



CGIAR 1999 Mid-Term Meeting  
*Beijing, China, May 24-28*

## **Summary of Proceedings and Decisions**

# *The Third System Review* *From Proposals to Practice*



**Consultative Group on International Agricultural Research**

## *CGIAR Centers*

Centro Internacional de Agricultura Tropical (CIAT) • Cali, COLOMBIA

Center for International Forestry Research (CIFOR) • Jakarta, INDONESIA

Centro Internacional de Mejoramiento de Maiz y Trigo (CIMMYT) • Mexico City, MEXICO

Centro Internacional de la Papa (CIP) • Lima, PERU

International Center for Agricultural Research in the Dry Areas (ICARDA) • Aleppo, SYRIAN ARAB REPUBLIC

International Center for Living Aquatic Resources Management (ICLARM) • Makati City, PHILIPPINES

International Centre for Research in Agroforestry (ICRAF) • Nairobi, KENYA

International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) • Patancheru, INDIA

International Food Policy Research Institute (IFPRI) • Washington, DC, USA

International Institute of Tropical Agriculture (IITA) • Ibadan, NIGERIA

International Livestock Research Institute (ILRI) • Nairobi, KENYA

International Plant Genetic Resources Institute (IPGRI) • Rome, ITALY

International Rice Research Institute (IRRI) • Los Baños, PHILIPPINES

International Service for National Agricultural Research (ISNAR) • The Hague, NETHERLANDS

International Water Management Institute (IWMI) • Colombo, SRI LANKA

West Africa Rice Development Association (WARDA) • Bouaké, CÔTE D'IVOIRE

**CGIAR 1999 Mid-Term Meeting**  
Beijing, China, May 24-28

**Summary of Proceedings and Decisions**

*The Third System Review*  
*From Proposals to Practice*

**A**

**Issued by the CGIAR Secretariat**

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# Overview

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# Overview

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The CGIAR Mid-Term Meeting (MTM99) will be best remembered for bringing to closure the third System Review and launching the CGIAR into the new millennium. Members took important decisions about CGIAR science, governance, partnerships and finance. In a very real sense, MTM99 enabled the Group to put the CGIAR's house in order in preparation for renewal of the substance of the CGIAR's science.

The agenda of the business meeting was full, reflecting considerable work done in preparing for MTM99. The meeting itself reflected a concerted effort by the Group to move from discourse to action. The Chairman presented a set of nine propositions to provide a framework for the discussions.

The CGIAR was welcomed to Beijing by His Excellency, Yaobeng Chen, China's Minister of Agriculture, and other high-ranking officials. A number of senior scientists from the Chinese Academy of Agricultural Sciences participated in the CGIAR's business meeting.

MTM99 was a "landmark" gathering in many respects—from the emphasis on the CGIAR's future strength and direction following the third System Review to the celebration of the highly successful China-CGIAR scientific partnership.

A hallmark of MTM99 was the mutual respect, collegiality, capacity to listen, and commitment that Members brought to Beijing. All components of the System worked together effectively. The effort was characterized by a high quality of debate and a determination to move the CGIAR into the future. With closure of the third System Review, the action moves to the Centers, standing committees, and other groups who have taken up the responsibility of implementing the decisions taken at MTM99.

In concluding MTM99, the Chairman emphasized that the CGIAR's challenge for the future is to mobilize frontier science and technology in a frontal assault on poverty and hunger. In the context of the unfinished global development agenda, the CGIAR's vision will focus on science that remains cutting edge and is directed at providing the basis for advancement on the development front.

*Major*  
*Decisions*

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**T**he Group made the following major decisions at the 1999 Mid-Term Meeting in Beijing, China:

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**1. Integrated Gene Management: Plant Breeding Review.**

The Group endorsed the terms of reference for the systemwide plant breeding review proposed by the Technical Advisory Committee (TAC). TAC will make recommendations to the Group by MTM2000. (See pages 27-28.)

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**2. Integrated Gene Management: Patents and Intellectual Property Rights.**

The Group endorsed the Consultative Council recommendation not to create a system-level legal entity to hold patents and encouraged the Centers to complete Intellectual Property Rights (IPR) audits expeditiously. The Centers will conduct a feasibility study on a wholly-owned subsidiary (possibly of 2-3 Centers). The Centers are to report on results and progress at International Centers Week 1999 (ICW99). (See pages 28-29.)

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**3. Integrated Natural Resources Management.**

The Group endorsed the action plan on integrated natural resources management (INRM) proposed by the Center Directors Committee (CDC). TAC and CDC will report on results and progress at ICW99. (See pages 29-30.)

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**4. Global Knowledge System.** The Group encouraged the Centers to strengthen their databases, present their findings in a more user-friendly fashion, and expand their use of information technology for communication, dissemination, capacity building, and organizing research. The CDC will report on the Centers' progress as part of its regular reports to the Group. The Group also endorsed the Consultative Council recommendation that the CGIAR should not attempt to function as the hub of a global knowledge system. (See page 31.)

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**5. Policy Research.** The Group endorsed the CDC proposal to strengthen policy research and capacity building for policy research and requested TAC to monitor progress. (See page 32.)

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**6. Capacity Building.** The Group endorsed the Consultative Council recommendation that the CGIAR should maintain its emphasis on capacity building without creating a new mechanism for this work. (See pages 32-33.)

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**7. Women in Agriculture.** The Group endorsed the CDC recommendation that the CGIAR should not establish an additional network on women in agriculture; instead it should rely on existing programs on gender analysis and gender staffing. (See page 33.)

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**8. Focus on Africa.** The Group welcomed the consultations between the Centers and African national agricultural research system (NARS) leaders and encouraged all those engaged in this exercise to continue and complete their discussions in a practical manner. The CDC, Special Program for African Agricultural Research (SPAAR), and Forum for Agricultural Research in Africa (FARA) will present specific proposals for consideration by the Group at ICW99. (See page 34.)

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**9. Partnership Committees.** The Group endorsed the Chairman's proposal to establish a science partnership committee and agreed that the total membership of all CGIAR partnership committees would remain unchanged from the present. The Group also asked the Chairman to review with the NGO Committee (NGOC) and Private Sector Committee (PSC) the restructuring of their membership and operations. The Chairman will inform the CGIAR of progress in establishing the science partnership committee and the NGOC and PSC will inform the CGIAR of changes in their membership and operation. (See pages 35-36.)

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**10. Review on Partnerships.** The Group endorsed the terms of reference proposed by the TAC Chair for an analytic review on "Partnerships and Research: Lessons

for the CGIAR" and agreed that TAC and the CGIAR Secretariat should conduct the review by ICW2000. (See pages 36-37.)

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**11. Meeting with Private Sector CEOs.** The Group agreed that the Chairman should take the lead role in convening a meeting with private sector CEOs and report on progress at ICW99. (See page 37.)

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**12. Conditions of CGIAR Membership.** The Group endorsed the Consultative Council proposal that conditions of CGIAR membership should remain unchanged for the present. (See pages 37-38.)

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**13. CGIAR Chairmanship.** The Group welcomed the continued commitment of the World Bank to support the CGIAR and agreed to await further consultation with the Bank in November 1999. (See page 38.)

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**14. Role of Cosponsors.** The Group endorsed the Consultative Council proposal that the role and status of the cosponsors should remain unchanged. Searches for major system posts should be planned so as to enable wide consultation and endorsement of the nominee at a CGIAR meeting. The current TAC Chair search process should follow procedures approved earlier for this search. (See page 39.)

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**15. Regional Representation.** The Group endorsed the Consultative Council proposal that the system of regional representation at the CGIAR should be phased out and agreed to ask the Food and Agriculture Organization (FAO) of the United Nations to act accordingly. The FAO cosponsor representative will consult with FAO governing bodies regarding implementation. (See page 39.)

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**16. CGIAR decision-making process.** The Group endorsed the Consultative Council's proposal to maintain the informal style of decision-making by consensus and rejected the System Review's recommendation to have the CGIAR reconstituted as a legal entity. (See pages 39-40.)

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**17. CGIAR Decision-Making Structure.** The Group recognized that the Consultative Council had operated very well and empowered the Chairman to call a Council

into session as and when required, on the clear understanding that the Council will be reduced in size. The convening of the Council is not going to replace the mid-term meeting. The Council should prepare, but not take decisions for the CGIAR. (See pages 40-41.)

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**18. CGIAR Meetings.** The Group agreed to retain the mid-term meetings. (See page 41.)

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**19. Human Resource Services.** The Group acknowledged that there are substantial potential benefits to science in modernizing the CGIAR's management of human resources. The Group endorsed the Consultative Council proposal that the System should commit itself to seeking the best talent for all openings and that the search for suitable talent be widened and deepened to ensure diversity (particularly in terms of gender and nationality) and infusion of new generation scientists. (See page 41.)

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**20. Organization of TAC.** The Group endorsed TAC's proposals on its composition and working arrangements, and reaffirmed TAC's present mandate. (See pages 41-42)

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**21. IAEG Linkage with TAC.** The Group endorsed the cosponsors' recommendation on the integration of TAC and Impact Assessment Evaluation Group (IAEG). (See pages 42-43.)

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**22. Evaluation processes.** The Group endorsed the TAC proposal on streamlining evaluation processes and asked TAC and the CGIAR Secretariat to implement the proposals and inform the Group of progress. (See pages 43-44.)

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**23. Genetic Resources Policy Committee.** The Group agreed with the Consultative Council proposal that Genetic Resources Policy Committee (GRPC) should continue to function as a policy resource, generally reporting directly to the Group, but reporting through TAC on the financial aspects of its recommendations. The Group also endorsed the GRPC proposal on its terms of reference and future composition, with the proviso that it should include individuals representing Members. It agreed that GRPC should be mandated to represent the CGIAR in international fora, but not commit the CGIAR on policy positions. It also asked the

CGIAR Chair to invite stakeholders to nominate Members and to consult with them on committee membership. (See pages 44-45.)

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**24. The Global Forum.** The Group reaffirmed the importance of the Global Forum on International Agricultural Research (GFAR) and agreed that the CGIAR should continue to support GFAR. (See page 45.)

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**25. Long Term Financing Strategy.** The Group endorsed the Finance Committee's effort to develop a long term financing strategy and identify structures for fund raising, constituency building, and public awareness. The Committee will present elements of a financing strategy at ICW99. (See pages 45-46.)

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**26. Financing guidelines.** The Group endorsed the guidelines prepared by the Finance Committee. (See page 46.)

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**27. Structures for Fund Raising, Constituency Building, and Public Awareness.** The Group endorsed the Finance Committee's plan of work and asked the committee to make a recommendation to the Group at ICW99. (See pages 46-47.)

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**28. Funding and Management of Systemwide Programs.** The Group welcomed the Committee of Board Chairs (CBC) progress report on the funding and management of systemwide programs and asked the task force led by the CBC Chair to make specific recommendations to the Group at ICW99. The task force should include CGIAR Members and those engaged in these programs. (See page 47.)

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**29. 1998 Financial Outcome.** The Group adopted a report from the Finance Committee on the 1998 financial outcome. In 1998, funding totaled \$340 million, up from \$333 million ("agenda" and "non-agenda" funding) in 1997. As of 1998, there is a single funding figure because of the full integration of agenda and non-agenda funding. (See page 48.)

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**30. 1999 Progress Report.** The Group received the Finance Committee report that the outlook for 1999 continued to be stable. The financing plan should be maintained at the ICW98 approved level of \$340 million. (See page 48-49.)

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**31. CGIAR 2000 Research Agenda.** The Group approved the substance of the 2000 Research Agenda recommended by TAC and the Finance Committee proposal that financial planning for 2000 be undertaken in the context of a \$340-345 million funding target. (See page 50.)

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**32. External Program and Management Review.** The Group accepted the External Program and Management Review reports for ICLARM and ILRI, and endorsed the ad-hoc committee's conclusions and recommendations. (See page 51-53.)

# *Host Country Day*

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## *Host Country Day*

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"China Day," the opening phase of activities for MTM99 sponsored by the host country, was built on the foundations established during the *1997 China-CGIAR Forum* organized by the Ministry of Agriculture of China and the Chinese Academy of Agricultural Sciences (CAAS) in Beijing. The *Forum* was a high level gathering that included more than 80 participants from the Ministry of Agriculture, CAAS, four provincial Academies of Science, the China Agricultural University, and various research centers. The CGIAR Chairman, Executive Secretary, and senior managers from twelve Centers represented the CGIAR. The *Forum* systematically reviewed the successful collaboration between China and the CGIAR and the achievements of the last three decades. It also identified priority areas for future collaboration and laid a sound foundation for a new phase in the relationship.

