they are followed by Centers?

- What should be the future responsibilities of the CGIAR Secretariat?

The CGIAR has come a long way. The momentum gained with the reform program should not be lost; it serves as the key pillar for an additional wave of reforms, now dealing with
Center governance and other critical elements such as the mobilization of science without the CGIAR Center “club” boundaries. Reform will not be easy, but it is essential. There are still new journeys to undertake, new goals to meet. What might seem exacting now cannot be postponed for a reluctant tomorrow. As Machiavelli reminded us centuries ago, “The innovator makes enemies of all those who prosper under the old order.” Let this not detract energy from the new innovators in the CGIAR!
Evolution of CGIAR Mission Statement:

“… to support research and technology that can potentially increase food production in the food-deficit countries of the world” (First System Review, 1977)

“… to contribute to increasing sustainable food production in developing countries in such a way that the nutritional levels and general economic well-being of low-income people is improved” (TAC37 Los Baños; TAC Review of CGIAR Priorities and Future Strategies, 1985)

“… in partnership with national research systems, to contribute to sustainable improvements in the productivity of agriculture, forestry and fisheries in developing countries in ways that enhance nutrition and well-being, especially of low-income people” (MTM92, Istanbul; TAC Review of CGIAR Priorities and Strategies, Part I)

“… to contribute, through its research, to promoting sustainable agriculture for food security in the developing countries” (Ministerial-Level Meeting, Lucerne, 1995)

“… to contribute to food security and poverty eradication in developing countries through research, partnership, capacity building, and policy support, promoting sustainable agricultural development based on the environmentally sound management of natural resources” (ICW98, Washington, Third System Review)

“… to achieve sustainable food security and reduce poverty in developing countries through scientific research and research-related activities in the fields of agriculture, forestry, fisheries, policy, and environment” (MTM2000, Dresden)

Evolution of CGIAR Centers:

The raison d’être of the CGIAR has been to enable a network of international agricultural research Centers to function effectively, implementing a research agenda that responds to the needs of poor farmers and consumers in developing countries. The Centers are autonomous but are linked by a commitment to a common cause.

At the time of its founding (1971) the CGIAR decided that the research it would support would be based on “technical as well as on ecological, economic and social factors.” Thus the CGIAR agenda has changed over time as the demands
on agricultural research grew and became more complex. This is reflected in the development of the CGIAR network of Centers.

The founding objective of the CGIAR was to increase food production in developing countries in the tropics. The earliest successes of the Centers were in staple cereals (rice, wheat, maize) but, before long, the research portfolio of the Centers was broadened to also include potato, cassava, pasture/forage crops, beans and thereafter, the so-called orphan commodities such as sorghum, millets, and chickpea.

Subsequently, the CGIAR branched out into new areas of activity when it became clear that improvement of basic commodities alone would not enable it to achieve its goals. These new areas included livestock research, farming systems, conservation of genetic resources, water management, policy research, services to build capacity of national agricultural research systems. The number of Centers grew from 4 at the time of its founding to 13 at the end of the first decade of CGIAR’s existence.

In the CGIAR’s second decade (1980s), the objective of research was redefined giving emphasis to increasing sustainable food production in the developing countries in such a way that the nutritional level and general economic well-being of the poor are improved. Towards the end of the decade, the CGIAR launched an inquiry into whether the “admission” of some non-CGIAR Centers into the System would strengthen the capacity to address natural resources management issues in agriculture and fill some gaps in its food commodity portfolio.

At the beginning of its third decade (1990s), the CGIAR expanded the scope of its research to include agroforestry, forestry, fisheries, water management, and banana/plantain, thus increasing the number from 13 to 18. Later the two existing livestock research Centers were merged into one, and the work on banana and plantain was integrated into the agenda of IPGRI. The number of Centers was therefore reduced. Table 1 gives the chronology of the Centers (i.e. dates of foundation and admission into the CGIAR System) and their headquarters locations. The Centers are grouped into three: 1) original members of the System and founded before the CGIAR; 2) founded or adopted by the CGIAR to broaden the System, after 1971; and 3) founded or adopted by the CGIAR to strengthen its mission, after 1990.