During MTM99, "China Day" provided a unique opportunity for interaction and exchange between the CGIAR meeting participants and China's agricultural research community. It demonstrated the importance of agricultural growth and the openness characteristic of pure science. The full spectrum of Chinese agricultural research was represented, with participants from most Provinces. Speakers highlighted the many challenges in agricultural research and how they are being addressed.

The Honorable Yaobeng Chen, Minister of Agriculture warmly welcomed the CGIAR as part of China Day activities and Mr. Serageldin spoke on behalf of the CGIAR. The Group heard presentations by Lu Feijie, President of Chinese Academy of Agricultural Science (CAAS); Shiqing Ma, Director General of the Ministry's Department of Science, Technology, and Education; Wang Hongguang, Deputy Director General of the Ministry's Rural Development Department; Ren Wang, Vice President of CAAS; Kang Le, Deputy Director General of the CAAS Biotechnology Program; Jiang Zehui, President of the Chinese Academy of Forestry Sciences; Lei Maoliang, President of the Chinese Academy of Fishery Sciences; and Chen Qiubo, Vice President of the Chinese Academy of Tropical Agricultural Sciences.

Later in the day, participants made field visits to CAAS Research Institutes, including the Institute of Crop Genetic Resources, Vegetable and Flower Research Institute, Biotechnology Research Center, Institute of Feed Research, Institute of Natural Resource Management and Regional Planning, and Institute of Soil and Fertilizer Research. Many senior Chinese officials and scientists participating in "China Day" also attended the CGIAR business meeting and met informally with Members throughout MTM99.

*Summary*  
*of Proceedings*

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## *Chairman's Opening Statement*

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### **“Launching Pad to the Future”**

Third System Review of the CGIAR: Chairman's Comments at the Commencement of Discussion on Action Proposals from the Consultative Council

#### ***Overview: A Time for Action***

Good afternoon, friends and colleagues.

Our foremost responsibility at the CGIAR Mid-Term Meeting (MTM99) is to launch the System into the future. To do so, we need to bring consideration of the third System Review to closure. We are helped in this responsibility by a set of recommendations crafted by the Consultative Council, which was established as a follow-up mechanism to the System Review. We have before us, as well, the terms of reference and other action outlines for how these recommendations might be implemented, if the Group so decides. I thank all of you who have participated directly and indirectly in this exhaustive, even exhausting, process. So let us agree that the time for introspection is done. Now, it is time to act. Let us move forward, preserving all that is enduring in the CGIAR, but recognizing the need for change.

The world around us is changing dramatically. I do not refer to the alignments and perhaps misalignments in the political world, but to the exhilarating science revolution that is all around us. Exciting changes of profound significance in the biological sciences are taking place at a very fast pace. Genomic studies are being accelerated at incredible speed. Scientists are already able to accomplish in a day what it took 1000 scientists ten years to achieve in the past. At the same time, scientists are working across species to create and accumulate knowledge with potential applications in various species. The pace is ever quickening; the scope is ever broadening. We must be part of this science revolution or we will become irrelevant. We must change—or perish.

Change is driven by a variety of forces, making both the substance and process of change complex. Intermingling with proprietary science, for instance, requires that we be especially nimble. Thus, in this world of change that takes place at an almost dizzying pace, it would be anachronistic for the CGIAR not to accelerate its own decision-making.

At International Centers Week, I will re-examine the vision of the CGIAR for the future, and will outline a set of options for your consideration. However, before we contemplate giant steps forward on the science front, we need to put our own house in order.

My **first Proposition** for MTM99, therefore, is:

*This mid-term meeting will bring consideration of the third System Review to closure and, in doing so, will launch the implementation of action proposals emanating from that review, as amended and adopted by the Group.*

In order to do this, we will refer to the specific proposals crafted by the Consultative Council for your consideration. For clarity, I will now be referring to the findings in the summary report of the Consultative Council meeting held in Brussels and issued as Document MTM/99/05, rather than to the original statements in the report of the System Review Panel. That report is now being edited for wide distribution. I take this occasion once again to thank the panel for their sense of dedication, for their wise counsel, and for their willingness to share their valuable time with us. Let us acknowledge the efforts of Maurice Strong and his colleagues in the customary fashion.

Let me go now to the major themes of the Consultative Council's report:

- ◆ Scientific Excellence and Science Partnerships;
- ◆ Financial Strength; and
- ◆ Governance.

### *Scientific Excellence and Science Partnerships*

The System Review and the Consultative Council re-emphasized the principle of partnerships. This approach resonates well within the CGIAR of today. A large number of partnerships are now in existence, covering the four levels of collaborative activity identified by the Committee of Board Chairs (CBC):

- ◆ Defining the global research agenda;
- ◆ Defining the CGIAR agenda and research priorities;
- ◆ Defining the research agenda at each Center; and
- ◆ Collaborating in research.

Partnership arrangements—whether through policy committees or in practical research relationships—need to be periodically re-examined, their relevance re-confirmed and their effectiveness enhanced. That is the reason for the proposed analytic study of the lessons to be drawn from partnership arrangements to be carried out by the Technical Advisory Committee (TAC).

The CGIAR contribution to partnerships is scientific integrity, research relevance, and commitment to the production of public goods. TAC and the Centers have examined the science-based recommendations of the Consultative Council, and are ready to integrate these proposals with the evolving research agenda of the CGIAR, covering such areas as:

- ◆ Initiatives for integrated gene management that will conserve genetic resources and use them sustainably;
- ◆ Integrated natural resource management programs involving both national and international scientists, consistent with international agreements such as the Convention on Biological Diversity;
- ◆ Application of the latest and sometimes dramatic developments in biotechnology in ways that are pro-poor, pro-women, and pro-environment, that guard against hazards, respect ethical considerations, and ensure biosafety;
- ◆ Entrepreneurship and a sense of adventure in the continued development of global agricultural knowledge networks that will provide both traditional and contemporary scientific knowledge as free goods to farmers, scientists, non-governmental organizations (NGOs) and others in developing countries;
- ◆ Empowerment of women in agriculture; and
- ◆ Enhanced policy research and capacity building.

Your consensual decisions on this whole package of science-based proposals will launch the Centers into a course of action for the future; action that the Centers themselves have helped to frame.

So, I give you **Proposition #2**:

*The Group endorses the recommendations for the strategic orientation of research priorities, as well as the ideas for expanded science partnerships, formulated and being further developed by TAC and the Centers.*

As a corollary, and in keeping with the critical need for the CGIAR to benefit fully from current and continuing developments in information technology, and to make the results of its own research more readily available to all, I suggest **Proposition #3**:

*The Group encourages the Centers, in order to become effective partners in existing knowledge networks, to strengthen their databases, present their findings in a more user-friendly fashion, and expand their use of information technology, both for communication and dissemination.*

On the science side, that leaves only the Consultative Council's recommendation for the improved effectiveness of research in and research support to Africa. A dialogue between the Centers and their African colleagues, with the full involvement of the Special Program for African Agricultural Research (SPAAR), is already underway, and is the subject of **Proposition #4**:

*The Group welcomes the consultations between the Centers and African national agricultural research system (NARS) leaders, encourages all those engaged in this exercise to continue their discussions in a practical manner, and to present proposals for consideration by the Group at ICW99.*

### ***Financial Strength***

Next, the financial strength of the System.

We have come a long way from the grim and faltering days of 1993 and early 1994, when the research agenda was imperiled, and the scientific integrity of the System was threatened by budget shortfalls. Full funding of the research agenda was achieved in 1998, with contributions of some \$340 million, up from \$234 million in 1993. Conservatively, \$340 million is being projected for 1999 as well. All funds are now in a single category, in support of the research agenda. The current health of the System should not, however, induce a sense of complacency among us. I appreciate and applaud the successes so far achieved, but should point out the danger signals:

- ◆ Restricted funding as a proportion of the agenda has risen from 23 percent in 1994/1995 to 39 percent in 1998. In addition, some of the funding classified as “unrestricted” carries qualifications, attributions or other constraints. Some Members who provide restricted funding are not covering the associated overheads. This results in an over-constrained situation for the Centers. I urge you to treat this issue as a matter of gravity. Members providing restricted funding must be willing to cover the associated overheads. Centers must have more unrestricted funding if they are to preserve their flexibility and resilience. Restrictions on funding are forcing Centers downstream into technical assistance activity and away from upstream research. The trend to restrict funding is therefore a very serious threat to the primacy of research in the CGIAR. Our raison d'être is to support research. If we act in a manner contrary to this objective, we are, in effect, subverting ourselves. That is unacceptable.
- ◆ Earlier progress made toward reaching the agreed disbursement target of 50 percent in January and the rest by mid-year has slipped. The Centers have suffered net opportunity costs of at least \$5 million, as a result.

- ◆ The variability of currency fluctuations—Member currencies vs. dollar, local currencies vs. dollar—is going to be with us for some time, and we must be ready for this, with greater reserves at the Centers and at the systemwide level. This is of utmost importance to all Centers. They cannot expect to receive bailouts from the World Bank. We are looking into different instruments, such as “hedging,” to deal with this situation. Realistically, however, the impacts tend to be highly variable and quite Center specific.
- ◆ The outlook for Official Development Assistance (ODA) continues to be uncertain, and fraught with gloomy expectations of a long-term downward trend. Robust support for the CGIAR in this environment is of great comfort, but we must be ready for all eventualities. Hence, the need for a long-term funding strategy. So let me repeat what I have said at these meetings before: we must all recognize that contributions to the CGIAR are a long-term productive investment, and that the CGIAR is not a beneficiary of “donations.” Towards this end, let us agree that henceforth the word “donor” is expunged from the CGIAR lexicon. This group consists of Member investors.
- ◆ New and innovative funding sources must be explored, as the System gears itself to undertake the more exacting tasks of the future.

The Finance Committee, which was previously loaded down with fire-fighting tasks, has assumed a strategic role, and you will hear from Alex McCalla on the steps being taken to devise a funding strategy that encompasses traditional as well as non-traditional sources of funding. Plans for the strategy are expected to be accompanied by proposals for a structure to carry out the tasks involved, and for creating an effective working relationship between fund raising and public awareness programs.

This is the context in which the finance-related proposals before you are set. They are meant to secure the long-term financial health of the System, and they require your comment and concurrence—both in principle and in practice. This can be done through **Proposition #5**:

*The Group endorses the financing proposals of the Finance Committee, and requests the committee Chair to table at ICW99 a long-term funding strategy, a structure for implementing that strategy, and for managing the public awareness component of fund raising.*

### **Governance**

Governance questions have periodically pre-occupied the CGIAR, and a number of modest steps have been taken over several years. The quest for improvement, for striking exactly the right formula, has been ceaseless.

A number of important governance issues were raised by the System Review Panel, studied by the Members, reviewed by the Consultative Council but not adopted. These are summarized by the Consultative Council report.

Specifically:

- ◆ The CGIAR will not be incorporated into a legal persona, and no central executive committee will be making decisions on behalf of the Group.

## SUMMARY OF PROCEEDINGS

- ◆ No formal entity has been created to hold patents on behalf of the System. Instead, the CBC is looking into the need, if any, to create a subsidiary body representing the Centers. No decision is pending on this question at present.

In connection with patents, let me bring to your attention the new publication which puts in readily accessible form the material agreed to by the Centers in Brasilia with additional input from Food and Agriculture Organization (FAO) of the United Nations and whose appropriateness has been largely confirmed in the light of System Review recommendations. This handy publication deals with the whole range of issues involved in the creation of “rules of engagement” under which the public and private sectors can cooperate, so that poor farmers and smallholders in developing countries will not be cut off from access to new crop technologies. The publication is available at the CGIAR display counter outside this room.

Other points for action include:

- ◆ The role of cosponsors is retained, with greater transparency and consultation in the way they function. I believe that the open search being conducted for the TAC Chair demonstrates this commitment;
- ◆ Further strengthening the working of TAC, which should remain a gender conscious, geographically and technically balanced group of 10-14, drawing on a range of external and additional expertise as and when required;
- ◆ Folding Impact Assessment Evaluation Group (IAEG) into TAC;
- ◆ Redefining the composition and activities of the Genetic Resources Policy Committee (GRPC); and
- ◆ Creating a new Science Partnership Committee, to strengthen links between the CGIAR and the international scientific community. The total membership of partnership committees (non-governmental organization (NGO), private sector, and scientific) will remain at the current 21.

Each of these proposals has its own logic. Together, they are intended to position the CGIAR for the future, and are directed at protecting quality assurance and enhancing the quality of strategic advice on which the Group can base its decisions. I urge you, therefore, to consider **Propositions #6:**

*The Group endorses the governance recommendations presented by the Consultative Council, specifically, the continued role of the cosponsors who will strive to ensure systematic consultation with Members as they conduct business, the need to further strengthen the working of TAC, the rationale for folding IAEG into TAC, the need to redefine the composition and activities of the GRPC, and the basis for creating a Partnership Committee for Science.*

The question of System leadership was an important aspect of governance discussions, both at ICW98 and at the Consultative Council. The council has recommended that the Chairman should continue to be a senior official of the World Bank, and that he/she should devote at least 50 percent of his time to the CGIAR.

On this question, the Bank’s senior management has asked me to reaffirm its full commitment to the CGIAR, and to be thoroughly supportive of the System’s endeavors. They have specifically asked me to clarify the Bank’s position to you as follows:

As some of you know, I may be leaving the World Bank in November. Should that happen, the Bank will propose to you the appointment of a person of recognized standing as full-time Vice Chairman—not a CEO—and a Bank Vice President as Chairman, but not spending 50 percent of his

or her time on the CGIAR. If, on the other hand, I do not leave the Bank in November, I will be your Chairman for at least another year, serving close to full-time.

**Proposition #7** is based on this clarification:

*The Group welcomes the continued commitment of the Bank to support the CGIAR, and decides to await further consultation on chairmanship with the Bank in November.*

Both at ICW98 and at the Consultative Council, the Group's preference for collegiality and informality in decision-making was unambiguously reaffirmed. The need to combine the expertise and insights of the various groups and committees with the participatory approach of involving all stakeholders in decision-making, led us to use a Consultative Council as the mechanism to follow up on System Review proposals. Members of the council have shown how effectively a Consultative Council can facilitate decision making without in any way eroding the authority and centrality of the Group.

The Council was not intended to be a decision-making body. It has not usurped the Group's authority and functions. Its responsibilities were consultative and advisory. It has functioned as a facilitator by reviewing the issues, distilling them into a format that could sharpen discussion and decisions, and enable the Group to go directly to the core of the issues, thus making full productive use of its time at plenary sessions. It has worked for the System, and has also been representative of the System.

Hence, **Proposition #8**:

*The Group recognizes that the Consultative Council operated very well, and empowers the Chairman to call the council into session as and when required.*

Beyond collegiality and transparency, there is another issue, which I have raised with you as early as in 1994, and to which I have referred several times. This is the public perception that the CGIAR is "in-bred." At a time when we are putting our house in order, and in a period of transition, it is necessary that we reach out to a new generation of talent and diversity, both research scientists and CGIAR Members. This is critical to the credibility, the long-term viability, and the influence of the Group.

*This is the reason for **Proposition #9**:*

*The CGIAR will make a special effort to seek out talent of greater gender and national diversity in all key positions of the System, without compromising quality and standards.*

### **Conclusion—Moving On**

My friends.

Discussion of the agenda for MTM99 has been timed to give you every opportunity to examine the proposals before you, but you have a far, far greater opportunity than that of discourse. You have the opportunity and face the challenge of ensuring that agricultural research will be a dynamic instrument of societal progress, serving the needs of a new time and a new generation in a new millennium.

This is a unique opportunity. Let us use it wisely, to launch the System into an exciting future. Thank you.

## *Chairman's Announcements*

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### *Thanks and Welcome*

Your Excellency, ladies and gentlemen.

Greetings and welcome to the MTM99, the first formal meeting of the Group in China. A particularly warm welcome to His Excellency Yaobeng Chen, Minister of Agriculture. We value his presence and support, and we look forward to listening to him. Let us demonstrate our appreciation of his interest in the CGIAR by acclamation.

On behalf of the CGIAR System, I thank the Government of China for inviting us to meet here, and I thank the Ministry of Agriculture (MOA) that serves as our immediate hosts. Thanks, as well, to the Chinese Academy of Agricultural Sciences (CAAS) for their wonderful arrangements for "China Day" yesterday.

Several representatives of our host organization are here today, and I extend a warm welcome to all of them:

- ◆ Zhenping Tang, Director General, Department of International Cooperation, Ministry of Agriculture (MOA);
- ◆ Shiqing Ma, Director General, Department of Science and Technology, MOA;
- ◆ Longyue Zhao, Deputy Director General, Department of International Cooperation (DIC), MOA;
- ◆ Ren Wang, Vice President, Chinese Academy of Agricultural Sciences (CAAS);
- ◆ Xifeng Gong, Deputy Division Chief, DIC, CAAS;
- ◆ Zhenglin Wei, Program Officer, Department of International Cooperation, MOA; and
- ◆ Ze Guo, Deputy Director and Associate Professor, Center of International Cooperation Service, MOA, and National Coordinator, MTM99.

We are pleased to have all of you with us, and I ask my colleagues to welcome you with a round of applause.

Let me recognize, as well, some special guests attending MTM99:

- ◆ David Hopper, a CGIAR pioneer and former CGIAR Chairman, whose contributions to the CGIAR have been boundless, and who is here as a Member of the board of trustees of the International Network for Bamboo and Rattan (INBAR) headquartered in Beijing;
- ◆ Mohammed Ridha Bin Hassan Bin Suleiman, Adviser for Planning Affairs of the Ministry of Agriculture and Fisheries in the Sultanate of Oman;
- ◆ Regina Gata, a valued friend of many years, now representing Zimbabwe;
- ◆ Hoang Thi Dzung, a Senior Expert from the Ministry of Agriculture and Rural Development, Vietnam; and
- ◆ Mahendra Shah, representing Maurice Strong and his System Review colleagues.

I know that all of you share my hope—or should I say expectation—that before long we will be able to welcome Oman, Vietnam, and Zimbabwe as full Members of the CGIAR.

### *Condolences*

With regret, I have to place on record the deaths of colleagues and friends:

- ◆ We lost Robert Chandler in March. He was 91. He led a full life of service to the human family, as IRRI's first director general and in all his undertakings. So, as we mourn his passing, we rejoice in having known him. The memory of his dynamic leadership, his kindness, and wisdom will forever inspire the CGIAR.
- ◆ William A. C. Mathieson, was a popular and respected CGIAR pioneer. He died in February at his home in London. Will Mathieson was 82.
- ◆ Mohamed Dahniya, who won the CGIAR Chairman's Excellence in Science Award in 1996, for outstanding partnership with IITA, and his wife Florence, were victims of the tragic violence in Sierra Leone.
- ◆ Nobel laureate Henry Kendall whose knowledge enriched our understanding of biotechnology died while engaged in a favorite pastime, underwater photography, in Florida.

I suggest that our condolences be recorded in the summary report of this meeting, and copies of the report conveyed to the families concerned.

### *Congratulations*

Let me move on now to some richly-deserved felicitations:

- ◆ IPGRI recently celebrated its 25<sup>th</sup> anniversary. IPGRI, which began life as IBPGR, is today the world's largest international Center committed to the conservation and use of plant genetic resources. The work of IPGRI's 170-member staff is widely recognized. Geoff Hawtin's leadership is valued not only by us but by colleagues in the global agricultural research system.
- ◆ T. T. Chang and Joel Cohen, have jointly been awarded the 1999 Tyler Prize for Environmental Achievement. They were honored for their "monumental contributions to solving the related problems of food production and distribution, and understanding the dynamics of population growth." Joel is truly a friend of the CGIAR, whose insights and counsel have been and remain invaluable. He is the guiding light behind a biotechnology conference that will be held immediately preceding ICW99. T. T. Chang was the principal geneticist at IRRI, up to his retirement in 1993. He is a world authority on rice genetics and conservation. His research has led to major advances in plant breeding, productivity, and disease resistance with a profound impact on agriculture productivity throughout much of Asia, Africa, and South America.

Let us acknowledge these achievements in the usual CGIAR manner.

### *Departures/New Appointments*

There always comes a time in our proceedings when we bid farewell to some colleagues or welcome others in to the family. My list has only farewells, and is fairly short, but I suggest that you should hold your applause until I have reached the end of it.

*First, CGIAR Members:*

- ◆ *Ebbe Schiøler has informed me that he will be retiring in July, so this is his final participation as a national delegate at a CGIAR meeting. Ebbe has been an exemplary Member: totally committed to the vision of the CGIAR, respectful of what the CGIAR has achieved but never alarmed by the prospect of change, articulate and astute at this and other CGIAR meetings, supportive in so many ways including authorship, and highly effective in raising public awareness about the work of the Centers. He is a true embodiment of the spirit of the CGIAR. I have personally gained from his friendship and support. We will miss you at these meetings in your present capacity Ebbe, but I can say with absolute certainty that Ebbe Schiøler will continue to support and help the CGIAR in many different capacities well into the future.*

At the Centers, September seems to be something of a departure month for the CGIAR:

- ◆ Alfred Brönniman of ICARDA, Neville Clarke of ILRI, and Amir Muhammed of ISNAR are due to end their terms as board chairs in September. They have been exemplary leaders in demanding times. Their contributions to these Centers will outlast by far their tenure as board chairs. They leave their positions with our best wishes, and with the hope that they will continue to be members of the extended CGIAR family.
- ◆ Shawki Barghouti of ICRISAT and Grant Scobie of CIAT will end their stewardship as Center directors in the same month. Each undertook the task of leading a Center that was challenged to change its research emphasis, structure and operations. Both did admirably well. They supported and inspired their colleagues. In doing so, they have served the CGIAR System, its beneficiaries, and its partners. They have earned our enduring gratitude and our respect. Good luck, friends, wherever the future takes you.

### *Adoption of Agenda*

May I now ask for the adoption of the agenda?

## *Chairman's Nine Propositions to Bring the Third System Review to Closure*

**Proposition One:** MTM99 will bring consideration of the third System Review to closure and, in doing so, will launch the implementation of all the action proposals emanating from that review, as amended and adopted by the Group.

**Proposition Two:** The Group endorses the recommendations for the strategic orientation of research priorities, as well as the ideas for expanded science partnerships, formulated and being further developed by TAC and the Centers.

**Proposition Three:** The Group encourages the Centers, in order to become effective partners in existing knowledge networks, to strengthen their databases, present their findings in a more user-friendly fashion, and expand their use of information technology, both for communication and dissemination.

**Proposition Four:** The Group welcomes the consultations between the Centers and African NARS leaders, encourages all those engaged in this exercise to continue their discussions in a practical manner, and to present specific proposals for consideration by the Group at ICW99.

**Proposition Five:** The Group endorses the financing proposals of the Finance Committee and requests the committee Chair to table at ICW99 a long-term funding strategy, a structure for implementing that strategy, and a public awareness component for fund raising.

**Proposition Six:** The Group endorses the governance recommendations presented by the Consultative Council, specifically the continued role of the cosponsors, the need to further strengthen the working of TAC, to fold IAEG into TAC, to redefine the composition and activities of the GRPC, and to create a new Science Partnership Committee, and requests that a progress report on actions taken be tabled at ICW99 for information.

**Proposition Seven:** The Group welcomes the commitment expressed by the World Bank and decides to await further action after ICW99, based on the results of the UNESCO action.

**Proposition Eight:** The Group recognizes that the Consultative Council operated very well and empowers the Chairman to call the Council into session as and when required.

**Proposition Nine:** The CGIAR will make a special effort to seek out talent of greater gender and national diversity in all key positions of the System, without compromising quality and standards.

## *The China-CGIAR Collaboration*

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The MTM99 business meeting began with a candid discussion of China-CGIAR collaboration and future challenges and priority work areas. The resounding message throughout the session was the strength and endurance of the China-CGIAR partnership, which began more than a decade before China joined the CGIAR in 1984.

In a keynote statement on *Science in the Service of Humanity: The Challenge to Agricultural Research in China and the World*, Mr. Serageldin extolled the China-CGIAR collaboration. Over nearly three decades, more than 50 Chinese institutions have engaged in joint projects with the CGIAR. Some 3,400 Chinese scientists have been trained by the CGIAR Centers, and China has bred 252 crop varieties containing genetic material from the CGIAR. Eleven of the CGIAR's 16 Centers now have formal links with Chinese research institutions, and five Centers operate offices in Beijing.

Mr. Serageldin pointed to the fact that China today feeds 22 percent of the world's population with only 7 percent of the world's arable land. The demand for food will grow, he said, as the population increases and diets change with rising incomes. The prospect of food grain demand increasing from 437 million tons in 1996 to about 700 million tons in 2020 poses a colossal challenge to farmers, scientists, and policymakers. Experts believe that yield increases of 30–40 percent will be required, but this productivity must be increased without irreparable harm to the natural resource base.

Other speakers—Jian Liu, Vice Minister of Agriculture, Zhengping Tang, Director General of the Ministry's Department of International Cooperation, Hubert Zandstra, Director General of CIP (speaking on behalf of the CGIAR Centers), Shiqing Ma, Director General of the Ministry's Department of Science, Technology, and Education, and Donald Winkelmann, TAC Chair—focused on the nature of current China-CGIAR collaboration and the major challenges in the millennium.