Table 2 gives a summary of the commodity responsibilities or subject matter responsibilities of the Centers. In general, 11 of the 16 Centers can be considered as primarily global or subject matter Centers, although some also carry some regional responsibility (CIFOR, CIMMYT, CIP, ICLARM, ICRAF, IFPRI, IRRI, ISNAR, IWMI). WARDDA is primarily a regional commodity Center. The remaining Centers (CIAT, ICARDA, ICRISAT, and IITA) are primarily regional or eco-regional Centers but they also carry responsibility for the commodities that are the most significant within their assigned region.

### Table 1. Chronology of the CGIAR Centers

<table>
<thead>
<tr>
<th>CENTER</th>
<th>YEAR FOUNDED</th>
<th>YEAR JOINED CGIAR</th>
<th>HEADQUARTERS LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original members of the System, founded before the CGIAR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IRRI</td>
<td>1960</td>
<td>1971</td>
<td>Philippines</td>
</tr>
<tr>
<td>CIMMYT</td>
<td>1966</td>
<td>1971</td>
<td>Mexico</td>
</tr>
<tr>
<td>IITA</td>
<td>1967</td>
<td>1971</td>
<td>Nigeria</td>
</tr>
<tr>
<td>CIAT</td>
<td>1967</td>
<td>1971</td>
<td>Colombia</td>
</tr>
<tr>
<td>Founded or adopted by the CGIAR, to broaden the System, after 1971</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICRISAT</td>
<td>1972</td>
<td>1972</td>
<td>India</td>
</tr>
<tr>
<td>CIP</td>
<td>1970</td>
<td>1973</td>
<td>Peru</td>
</tr>
<tr>
<td>ILRAD</td>
<td>1973</td>
<td>1973</td>
<td>Kenya</td>
</tr>
<tr>
<td>ILCA</td>
<td>1974</td>
<td>1974</td>
<td>Ethiopia</td>
</tr>
<tr>
<td>IPGRI</td>
<td>1974</td>
<td>1974</td>
<td>Italy</td>
</tr>
<tr>
<td>WARDDA</td>
<td>1970</td>
<td>1975</td>
<td>Cote d’Ivoire</td>
</tr>
<tr>
<td>ISNAR</td>
<td>1980</td>
<td>1980</td>
<td>Netherlands</td>
</tr>
<tr>
<td>IFPRI</td>
<td>1978</td>
<td>1980</td>
<td>USA</td>
</tr>
<tr>
<td>Founded or adopted by the CGIAR to strengthen its mission, after 1990</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICRAF</td>
<td>1977</td>
<td>1991</td>
<td>Kenya</td>
</tr>
<tr>
<td>IWMI</td>
<td>1984</td>
<td>1991</td>
<td>Sri Lanka</td>
</tr>
<tr>
<td>ICLARM</td>
<td>1977</td>
<td>1992</td>
<td>Malaysia</td>
</tr>
<tr>
<td>INIBAP</td>
<td>1984</td>
<td>1992</td>
<td>France</td>
</tr>
<tr>
<td>CIFOR</td>
<td>1993</td>
<td>1993</td>
<td>Indonesia</td>
</tr>
</tbody>
</table>
### Table 2. CGIAR Centers’ responsibilities