From the Chinese perspective, one of the main objectives of agricultural research and development is to enable agricultural science and technology to advance in order to ensure China's food supply, sustainable economic development, and efficient utilization of natural resources in the 21<sup>st</sup> century. Priority research areas include selection and breeding for crops and livestock, the research and application of biotechnology, modern intensive farming, new techniques for highly efficient utilization of agricultural resources, post-harvest technologies, integrated pest management, agricultural information technology, and agricultural products.

CGIAR scientists welcome the impressive achievements resulting from collaboration between CGIAR Centers and Chinese research institutes. CGIAR activities in China encompass almost all aspects of its research agenda, including crops, livestock, irrigation, agroforestry, forestry, aquaculture, policy, institutional strengthening, and training.

The many presentations made clear that serious environmental problems threaten China's agriculture. Acid rain may be damaging 10 percent of land area already. Several major rivers do not meet the lowest standards for irrigation water. Water scarcity has become China's most limiting agricultural production resource. The annual cost of air and water pollution is already costing more than \$50 billion a year. Tens of millions of people are at risk of losing access to safe drinking water.

The speakers noted that failure to confront these issues could have serious consequences for China's anti-poverty battle. Poverty has been dramatically reduced, primarily as a result of rising agricultural incomes, but it has not been abolished. Seventy percent of the population continues to rely on farming for their livelihoods, and at least half the poor live in abject poverty.

Plenary discussions focused on the technological, environmental, and social challenges facing China and the need for continued expansion of China-CGIAR collaboration. China must transform its agriculture, making it more productive, sustainable, and vibrant as an engine of growth. Members agreed that China's increased support to both national and international agricultural research will be strengthened by the CGIAR's increased capacity building efforts with China's scientists, research managers, and policy makers. Enhanced germplasm exchange between China and the CGIAR Centers will benefit farmers and consumers in China and throughout the world. CGIAR Centers can contribute their scientific strength, to work with China's NARS, as well as others in the global agricultural research system; China should provide reciprocal collaboration as well.

Several members noted the emergence of the "new China," where some 200 million people have raised themselves out of extreme poverty. Agricultural research and agricultural transformation have been crucial in this pursuit. China's food security depends on continued attainment of similarly high levels of sustainable productivity. This will require continued investment in research, strengthened research institutions, revamping of policies that retard agriculture, enhanced natural resource management, and the utilization of cutting edge science for sustainable agriculture, including fisheries, livestock production, and agroforestry.

The Group emphasized that the CGIAR is proud to be a special partner with China and stands ready to collaborate with Chinese scientists to grasp the opportunities offered by cutting-edge science.

## *Third System Review*

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MTM99 brought the third System Review of the CGIAR to closure. Under the enlightened leadership of Maurice Strong, the System Review had challenged the CGIAR to rethink its role and design a strategy to ensure continued impact in the new millennium. In its comprehensive report presented at ICW98, the System Review commended the accomplishments of the CGIAR System, urging the CGIAR to build on past achievements and confront past weaknesses as well. Twenty-nine recommendations on the CGIAR's science, partnerships, governance, and finance emerged from the System Review's 18-month analysis.

The Group made a useful start at ICW98, tackling the recommendations with openness, candor, and self-assessment. A Consultative Council was created as a follow up mechanism to deal with issues arising from recommendations of the System Review. Creation of the Council was an important experiment by the CGIAR—a smaller group was given the responsibility of clarifying issues, reviewing options, reaffirming fundamentals, defining specifics for action, and thereby helping facilitate decisionmaking by the Group as a whole.

The Consultative Council met in late January in Brussels, where Council members scrutinized, analyzed, and refined System Review recommendations. The Council then asked CGIAR committees to further develop proposals for consideration by the Group. The resulting set of action proposals was presented at MTM99. In this context, the Chairman challenged the Group to consider nine specific propositions (see box) to enable the CGIAR to bring the third System Review to closure and launch the CGIAR into the new millennium.

At MTM99, the Group redoubled its efforts to ensure the CGIAR's effectiveness in the future. It acted on the proposals and launched implementation of the follow up actions. Responsibility for implementing the decisions on science, partnerships, governance and finance taken by the Group has now moved to the Centers, standing committees and others charged.

### **SCIENCE**

The future effectiveness of the CGIAR System—the System Review noted—lies in "nurturing scientific credibility, building scientific strengths, and mobilizing scientific partnerships to meet the goals of eliminating poverty and hunger and protecting the environment." The CGIAR System was urged to position itself "at the core of a scientifically credible network of partners" and "serve as the flagship of a global movement of science for sustainable food security and poverty eradication."

Responding at ICW98 to the System Review's science-based recommendations, the CGIAR System had:

- ◆ Reformulated its mission statement, emphasizing food security and poverty eradication, and agreed that the mission statements of individual Centers may be modified for consistency;
- ◆ Reaffirmed its commitment to genetic improvement and natural resources management as the foundation of sustainable agriculture development; and

- ◆ Agreed that, to achieve the mission and objectives of the System, the Centers would:
  - Serve as global resource Centers on frontier technologies, policy research, sustainable use of natural resources, capacity building, and networking;
  - Enhance their scientific links with external partners, including NARS, the Global Forum, advanced research institutes (ARIs), the private sector, and NGOs in industrialized and developing countries;
  - Develop and disseminate environmentally relevant technologies based on effective blends of traditional and modern methods;
  - Undertake greater inter-Center collaboration; and
  - Pursue new methods of increasing System synergy.

Following ICW98, the science-based recommendations of the System Review were further studied and follow-up ideas and mechanisms outlined. At its meeting in Brussels, the Consultative Council re-emphasized the importance of scientific excellence, partnerships, and credibility. As requested by the Consultative Council, the Center Directors Committee (CDC) and TAC presented draft action proposals and progress reports on science-related recommendations for the strategic orientation of research priorities. The Group systematically considered each of the recommendations at MTM99.

### *Integrated Gene Management*

#### Plant Breeding

The System Review recommended use of an integrated gene management approach at CGIAR Centers. This would require a renewed approach to selective breeding, a more sensitive assessment of environmental impacts and safety risks, and the pursuit of a functional basis for a new agronomy. The System Review also recommended the use of genomics and molecular plant breeding as well as Mendelian methods of breeding, in an integrated manner, and urged increased attention to the conservation, characterizations, and sustainable and equitable use of agrobio-diversity. In this context, the Consultative Council proposed that a systemwide review of plant breeding be carried out by TAC.

At MTM99, TAC Chair Don Winkelmann presented to the Group proposed terms of reference, in the context of an IGM approach at CGIAR Centers. The TAC review will analyze five principal issues:

- ◆ Breeding techniques and tools employed for each mandate crop;
- ◆ Total expenditures for plant breeding and expenditures for biotechnology for each crop;
- ◆ Opportunities for cost reductions by improving conventional techniques or substituting biotechnology and other new applications;
- ◆ Opportunities for efficiencies by concentrating applications; and
- ◆ Capital costs and likely gains from implementing different methods.

The first two issues will involve desk studies through the TAC Secretariat. TAC will form a panel of experts to study the remaining issues.

The Group discussed current efforts to integrate the System Review's science-based proposals into the evolving research agenda of the CGIAR. The systemwide review of Center plant breeding will focus on the extent to which appropriate biotechnology and bioengineering techniques are being used to support conventional breeding practices. It was noted that the under-lying aim is to

assess the balance of instruments and procedures currently used by the Centers and determine whether costs can be reduced if some activities are further centralized or outsourced.

Several Members raised concerns that the two approaches to plant breeding not be pre-judged, since the findings could point to a need for more investment rather than less. There was also concern that the report be forward looking and that it take into account synergies across crops. The Group agreed that TAC's plant breeding review should provide guidance and future directions for accelerating the introduction of modern marker-assisted breeding and bioengineering technologies at the Centers. Application of these latest developments in biotechnology, it was emphasized, must be in ways that guard against hazards, respect ethical considerations, and ensure biosafety.

*Decision: The Group endorsed the terms of reference for the systemwide plant breeding review proposed by TAC. TAC will make recommendations to the Group by MTM2000.*

#### Patents and Intellectual Property Rights (IPR)

A subject requiring further scrutiny and considerably more discussion was the System Review proposal for a "wholly-owned subsidiary, under full Centers' control," to hold "CGIAR scientists' patents," which was seen as a possible starting point for resolving this complex set of issues. The Consultative Council recommended against the creation of a systemwide institutional mechanism to hold patents, and proposed instead that the Centers should take the lead in deciding on appropriate mechanisms.

At MTM99, Timothy Reeves, Chair of the CDC subcommittee on IP issues, presented the CDC report on Centers' progress on these integrated gene management issues. Centers are embracing genomics, molecular breeding, and bioengineering in their research. While the extent to which these newer technologies are being used varies across the System, the CDC listed 40 specific examples of how new scientific technologies are being used. Centers are also organizing workshops to develop collaborative research agendas and strategies on such specific issues as genebanks and comparative genetics, and drought tolerance in major cereals.

The CDC argued against creation of a System-level legal entity to negotiate or hold patents on behalf of the Centers. Resolving IPR questions in a prudent yet rapid fashion is crucial for many of the Centers and for the System as a whole. Solutions to IPR problems are being sought in many international forums and the CGIAR will need to be in compliance with these internationally agreed conventions.

The CDC reported significant progress on IP management at individual Centers and on a systemwide basis. A number of Centers have Board-approved IP policies, IP committees, and clear statements on IP management and related issues. On the systemwide level:

- ◆ The Centers' statements on genetic resources, biotechnology, and intellectual property rights have been incorporated into a single publication, which was made available at MTM99;
- ◆ The guiding principles on intellectual property and genetic resources are being revised in consultation with the GRPC and FAO;

- ◆ The Central Advisory Service for Proprietary Science has been approved for an initial two-year period and is being implemented at ISNAR;
- ◆ The previously agreed upon Center-by-Center audit of intellectual property is proceeding. Final terms of reference for the IP Audits have been drafted and six Centers have identified consultants; audits of these first Centers are expected to be completed by ICW99; and
- ◆ The Central Advisory Service will carry out a feasibility study on a wholly owned subsidiary, possibly of 2–3 Centers.

The Group emphasized the need for Centers to solve operational problems regarding IPR. Centers' freedom to operate in terms of delivering needed products will be curtailed significantly unless they more effectively manage their own and others intellectual property, including that belonging to the private sector, NARS, Advanced Research Institutes (ARIs), and farmers. Several Members spoke against creation of a central entity that can legally hold patents, noting the difference between a legal entity and creation of a wholly-owned subsidiary among Centers.

The Group agreed with the Consultative Council that the Center-by-Center audit of intellectual property should be completed expeditiously, and noted that a central IPR advisory unit is being created at ISNAR. The Group acknowledged the difficulty of IPR issues and welcomed the progress reported by the CDC. The Centers' progress was viewed as especially encouraging for expansion of private sector partnerships.

The Group also noted the relevance of CGIAR participation in international fora such as the renegotiation of the FAO International Undertaking on Plant Genetic Resources. The importance of these undertakings to the work of the CGIAR was described in the FAO–IPGRI statement presented by Louise Fresco, Director of the Research, Extension, and Training Division of FAO.

*Decision: The Group endorsed the Consultative Council recommendation not to create a System-level legal entity to hold patents and encouraged the Centers to complete IPR audits expeditiously. The Centers will conduct a feasibility study on a wholly-owned subsidiary (possibly of 2-3 Centers). The Centers are to report on results and progress at ICW99.*

### ***Integrated Natural Resources Management***

The System Review recommended the establishment of a new international network to strengthen CGIAR's existing natural resource management research. The Consultative Council endorsed the Integrated Natural Resources Management (INRM) perspective and proposed that existing natural resources management networks be strengthened. A key issue, however, was whether a new network is needed or whether these activities could be fully carried out by strengthening and expanding existing networks and consortia. The Council asked the CDC to draft action proposals for review at MTM99.

Jeffrey Sayer, Chair of the CDC subcommittee on sustainability and environment, presented an overview of natural resources management issues including the ongoing loss of soil, growing scarcity of water supplies, continued deforestation, damage to the atmosphere, and loss of animal and plant biodiversity. The twin thrusts of integrated gene management and integrated natural resources management were reaffirmed, although it was recognized that natural resources management research is more complex and the nature of the research is not as sharply defined as that of crop improvement. The CDC and the CBC strongly supported the proposed conceptual framework and the need for increased support of ongoing INRM activities in the CGIAR, but did not endorse establishment of an additional systemwide network.

The CDC felt that the CGIAR has great potential in the field of INRM and offered an action plan. Key components follow:

- ◆ The CGIAR can best contribute to INRM and broader environmental objectives by strengthening ecoregional research capabilities and reinforcing inter-Center cooperation.
- ◆ The CDC Committee on Sustainability and the Environment (CSE) will be strengthened by including Center scientists who are leaders in INRM research.
- ◆ CSE will develop a matrix of systemwide and ecoregional environmental issues to identify major gaps in current ecoregional programs.
- ◆ Local, national, and international resources tend to be spent on addressing symptoms of environmental degradation rather than understanding the underlying causes. A strong case can be made for shifting resources away from palliative "environmental protection" and toward research on the underlying causes of natural resource degradation.
- ◆ Centers should address cross border environmental issues, like large watersheds.
- ◆ Immediate steps should be taken to strengthen the CGIAR's INRM research.

TAC agreed that the proposed action plan is an excellent start and on target. Most elements of the proposed INRM approach for linking productivity research with the environmentally sound management of natural resources are consistent with principles already established within the CGIAR System.

The Group endorsed the importance of INRM to the CGIAR's mission and the need to move toward stronger programs. Members discussed the CDC action plan including the call for further studies of the relationship between natural resource depletion and poverty; case studies of economic, social, and environmental returns from INRM research; better understanding of the relationship between natural resource depletion and both sectoral and extra-sectoral policies; full inclusion of INRM issues in NARS agenda and building NARS capacity for INRM research; strengthened INRM research in sub-Saharan Africa, where poverty and resource degradation are most acute; and incorporation of appropriate climate change and biodiversity issues in Centers' research agendas.

The extent to which the potential of INRM is realized will depend largely on incorporation of the action plan into Centers' research agenda. It was noted that adequate resources must also be made available.

Several Members emphasized the crosscutting nature of the ecoregional approach as an additional advantage. During the discussion, concerns were raised that separating integrated gene management and integrated natural resource management is an artificial distinction, contrary to how farmers approach the issues. Regarding the Centers INRM programs, it was emphasized that both national and international scientists be involved and that creation of a new network could not be justified.

*Decision: The Group endorsed the action plan on INRM proposed by the CDC. TAC and CDC will report on results and progress at ICW99.*

### ***Global Knowledge System***

The System Review proposed that the CGIAR take the lead, in partnership with others, to establish an effective Global Knowledge System for Food Security. The System Review felt that this would enrich the work of the CGIAR and benefit the global agricultural research community. At ICW98, both the CBC and CDC noted the cost and difficulty of the CGIAR taking the lead in such efforts. The Consultative Council agreed that it would not be appropriate for the CGIAR to attempt to function as the hub of a global knowledge system in agricultural research, although Centers should be prepared to participate, as appropriate, in relevant knowledge networks. The Council asked the Centers to determine appropriate follow through actions.

At MTM99, Stein Bie, Chair of the CDC subcommittee on information, presented the CDC response to System Review recommendations on global information sharing and capacity building. The CGIAR recognizes the contributions it can make in the global knowledge system. Consequently, the Centers are expanding their electronic connectivity to include NARS and to select low-cost alternatives that will offer better opportunities for NARS to benefit from and contribute to CGIAR science. The Centers will continue to strive for greater standardization of internal databases, including those on administration and finance data. At the same time, the Centers will enter into close cooperation with global leaders in knowledge systems to seek compatibility with their system rather than to develop their own. This will help lower communication barriers between CGIAR scientists and NARS scientists, and add to the expanding flora of connectivity possibilities offered by the public and private sectors. TAC urged the Centers to consider added investment in staff training to manage websites, expand electronic conferencing, and other communications skills.

Recognizing the role of information in future agricultural research both within the CGIAR and in the global research system, the Group discussed how the Centers should review their in-system policies and the role they can play globally, but agreed that the Centers should not independently develop a separate system for agricultural knowledge.

The Group acknowledged the need for the CGIAR to take full advantage of the information and communication revolution currently sweeping the world, but expressed caution about the cost implications of establishing an effective global knowledge system for food security.

There was strong agreement that the Centers should strengthen their existing efforts, so that the CGIAR can benefit fully from current and continuing developments in information technology. The Group agreed with the Consultative Council's proposal that the quality and availability of information from the Centers should be improved and that the Centers should update their data bases, present data in user-friendly formats, and increase their sharing of knowledge with NARS and others.

*Decisions: The Group encouraged the Centers to strengthen their databases, present their findings in a more user-friendly fashion, and expand their use of information technology for communication, dissemination, capacity building, and organizing research. The CDC will report on the Centers' progress as parts of its regular reports to the Group. The Group also endorsed the Consultative Council recommendation that the CGIAR should not attempt to function as the hub of a global knowledge system.*

### ***Policy Research***

The System Review recommended that the CGIAR strengthen its policy research and capacity building for policy research. The Consultative Council agreed with the recommendation, but concluded that there is no need for an additional policy dialogue mechanism. The Council also agreed that the CGIAR Chairman and Center representatives should articulate the views of the CGIAR at international policy discussions, particularly on genetic resources, always representing the voice of the poor. The CDC was asked to develop specific action proposals.

At MTM99, CDC Chair Pedro Sanchez presented the recommendations on policy research and capacity building for policy research. The CDC recommended a strengthened policy research agenda for the CGIAR, including:

- ◆ More integration of the technological and policy dimensions of the research agenda;
- ◆ Emphasizing the CGIAR's comparative advantage at the intersection of policy and technology;
- ◆ Targeting global, regional, national, and local clients;
- ◆ Emphasizing policy research that produces international public goods;
- ◆ Strengthening NARS capacity for policy research; and
- ◆ Building new partnerships for policy research.

The Group discussed the need for greater attention to social and management sciences and policy research. To maximize impact, the Group urged that the Centers' policy research be carried out in partnership with NARS and regional fora.

The need for a greater CGIAR presence in intergovernmental negotiations was a recurring theme of the discussion, with the caveat that the CGIAR avoid taking positions or advocating specific policies. There was agreement that policy dialogues with a variety of interlocutors is essential if the CGIAR is to be heard on behalf of the world's poor and respected for both its vision and compassion in the global debates.

*Decision: The Group endorsed the CDC proposal on strengthening policy research and capacity building for policy research and requested TAC to monitor progress.*

### ***Capacity Building***

The System Review recommended that the CGIAR continue to emphasize capacity building. The Consultative Council supported the recommendation but concluded that the CGIAR should not create a new mechanism for this work. The Council asked the Centers to determine appropriate action.

At MTM99, the CDC agreed that the CGIAR's capacity building should hold a central place in Centers' agendas and serve as a cornerstone in CGIAR-NARS collaborations, but the CDC agreed that there is no need for a distinctly new mechanism.

TAC strongly supported the need to increase Centers' emphasis on high quality social science and management science, and urged more diversity in staffing practices to assure the inclusion of social scientists. TAC also called for more training in management, policy, biotechnology, integrated natural resource management, and other areas, which can strengthen the effectiveness of national programs.

The Group discussed the need for expanded capacity building and welcomed the consultations with NARS leaders. It was noted that Centers have created numerous capacity building tools, including extensive inter-Center cooperation in Africa, innovative methods of interaction with local universities, and knowledge links with NARS and others. New methods for capacity building should be explored and implemented when appropriate, but the Group did not support creation of a new mechanism.

*Decision: The Group endorsed the Consultative Council recommendation that the CGIAR should maintain its emphasis on capacity building without creating a new mechanism for this work.*

### ***Women in Agriculture***

The System Review recommended that a new international network for the technological empowerment of women be established. The proposal has both science-related and partnership-related justification and implications. The Consultative Council proposed that the existing CGIAR gender analysis program, centered at CIAT, be strengthened as a contribution toward empowering women in agriculture. The emerging consensus was that a new network should not be created, but instead the existing CGIAR gender program should be reoriented to meet the objectives outlined by the System Review.

At MTM99, Grant Scobie presented the CDC recommendations on gender analysis. The CGIAR's participatory research and gender analysis program mainstreams gender analysis and participation of stakeholders, particularly poor rural women, into core research areas of the CGIAR—plant breeding, crop improvement, and natural resource management research. The CDC agreed that the CGIAR's existing gender analysis program should be strengthened. However, the CDC did not support the establishment of an additional network for women in agriculture.

TAC strongly supported the spirit of the recommendation to strengthen efforts to empower women in agriculture. TAC encouraged CIAT to fully develop the project proposal described in the concept note, "Technology Development for Empowering Women in Agriculture," for TAC's review and subsequent recommendations to the Group.

The Group discussed the CGIAR's gender analysis work, which enables scientists to differentiate the special needs, constraints, responsibilities and rights of women in agriculture, and assess the impact of technical change on women. In addition, the CGIAR's gender staffing program was praised for its support of efforts by the Centers and their boards to strengthen the recruitment and retention of highly qualified women scientists and professionals, and to create work environments that are supportive of the productivity, advancement, and job satisfaction of women and men. Since the program was established in 1991, internationally recruited female staff has increased by more than 20 percent and female nationally recruited staff by 150 percent.

*Decisions: The Group endorsed the CDC recommendation that the CGIAR should not establish an additional network on women in agriculture; instead it should rely on existing programs on gender analysis and gender staffing.*

*Focus on Africa*

The System Review recommended the development of a multi-faceted, science-based strategy for a concerted drive to eliminate production constraints and stimulate accelerated agricultural progress in Africa. The Consultative Council agreed that much more could be done to enhance the impact of CGIAR research programs in Africa and urged that obstacles to effectiveness be removed and inter-Center collaboration be improved. The Council asked the CDC to take the lead role in determining the most useful niche for the CGIAR, identifying appropriate partners and working arrangements, increasing African membership and involvement in the CGIAR, and dampening donor competition.

At MTM99, Joseph Mukiibi, speaking on behalf of the Forum for Agricultural Research in Africa (FARA), reported on efforts by the Special Program for African Agricultural Research (SPAAR) and FARA to develop a "Vision of African Agricultural Research." The vision calls for a doubling of the annual rate of agricultural growth from the current 2–3 percent and urges increased commitment by all stakeholders to agricultural research for development.

The CDC organized a "meeting of minds" with African NARS leaders in Nairobi to develop ways of better integrating their work, particularly on IGM and INRM research and on training. The outcome of this retreat was a shared operational vision and action plan of inter-Center activities as well as engagement with SPAAR, FARA, NARS, NGOs, bilateral donors, development agencies and other principal actors in African research and development. Hank Fitzhugh, Chair of the CD subcommittee on sub-Saharan Africa, reported the CDC conclusions:

- ◆ The CGIAR mission is fully congruent with the African vision for agricultural research;
- ◆ Enabling policies are essential for the success of agricultural research and development;
- ◆ Broader partnerships can ensure that research results have more impact on sustainable agricultural development;
- ◆ CGIAR Centers can contribute new research approaches; and
- ◆ Human and institutional capacity for research skills must be strengthened as well as capacity in the management and leadership of collaborative research.

The Group discussed the strategic collaboration in Africa and endorsed the interactions with African leaders and the shared vision. The benefits of a systemwide, concerted effort on Africa, driven by a clear strategy and implemented through effective institutional mechanism, are likely to be considerable. However, there was caution expressed that the focus on Africa should not be at the expense of other developing regions where poverty and food security is also widespread.

The Group noted the broad extent of CGIAR research programs in Africa. All 16 CGIAR Centers work in Africa and four (ICRAF, IITA, ILRI, and WARDA) are based there, so the consultations with African NARS leaders can and should be continued and expanded. The challenge is to remove obstacles to CGIAR effectiveness in Africa and improve inter-Center collaborations.

*Decision: The Group welcomed the consultations between the Centers and African NARS leaders and encouraged all those engaged in this exercise to continue and complete their discussions in a practical manner. The CDC, SPAAR, and FARA will present specific proposals for consideration by the Group at ICW99.*

**PARTNERSHIPS**

A key conclusion of the third System Review was that "broadening and deepening partnerships and collaboration with other actors in the research-development continuum is of utmost importance to the future of the CGIAR." The principle of research partnerships, which was unequivocally endorsed at the CGIAR ministerial level meeting in Lucerne, Switzerland, in 1995, has become a strong impulse in CGIAR activities, manifested in the NGO Committee (NGOC) and Private Sector Committee (PSC).

Discussions of CGIAR partnership goals continued at MTM99, with three criteria emerging as essential for partnership building:

- ◆ Linkages already developed by the CGIAR with a broad range of partners must be strengthened;
- ◆ These linkages are most effective when they serve as conduits for two-way communication based on mutual respect and a sense of commonality; and
- ◆ Science and research must always be at the core of partnership mechanisms.