<table>
<thead>
<tr>
<th>CENTER</th>
<th>GLOBAL RESPONSIBILITY</th>
<th>REGIONAL RESPONSIBILITY</th>
<th>AGRO-ECOLOGICAL RESPONSIBILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIAT</td>
<td>Beans, cassava, tropical forages</td>
<td>Rice — Latin America and Caribbean</td>
<td>Hillsides, forest margins, savannas</td>
</tr>
<tr>
<td>CIFOR</td>
<td>Forestry policy, forest management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIMMYT</td>
<td>Wheat, maize</td>
<td></td>
<td>Rice-Wheat systems (with IRRI)</td>
</tr>
<tr>
<td>CIP</td>
<td>Potato, sweet potato</td>
<td>Andean root and tuber crops</td>
<td>Mountain ecoregion, Andean ecoregion</td>
</tr>
<tr>
<td>ICARDA</td>
<td>Barley, chickpea, lentil, Faba bean, forage legumes</td>
<td>Wheat — West Asia and North Africa</td>
<td>Dry areas</td>
</tr>
<tr>
<td>ICLARM</td>
<td>Living aquatic resources</td>
<td></td>
<td>Coastal areas, coral reefs, pond systems</td>
</tr>
<tr>
<td>ICRAF</td>
<td>Agroforestry, multipurpose trees</td>
<td></td>
<td>East African highlands</td>
</tr>
<tr>
<td>ICRISAT</td>
<td>Sorghum, millet, groundnut, chickpea, pigeonpea</td>
<td></td>
<td>Semi-arid tropics</td>
</tr>
<tr>
<td>IFPRI</td>
<td>Food policy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IITA</td>
<td></td>
<td>Cassava, maize, banana and plantain, yam, cowpea, soybean — SSA</td>
<td>Humid and sub-humid Sub-Saharan Africa</td>
</tr>
<tr>
<td>ILRI</td>
<td>Livestock diseases, livestock production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPGRI</td>
<td>Conservation and use of plant genetic resources, banana and plantain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IRRI</td>
<td>Rice</td>
<td></td>
<td>Humid tropics of Asia, rice-wheat systems (with CIMMYT)</td>
</tr>
<tr>
<td>ISNAR (now closed)</td>
<td>Institutional development of NARS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IWMI</td>
<td>Water management</td>
<td></td>
<td>Rice — West Africa</td>
</tr>
</tbody>
</table>


13 For a report on TAC’s “Vision and Strategy for the CGIAR” and the discussion on TAC’s submission, please see “Charting the CGIAR’s Future, A New Vision for the CGIAR,” Summary of Proceedings and Decisions, CGIAR Mid-Term Meeting, May 21-26, 2000, pages 25-33. Published by the CGIAR Secretariat.

14 The CGIAR Chair at the time, Ismail Serageldin, informed former World Bank President James D. Wolfensohn, that the position was upgraded to Director-level so that the strongest possible leadership and managerial talent could be attracted to advance the CGIAR System’s role in global agricultural research.


18 Membership consisting of the Cosponsors, the CGIAR Director, members of the current Oversight and Finance Committees, and the Chairs of CBC, CDC, TAC, NGOC, PSC and GFAR.

19 Future Harvest, a public relations activity sponsored by CGIAR Centers, has been dissolved.
20 In 2006, the CGIAR commissioned GlobeScan Inc., a global public opinion and stakeholder research firm, to survey the perceptions of its key stakeholder groups, i.e. CGIAR Members and Center Partners. The overall perception of stakeholder groups was that “the CGIAR does an excellent job, advancing sustainable agricultural development through research.” For more details, please see “Performance Measurement and the CGIAR,” published by the CGIAR Secretariat.

21 Additional details on the four initial CPs follows:
- **Water and Food**, which creates research-based knowledge and methods for growing more food with less water, and develops a transparent framework for setting targets and monitoring progress (www.waterandfood.org)
- **Generation**, which uses advances in molecular biology and harnesses global stocks of crop genetic resources to create and provide a new generation of plants that meet farmers’ needs (www.generationcp.org)
- **HarvestPlus**, which is an international, interdisciplinary research program that seeks to reduce micronutrient malnutrition by harnessing the powers of agriculture and nutrition research to breed nutrient-dense staple foods (www.Harvestplus.org)
- **Sub-Saharan Africa Challenge Program**, which addresses the most significant constraints to reviving agriculture in Africa, e.g., failures of agricultural markets, inappropriate policies and natural resource degradation, and develops a new paradigm, Integrated Agricultural Research for Development (IAR4D) (www.fara-africa.org)

22 CGIAR major “products” can be characterized as knowledge, technologies, policy advice, and the provision of special services (as genebanks maintained by Centers) that are of relevance to both developing and industrialized countries due to their nature, i.e., international or global public goods.

23 Details of the Paris Declaration may be accessed at http://www.oecd.org/document/18/0,2340,en_2649_3236398_35401554_1_1_1_1,00.html.