In the context of an unfinished global development agenda, the challenge to the CGIAR is to mobilize frontier science and technology in a frontal assault on poverty and hunger, and to promote sustainable management of natural resources. The Global Forum provides a mechanism to accelerate consultation and action across the global agricultural research system. The CGIAR must work with the Global Forum, regional and national agricultural research systems, NGOs, advanced research organizations in the public and private sectors, and most especially, farmers in their fields.

### *Partnership Committees*

The System Review recommended that the range of CGIAR partnerships be broadened to include other organizations with a shared commitment to its mission and goals. Discussion at ICW98 demonstrated that the System accepted in principle the need to maintain and strengthen partnerships, but there was uncertainty about what practical measures would be most appropriate and effective. The Consultative Council endorsed the partnership building approach adopted by the CGIAR and agreed that the involvement of existing partnership committees in CGIAR decision-making should continue.

To facilitate the strategic orientation of CGIAR research priorities and expand science partnerships, the Chairman proposed that a science partnership committee be established to link with the international scientific community and enhance the involvement of existing partnership committees in CGIAR decisionmaking. The combined number of members of partnership committees will not exceed the current total.

In addition, NGOC Chair Miguel Altieri and PSC Chair Sam Dryden outlined proposals for restructuring the membership of the NGOC and PSC committees respectively. The NGOC restructuring proposal redefines the NGOC's overall role: "To assist the CGIAR and associated international agricultural research Centers to achieve their poverty eradication, food security, and sustainable agriculture goals by channeling civil society perspectives and NGO accumulated experiences, so that small, poor farmer directly benefit from international agriculture research." The NGOC proposes to have 11 members, with geographical and gender balance. NGOC members should also serve on GFAR, TAC, and the Consultative Council.

Regarding its future role, composition and working procedures, the PSC suggested that it provide policy advice based on its members' reflections of private sector views and experiences and reduce its size by one third. Half the membership should be drawn from private sector members already active in CGIAR boards and committees; the other half from external private sector managers

with international experience and broad policy perspectives on issues related to CGIAR work. To further sharpen its discussions, the PSC proposed inviting outside experts to theme-based meetings.

During discussion by the Group, there was strong agreement that the CGIAR would benefit from stronger partnerships with advanced research institutions and international scientific organizations, including professional societies at the national level. The Group agreed with the Consultative Council proposal that in order to make partnerships more effective, the CGIAR should reach out to the international science community, but without exceeding the current combined number of members of partnership committees.

Similarly, strengthened interactions with the private sector could expand collaborative research opportunities and assure that products emerging from research by CGIAR Centers and their partners are utilized efficiently and effectively. The Group confirmed the importance of CGIAR relationships with NGOs, including those with grass roots experience.

*Decisions: The Group endorsed the Chairman's proposal to establish a Science Partnership Committee and agreed that the total membership of the partnership committees would remain unchanged from the present. The Group also asked the Chairman to review with the NGOC and PSC the restructuring of their membership and operations. The Chairman will inform the CGIAR of progress in establishing the Science Partnership Committee and the NGOC and PSC will inform the CGIAR of changes in their memberships and operation.*

### **Review on Partnerships**

In support of the System Review recommendation on strengthening CGIAR partnerships, the Consultative Council noted that it would be appropriate for TAC to conduct an analytic review on "Partnerships and Research: Lessons for the CGIAR" by 2000 or 2001. The Council asked the TAC Chair to present terms of reference for the review.

At MTM99, TAC Chair Don Winkelmann presented terms of reference for an analytic review of partnerships to be conducted by TAC and the CGIAR Secretariat. The study will be conducted over 18 months, with a literature review completed by ICW99, Center case studies and survey by MTM2000, and policy recommendations by ICW2000.

The Group discussed the importance of periodically re-examining partnership relationships, re-confirming their relevance, and taking steps to enhance their effectiveness. Members praised the overall objectives of the study: to evaluate Center experience with research and research-related partnerships; characterize the relative significance of various types of Center partnerships; assess the factors that contribute to the success of partnerships; and suggest which types of partnerships might be most effective to achieve CGIAR goals in the future. It was felt that TAC's analytic study of the lessons to be drawn from the CGIAR's partnership arrangements could enhance future partnership efforts.

*Decision: The Group endorsed the terms of reference proposed by the TAC Chair for an analytic review on "Partnerships and Research: Lessons for the CGIAR" and agreed that TAC and the CGIAR Secretariat should conduct the review by ICW2000.*

### **Meeting with Private Sector CEOs**

The System Review urged the CGIAR System to develop an overall policy for collaboration with the for-profit sector, keeping in mind the public interests and objectives of the CGIAR. The importance of CGIAR-private sector partnerships to expand collaborative research opportunities and

assure that the products of the Centers' research are utilized efficiently and effectively was emphasized. To strengthen such partnerships, the System Review urged the CGIAR Chair to convene a high-level meeting with CEOs of interested and representative agribusiness to exchange views and consider opportunities for new partnership relationships. The Consultative Council endorsed the proposal for a high-level meeting of senior CGIAR representatives with the CEOs of selected private sector companies engaged in agriculture and agricultural research in the North and the South. At MTM99, the Chairman reported that he would organize such a high-level meeting.

The Group discussed the meeting agenda, which could cover a range of issues from patenting and accessing public goods research to new ways of collaboration that are mutually productive. There was agreement on the need to assure that partnerships provide real value-added by strengthening CGIAR decisionmaking with perspectives and experience beyond the System. Members also pointed out the need to explore means by which partnerships can make agricultural research more effective. A meeting with private sector CEOs was seen as a major step toward enhanced collaboration with the private sector.

*Decisions: The Group agreed that the Chairman should take the lead role in convening a meeting with private sector CEOs; the Chairman will report progress at ICW99.*

## **GOVERNANCE**

The System Review raised a number of important issues about the governance of the CGIAR. Governance issues have periodically pre-occupied the CGIAR, and a number of important steps have been taken over the years. The Consultative Council carefully assessed the System Review recommendations in the context of the CGIAR principles of Member sovereignty, Center autonomy, independent technical advice, consensus decisionmaking, and non-political, informal political status. The Council requested various CGIAR committees and units to propose governance changes that conformed with these fundamental principles. The Group's review of governance issues at MTM99 reinforced the tradition of preserving the principles on which the CGIAR. In this context, the Group acted on the changes necessary to improve the CGIAR's effectiveness and efficiency.

### ***Conditions of CGIAR Membership***

The System Review encouraged the CGIAR to examine the conditions of membership in order to increase investment and membership in the CGIAR. The general thrust of its recommendations was endorsed at ICW98, but several aspects required more deliberation. After deliberating at the Brussels meeting, the Consultative Council proposed that conditions of CGIAR membership should remain unchanged; thus the proposed increase in the minimum membership contribution was not endorsed.

At MTM99, the Group discussed the conditions of membership and options for broadening membership and assure a suitable North/South balance in funding of and influence on the research agenda. The Group agreed with the Consultative Council about the need to increase investment and membership in the CGIAR, while recognizing the enormous differential in contributions (based on domestic economic considerations), and the need to maintain the voluntary nature of contributions.

*Decision: The Group endorsed the Consultative Council proposal that conditions of CGIAR membership should remain unchanged for the present.*

### ***CGIAR Chairmanship***

The System Review recommended that the CGIAR Chairman should continue to be a senior official of the World Bank, and that the role of the Chair be examined as part of options for adjusting the decisionmaking structure. At ICW98, the System Review's comments on CGIAR leadership were mixed in with discussion of other governance issues and did not receive the attention they deserved. However, the Group reaffirmed the importance of high level World Bank support of the CGIAR, and reached a consensus that, given the challenges that loom ahead, the crucial question to be decided is the quality of leadership that will best serve the CGIAR System. The Consultative Council agreed on the importance of World Bank leadership and proposed that the CGIAR Chairman should continue to be a Bank Vice President.

The Group welcomed the World Bank's interest in remaining involved in providing the CGIAR with System leadership. The Group agreed that in order to be effective, the CGIAR Chairman must draw on all resources of the System and receive support from all its components. To receive such support and collaboration, the Chairman's personal qualities must include acknowledged stature within and outside the CGIAR System, confidence of the Bank's leadership, respect within the global agricultural research system, and effective linkages with the political leadership of CGIAR Members and potential Members.

There was consensus that the CGIAR Chairman should continue to be a Bank Vice President appointed by the World Bank President in consultation with the CGIAR. There was support for the Consultative Council's proposal that the CGIAR should discuss with the Bank President the desirability of the Chairman devoting at least 50 percent of his working time and effort to the CGIAR.

Mr. Serageldin reported to the Group that the Bank could propose the appointment of a person of recognized standing as full-time Vice Chairman—not a CEO—and a Bank Vice President as Chairman, but under this scenario, the Chairman would not spend 50 percent of his or her time on the CGIAR. The Group noted that any specific decisions beyond November 1999 would depend on developments concerning the current Chair.

*Decision: The Group welcomed the continued commitment of the World Bank to support the CGIAR and agreed to await further consultation with the Bank in November 1999.*

### ***Role of Cosponsors***

The System Review urged the CGIAR to re-assess the role of the CGIAR's cosponsors—FAO, United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP), and the World Bank. The Consultative Council proposed that the role and status of the cosponsors remain unchanged and noted the need for greater transparency in their work as cosponsors, including greater consultation with Members on System appointments.

At MTM99, the Group discussed the System Review recommendations on cosponsors. FAO, UNDP, and the World Bank were the original cosponsors of the CGIAR System because they jointly sponsored its creation and that status cannot be abolished. UNEP joined as a cosponsor on the invitation of the CGIAR in 1994. While the functions performed by the cosponsors could be assigned to others, there was no support within the System for such a change.

To assure greater transparency in the work of the cosponsors and ensure systematic consultations with Members as the cosponsors conduct business, the Group emphasized the benefits of wider consultation between the cosponsors and Members.

*Decision: The Group endorsed the Consultative Council proposal that the role and status of the cosponsors should remain unchanged. Searches for major System posts should be planned so as to enable wide consultation and endorsement of the nominee at a CGIAR meeting. The current TAC Chair search process should follow procedures approved earlier for this search.*

### ***Regional Representation***

The System Review recommended that the practice of appointing regional representatives be discontinued. The Consultative Council also proposed that the system of regional representation be phased out, in consultation with FAO.

At MTM99, the Group discussed the system of regional representation at the CGIAR. Regional representatives have contributed richly to the Group's discussions over the years, bringing an invaluable perspective to CGIAR deliberations and helping ensure balance in CGIAR decisionmaking. In the early days of the CGIAR, developing countries had a presence through the electoral process that brought two Members from each region and was organized through FAO regional conferences. Since then, CGIAR membership has grown to include 20 developing countries and developing countries are represented on TAC, IAEG, and all CGIAR committees, and other CGIAR bodies. In addition, the systematic, continuing presence of regional and sub-regional organizations has been strengthened.

*Decision: The Group endorsed the Consultative Council proposal that the system of regional representation at the CGIAR should be phased out and agreed to ask FAO to act accordingly. The FAO cosponsor representative will consult with FAO governing bodies regarding implementation.*

### ***CGIAR Decisionmaking Process***

The System Review recommended a number of changes in the broad area of governance. The Consultative Council proposed that the informal style of decisionmaking by consensus be maintained, and declined the recommendation that the CGIAR be reconstituted as a legal entity.

At MTM99, the Group commended the informality of the CGIAR and discussed how to improve the efficiency and effectiveness of decisionmaking without letting go of the fundamental

principles on which CGIAR's governance is based. The Group re-emphasized what had been strongly confirmed at ICW98—that decisionmaking is the Group's prerogative and it cannot be abrogated by any other body. Thus the CGIAR will not be incorporated into a legal entity nor will a central executive committee make decisions on behalf of the Group.

*Decision: The Group endorsed the Consultative Council's proposal to maintain the informal style of decisionmaking by consensus and rejected the System Review's recommendation to have the CGIAR reconstituted as a legal entity.*

### **CGIAR Decisionmaking Structure**

The System Review recommended far-reaching proposals for the creation of a new decisionmaking structure. The Consultative Council proposed that a body akin to it, chaired by the CGIAR Chairman, be established as a permanent feature of the CGIAR decisionmaking structure. The proposed Council would:

- ◆ Reflect the membership of the entire System, with provisions for the principle of self-selection and for periodic rotation of membership;
- ◆ Engage in consultations and facilitation, not in decisionmaking;
- ◆ Craft propositions for discussions and decision by the Group;
- ◆ Sharpen the functioning of CGIAR committees; and
- ◆ Meet when required.

The Council asked the Chairman to propose to the Group the Council's composition and terms of reference.

At MTM99, the Group held thoughtful and candid deliberations on the proposal for the Consultative Council as a mechanism to prepare materials for decisions by the Group. There was broad recognition of the value of the Consultative Council at Brussels, and the useful role played by the Consultative Council in formulating issues for consideration by the Group at MTM99. It was noted that this function could not be easily performed by other CGIAR committees or units; and that the Consultative Council was structured like the *ad hoc* stakeholder consultations called by the Chairman in the past.

The Chairman proposed the Council's terms of reference and composition, stressing that the Council's role is to engage in consultation and facilitation, and that all decisionmaking would remain with the Group in the time-honored fashion. The Group discussed in detail the many advantages of a Consultative Council, including greater efficiency, continuity during the transition of senior leadership, involvement of CDC and CBC, and modulation of advice from committees. The Consultative Council also reflects the System Review recommendation for more active participation by the Center Directors and Center Board Chairs in the discussions of System level issues.

Several Members raised specific questions about the potential of the Council to become involved in decisionmaking and evolve into an alternative to MTM. There was also concern about the possibility of important CGIAR business being handled by a small group. If the Council eventually replaced the Mid-Term Meeting, new Members could have difficulty in becoming familiar with the System and gaining confidence in it.

Following extensive discussion, the Group agreed that a body akin to the current Consultative Council should be constituted by the Chairman, as and when required, to discuss specific issues and prepare proposals for decisionmaking by the Group.

*Decisions: The Group recognized that the Consultative Council had operated very well and empowered the Chairman to call a Council into session as and when required, on the clear understanding that the Council will be reduced in size. The convening of the Council is not going to replace the mid-term meeting. The Council should prepare, but not take decisions for the CGIAR.*

### ***CGIAR Meetings***

The System Review recommended that the CGIAR examine the need for two annual meetings. During discussion at ICW98, there was broad-based support for continuation of both the MTM and ICW, and the need for further discussion of the nature and agenda of the meetings. The Consultative Council proposed that MTM be retained for the next two years, and that its future and format be then re-examined.

At MTM99, the Group discussed the importance of mid-term meetings as forums for decisionmaking on CGIAR business as well as opportunities for informal networking and consultation. The value of immersing CGIAR Members attending mid-term meetings in another country's CGIAR experience was also emphasized.

*Decision: The Group agreed to retain the mid-term meetings.*

### ***Human Resources Services***

The System Review recommended that the CGIAR examine the need for centrally supporting certain staff recruitment services. The Consultative Council proposed that the System should commit itself to seeking the best talent for all openings, and urged that the search for suitable talent be widened and deepened.

At MTM99, the Group acknowledged that there are substantial potential benefits to science in modernizing the CGIAR's management of human resources. The Group discussed the need to strengthen diversity and ensure gender balance within the CGIAR, and to reach out to the new generation of younger scientists. The Group emphasized that diversification is possible without compromising quality or standards.

*Decision: The Group endorsed the Consultative Council proposal that the System should commit itself to seeking the best talent for all openings and that the search for suitable talent be widened and deepened to ensure diversity (particularly in terms of gender and nationality) and infusion of new generation scientists.*

### ***Organization of TAC***

The System Review recommended that the CGIAR streamline its committee structure and that TAC's strategic capacity be strengthened while maintaining its scientific independence. The Consultative Council reaffirmed the need for TAC to consist of scientists of the highest caliber, representing clusters of skills and geographic balance. TAC should have between 10 and 14 members—with 12 members the target—including the chair of the standing panel on impact assessment and evaluation. The need to reach out widely for the best talent, and to ensure peak effectiveness in TAC's functioning, was underscored.

AT MTM99, at the Council's request, TAC Chair Don Winkelmann presented a proposal on TAC's future composition, role, and working arrangements. He recommended that TAC's existing functions be reorganized into three principle areas, that its membership be set between 10 and 14,

that the Group endorse the role of external experts on study panels, and that the importance of hiring such consultants in support of TAC's work be acknowledged.

The Group reiterated the importance of an independent TAC and received TAC's recommendations. There was discussion about whether reorganizing the existing functions would improve TAC's strategic capacity. Several Members expressed concern that the proposed new terms of reference were not as clear as the existing ones. The Group agreed on the need to further strengthen the working of TAC but decided not to modify TAC's present terms-of-reference.

*Decision: The Group endorsed TAC's proposals on its composition and working arrangements, and reaffirmed TAC's present mandate.*

### **IAEG Linkage with TAC**

The System Review recommended that the CGIAR examine the possible efficiency gains from the consolidation of committees. The Consultative Council proposed that IAEG be integrated with TAC, with its Chair as an *ex officio* member of TAC, and with the IAEG functioning as a specialized panel of TAC.

At MTM99, Roberto Lenton, on behalf of the cosponsors, presented recommendations on the integration of TAC and IAEG as agreed with the chairs of these committees. The proposed new IAEG linkage with TAC would be based on the following arrangements:

- ◆ All System-level evaluation responsibilities would reside with TAC, and the IAEG mandate would be transferred to TAC. This will help ensure that a single group would coordinate all types of evaluation conducted at the System level, instead of having impact assessment coordinated by one and other evaluations by another.
- ◆ The cosponsors would appoint a small external standing panel to work as an "expert" panel of TAC on impact assessment and evaluation, with the panel chair serving as a TAC member. This will help reinforce the linkages between evaluation and priority setting.
- ◆ All System-level external evaluations commissioned on behalf of the CGIAR would be organized through TAC, with the panel serving as the principal instrument of TAC. TAC would provide guidance to the panel and give final approval to terms of reference and panel composition of external reviews, as well as assessments of scientific quality. Thus TAC would be more engaged with analysis and less with process management.
- ◆ There would be one secretariat supporting TAC and the standing panel on impact evaluation and assessment. The secretariat would have a staff dedicated to impact assessment and evaluation, under the guidance of the chair of the standing panel.
- ◆ There would be one TAC budget, with a line item for impact assessment and evaluation. The cosponsors would monitor the spending on impact assessment and evaluation as part of their oversight of TAC.

The Group discussed the need to ensure the generation and timely flow of information reflecting the CGIAR's impact; to simplify CGIAR governance by reducing the number of committees and units servicing them; and to increase efficiency and reduce costs. The advantages of the proposed arrangement for integrating TAC and IAEG were explained, and it was noted that the operational consequences would need to be worked out by the cosponsors, and in particular the host agencies, UNDP and FAO.

The Group agreed that the integration will strengthen TAC while preserving the independence of the evaluation function. A single group would coordinate all types of System level evaluation and the linkages between evaluation and poverty will be reinforced. Also, because impact assessments and the design of the evaluation processes for external reviews are supported by the same disciplines and professional practice, the integration will lead to increased efficiencies. It was noted that the IAEG linkage with TAC will not pre-judge the future development of TAC or IAEG.

*Decision: The Group endorsed the cosponsors recommendation on the integration of TAC and IAEG.*

### ***Evaluation Processes***

The System Review recommended that the CGIAR should streamline the evaluation processes. The Consultative Council agreed and called for more emphasis on impact assessment and reduced paperwork. The Council proposed that TAC should take the lead in examining this issue.

TAC Chair Don Winkelmann submitted an action plan to streamline evaluation processes. With IAEG and the CGIAR Secretariat, TAC would assess likely changes in the external environment affecting the CGIAR and assess the potential synergies among reviews to make the process more efficient. TAC will organize an inter-Center workshop before ICW 2000 to discuss these issues, and explore on a trial basis the possibility of incorporating special project reviews into the overall review process. The Group agreed that TAC should take the lead in examining the context and added value of all forms of evaluation.

At MTM99, the Group discussed the CGIAR's long tradition of demonstrating accountability to Members and stakeholders through external reviews of Centers, systemwide programs, and the System as a whole. The high quality, timely, independent examination of Center science, management, and governance is indispensable to a healthy CGIAR. As well, the importance of fostering an evaluation culture within the CGIAR, and in particular the Centers, was reaffirmed. However, Centers are concerned about the financial and time costs of evaluations.

The Group agreed that the challenge is to make these more efficient by producing more useful information for the same or lower cost. There was discussion of the advantages of a streamlined process, which could reduce direct and indirect costs. Given the complexity of Center work and its geographic scope, several Members noted that it is unlikely that significant reductions in the time required for reviews could be achieved without significant reductions in the scope of the evaluations.

*Decision: The Group endorsed the TAC proposal on streamlining evaluation processes and asked TAC and the CGIAR Secretariat to implement the proposals and inform the Group of progress.*

### ***Genetic Resources Policy Committee***

Following up the System Review recommendation to streamline committees, the Consultative Council recommended the need to redefine the composition and activities of the GRPC. The Council proposed that the GRPC should continue to function as a policy resource, generally reporting directly to the Group, but reporting through TAC on the financial aspects of its recommendations.

At the Council's request, Geoffrey Hawtin presented to the Group the GRPC proposal on its future composition and terms of reference. The GRPC will report to, and when appropriate represent, the CGIAR System on policy issues relating to genetic resources. In particular, the GRPC will:

- ◆ Monitor and analyze policy developments concerning genetic resources, focusing on political, legal, and ethical issues, at the national level and in relevant international fora, and recommend appropriate policy positions and action to the CGIAR;
- ◆ Monitor and analyze policy, legal, and ethical developments within the CGIAR relating to genetic resources and recommend action as necessary;
- ◆ Monitor implementation of the agreements that placed the CGIAR germplasm collections within the International Network of Ex Situ Collections, under the auspices of FAO. Where necessary, the committee will also assist in the interpretation of the agreements and propose any necessary changes; and
- ◆ Keep developments in intellectual property protection under review and advise the CGIAR on the further modification and implementation of its IPR guiding principles and related policies.

The Group discussed the proposal that GRPC members be nominated by their various constituencies but serve in a personal capacity. The committee's composition and terms of reference were proposed by the chair and other members of GRPC. The Group discussed the need to redefine the composition and activities of the GRPC in light of the rapid and profound changes in the biological sciences, and the need to position the CGIAR for the future.

The importance of continuity was emphasized, as was the need to provide information and policy options in international fora. The Group agreed with the Council's proposal that the committee's composition and terms of reference be reviewed jointly by the Director General of IPGRI and the chair and members of GRPC. The Group approved the proposal that the Committee consult with appropriate CGIAR Committees and stakeholder groups as needed, and report through TAC on any financial aspects of its recommendations.

*Decisions: The Group agreed with the Consultative Council proposal that GRPC should continue to function as a policy resource, generally reporting directly to the Group, but reporting through TAC on the financial aspects of its recommendations. The Group also endorsed the GRPC proposal on its terms of reference and future composition, with the proviso that it should include individuals representing Members. It agreed that GRPC should be mandated to represent the CGIAR in international fora, but not commit the CGIAR on policy positions. It also asked the CGIAR Chair to invite stakeholders to nominate members and to consult with them on committee membership.*

### **Global Forum**

The System Review recommended that GFAR-CGIAR partnerships be strengthened. The Council reaffirmed the importance of GFAR and proposed that the CGIAR should continue to provide GFAR with non-financial support.

At MTM99, Chair R. S. Paroda reported on GFAR's progress with the CGIAR's support and collaboration, in developing partnerships throughout the global agricultural system. GFAR has developed a strategic agenda to promote broader dialogue with civil society, as envisioned by the CGIAR in the Lucerne Declaration. The next Global Forum will be an important step.

The Group agreed that CGIAR-GFAR collaborations should be strengthened and that through GFAR, CGIAR partnerships could be further developed and expanded. The CGIAR should act in concert with GFAR to mobilize frontier science and technology to combat hunger and poverty. The Group acknowledged the progress of GFAR and the importance of the year 2000 Global Forum in Dresden. The CGIAR-GFAR relationship should be reviewed by the CGIAR after the Global Forum.

*Decision: The Group reaffirmed the importance of Global Forum on Agricultural Research (GFAR) and agreed that the CGIAR should continue to support GFAR.*

## FINANCE

Initiatives and innovations arising from the System Review will require sustained financial support. The System Review emphasized a number of goals. These included:

- ◆ Working to increase Official Development Assistance (ODA) for the CGIAR;
- ◆ Leveraging the CGIAR's small contribution to global research efforts;
- ◆ Ensuring a suitable North-South balance in funding of and influence on the research agenda; and
- ◆ Financing issues: predictability and stability of funding, rational resource allocations, restricted versus unrestricted funding, and disbursement practices of donor.

The thrust of the System Review's recommendations were supported by the Finance Committee and endorsed at ICW98, as well as, subsequently, by the CBC and CDC. The Finance Committee submitted the recommendations to the Consultative Council as proposals for the future financing of the System.

### *Long Term Financing Strategy*

Following up on the System Review recommendations regarding future financing of the CGIAR System, the Finance Committee identified four clusters of issues and suggested that the response of the CGIAR to these issues would help shape an overall financial strategy to reverse the decline in ODA for agricultural research. These issues are:

- ◆ Stable, possibly increasing, resource needs;
- ◆ A multi-faceted, multi-source resource mobilization strategy for tapping both traditional as well as new funding sources (both from the public and private sectors, including corporate philanthropy);
- ◆ Effective financial management, at both the System and Center levels, for supporting the agreed research agenda, including strategic System-level initiatives; and
- ◆ Action to cope with the volatility of the external financial environment.

The Consultative Council endorsed the Finance Committee's plan of work in this area, which includes developing a finance strategy, proposing a structure for implementing the strategy, and proposing arrangements for managing public awareness activities and programs relating to the financing strategy.

At MTM99, the Group noted that CGIAR finances are currently stable, but nothing can or should be taken for granted. The CGIAR must also overcome recurring problems caused by restricted funds, unfinanced overheads, uneven reserves, delays in disbursement, and the fact that some systemwide initiatives approved by the Group remain unfunded.

Finance Committee Chair Alex McCalla reported on progress in developing a long-term financing strategy for tapping both traditional and new funding sources, both from the public and private sectors, including corporate philanthropy, and a mechanism for public awareness and constituency building in support of CGIAR fund raising. A small working Group—Members, including the Finance Committee, Centers, Public Awareness and Resource Mobilization Committee

(PARC), external experts—chaired by the Finance Committee Chair is overseeing development of the strategy. A final product is aimed for discussion at ICW99.

*Decision: The Group endorsed the Finance Committee's effort to develop a long term financing strategy and identify structures for fund raising, constituency building, and public awareness. The Finance Committee will present elements of a financing strategy at ICW99.*

### ***Financing Guidelines***

In the context of the System Review's emphasis on the CGIAR's funding stability, the Finance Committee proposed adoption of guidelines for Members to improve the predictability and stability of the flow of funds to the Centers. These include multi-year funding commitments, expansion of unrestricted funding to Centers, timely disbursement of funds, and coverage of indirect costs in project funding. The Consultative Council endorsed the guidelines proposed by the Finance Committee.

At MTM99, the Group emphasized that funding stability and predictability are essential for research, and that the modalities of funding should be improved in the CGIAR. Several Members noted continuing uncertainty of ODA and the fact that worldwide, some 10 percent of ODA is going to crisis situations, including the care and feeding of refugees. Several Members urged that the CGIAR be more aggressive in raising awareness of global hunger problems and the CGIAR's role in providing solutions.

*Decision: The Group endorsed the guidelines prepared by the Finance Committee.*

### ***Structures for Fund Raising, Constituency Building, and Public Awareness***

The System Review urged the CGIAR System to develop a carefully formulated fund raising and public awareness strategy. Finance Committee Chairman Alex McCalla was invited to lead the effort to design a fund raising strategy for the System and develop proposals for a mechanism to plan and coordinate all public awareness activities.

In response to the Council's request, the Finance Committee Chair made a preliminary report at MTM99 on a long-term funding strategy, a structure for implementing the strategy and for managing the public awareness component of fund raising.

The Group discussed the importance of an integrated long-term fund raising and public awareness strategy. The Group agreed with the Consultative Council that the strategy include all aspects of philanthropy and take into account the overlap between public awareness and fund raising strategies.

*Decision: The Group endorsed the Finance Committee's plan of work and asked the Committee to make a recommendation to the Group at ICW99.*

### ***Funding and Management of Systemwide Programs***

The System Review sought to improve various aspects—including funding, partnership requirements, and governance and management—of systemwide, especially ecoregional, programs. Working group discussions at ICW98 endorsed the need for giving high priority to ecoregional research conducted in collaboration with NARS and to improving inter-Center collaboration on systemwide programs in general. The Consultative Council noted that the issue had to be approached from both a financial and management perspective. The Council proposed that the responsibilities of

all concerned, the design of programs, and their implementation should be re-examined by CBC in association with TAC and Finance Committee in an effort to resolve outstanding problems.

In response to the Council's request, Walter Falcon, CBC Chair, presented the initial findings of a review of systemwide activities from both a financial and management perspective to the Group at MTM99. The CBC—in association with TAC and Finance Committee—is re-examining roles and responsibilities, program design, and program implementation. To this end, the CBC recommended that systemwide initiatives be given a central place on Center's agendas, that expectations remain reasonable, that specific Centers and Boards be assigned lead roles, and that clearer goals, methods and a decision structure be established. The CBC also noted that systemwide initiatives are more successful when only 3 or 4 Centers and several NARS are involved, rather than all 16 Centers and 20 NARS.

The Group discussed the scope of systemwide activities and the need to make them a central component of a Center's agenda. The incentives structure at the System level and transaction costs at the Center level are problematic for systemwide projects. There was general agreement that neglecting these problems was not in the CGIAR's long term interests. Key to improving systemwide activities is that the CGIAR function as a System, not a set of 16 competitive Centers.

*Decision: The Group welcomed the CBC progress report on the funding and management of systemwide programs and asked the task force led by the CBC Chair to make specific recommendations to the Group at ICW99. The task force should include CGIAR Members and those engaged in these programs.*

## *1998 Financial Outcome and 1999 Progress Report*

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### *Overview*

The Group reviewed the system's financial outcome for 1998, the progress toward meeting the approved financing plan for 1999, and the funding requirements of the 1999 research agenda.

### *1998 Financial Outcome and 1999 Progress*

Finance Committee Chair Alex McCalla reported to the Group on the 1998 financial outcome and 1999 prospects, which show the overall stability of CGIAR funding. In 1998, funding totaled \$340 million, up from \$333 million ("agenda" and "non-agenda" funding) in 1997. As of 1998, there is a single funding figure because of the full integration of agenda and non-agenda funding.

The \$340 million outcome for 1998 compares to the \$345 million financing plan set at ICW97. This is in line with the revised financing estimate for \$335-340 million set at MTM98. The majority of Centers received funding within a 10 percent range of their approved funding. Only three Centers were outside this range: IFPRI, (+)\$1.9 million; CIMMYT, (-)\$3.6 million; and ILRI, (-)\$3.5 million.

Disbursement of funds continued to be slow in 1998. The slippage in disbursements caused financial problems for Centers. Centers were forced to draw on invested resources to meet their cash requirement, reducing Center income by an estimated \$5 million. The Finance Committee again urged Members to make every effort to accelerate disbursements.

There was continued stability in terms of absolute levels of unrestricted (and very lightly restricted) funding. Financial data show the following trends:

- ◆ Restricted funding is rising as a proportion of the agenda—29 percent in 1998 compared to 23 percent in 1994-95;
- ◆ The top twelve donors contributed 76 percent of funding as in 1997;
- ◆ Developing countries increased their contributions in absolute and percentage terms; and
- ◆ Contributions from non-CGIAR donors increased by \$3.7 million to \$11.9 million, primarily from private foundations.

*Decision: The Group adopted a report from the Finance Committee on the 1998 financial outcome. In 1998, funding totaled \$340 million, up from \$333 million ("agenda" and "non-agenda" funding) in 1997. As of 1998, there is a single funding figure because of the full integration of agenda and non-agenda funding.*

### *1999 Progress Report*

The outlook for 1999 continues to be stable. The 1999 funding forecast by Centers totals \$355 million, higher than the approved financing plan of \$340 million. The financing plan, however, should be maintained at the ICW98 approved level of \$340 million due to funding risks arising from weak European currencies and lower than expected utilization of restricted funding.

Regarding the allocation of 1999 World Bank funds, the Committee had made the following recommendations at ICW98:

- ◆ \$34.6 million allocated to Centers on a matching basis in the ratio of 11.5 percent of funds from Members other than the World Bank;
- ◆ \$0.4 million to ICRAF for Alternatives to Slash and Burn co-ordination unit;
- ◆ \$0.5 million to IFPRI/IWMI to support a Global Water Forum project;
- ◆ \$1 million for partnership activities;
- ◆ \$1.5 million set aside for strategic agenda initiatives;
- ◆ \$3.45 million for special allocations to ICLARM (\$2.5 million) and WARDA (\$0.95 million);
- ◆ \$3.05 million for systemwide programs: ILRI (\$1.2 million), IWMI (\$1 million), IPGRI (\$0.6 million), and CIMMYT (\$0.25 million); and
- ◆ \$0.5 million for the CGIAR reserve.

*Decision: The Group received the Finance Committee report that the outlook for 1999 continued to be stable. The financing plan should be maintained at the ICW98 approved level of \$340 million.*

## *CGIAR Research Agenda, 2000 Funding Requirements, and 2000–2002 Medium Term Plan*

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The Centers updated their medium-term plans (MTPs) for 2000–2002 in the context of the MTPs reviewed last year and their likely outcomes, as well as the endorsement of the integrated gene management and integrated natural resource management strategy recommended by the System Review. TAC confirmed that the plans are broadly in line with those approved last year and recommended that the plans be extended to 2002. Following CGIAR endorsement at MTM99, the Centers will prepare financing plans for review by TAC in September 1999.

After reviewing individual Center proposals, TAC noted their implications for system priorities. Three Center proposals—CIAT, CIP, IFPRI—are 10 percent above the share endorsed by the Group. Seven Center proposals—CIFOR, ICARDA, ICLARM, ICRISAT, IWMI, ILRI, ISNAR—are more than 6 percent below the endorsed level. The remaining 6 Centers are near the endorsed level in percentage terms.

TAC cautioned about the continuing and increasing shortfall in allocations to germplasm improvement compared to what was endorsed by the Group. By 2002, the widening divergence amounts to more than \$10 million per year. Offsetting this imbalance is the larger than endorsed percentage for strengthening NARS. Fish and forestry continue slightly below endorsed levels, and investments in livestock research remain well below the endorsed level. At the same time, the planned investment in crop research is well above the endorsed level. Investment in water research is moving in the right direction and is expected to increase.

The Finance Committee recommended a 2000 financial planning target of \$340-345 million. The agenda reflects activities slated for implementation during the third year of the MTP period 1998-2000 approved at MTM98 and now being extended to 2000–2002. The Finance Committee also advised the Centers that the World Bank funding policy would remain 11 percent of the matching ratio.

It was noted that innovations and initiatives arising from the System Review will require sustained financial support. CGIAR finances are currently stable, but nothing can or should be taken for granted. Finance Chair Alex McCalla reported on progress in developing a long-term financing strategy for tapping both traditional and new funding sources, both from the public and private sectors, including corporate philanthropy, and a mechanism for public awareness and constituency building, in support of CGIAR fund raising. A small working group—Members, including the Finance Committee Chair, Centers, PARC, external experts—chaired by the Finance Committee Chair is overseeing development of the strategy. A final product is aimed for discussion at ICW99.

*Decision: The Group approved the substance of the 2000 Research Agenda recommended by TAC and the Finance Committee proposal that financial planning for 2000 be undertaken in the context of a \$340-345 million funding target.*

## *External Program and Management Reviews*

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The CGIAR considered external reviews of two Centers—ICLARM and ILRI. Following discussions in parallel sessions, the *ad hoc* evaluation committees presented reports to the Plenary where the Group discussed and endorsed the recommendations. Mr. Serageldin commended the review panels and *ad hoc* committees for their excellent reports.

### **ICLARM**

At a parallel session chaired by Emmy Simmons, an *ad hoc* committee of interested CGIAR Members and other MTM99 participants discussed the report of the second External Program and Management Review of ICLARM as well as the Center's response and the TAC commentary. The discussion of the review report followed an introduction by Hans Gregersen, Review Panel Chair, the Center response by Board Chair Kurt Peters and Director General Merryl Williams, and the TAC commentary by TAC Member Elias Fereres.

#### *Highlights of the Committee Discussion*

The *ad hoc* committee:

- ◆ Concurred with the overall conclusion of the Review Panel and TAC that the review resulted in a very positive assessment of ICLARM and that the Center has made remarkable progress in all aspects of its work since it was admitted to the CGIAR in 1992 and in particular since the mid-term review of 1995;
- ◆ Raised questions about ICLARM's strategy in Africa, the innovative nature of its partnership, the importance of socio-economic aspects in fisheries research, and the crucial role of fisheries for food security. After clarification by the Director General that ICLARM's African strategy is composed of several thrusts, there was consensus that the Center was proceeding on the right track;
- ◆ Expressed satisfaction that recent evidence from FAO shows that the fisheries sector in developing countries is even more important than previously considered;
- ◆ Commented on ICLARM's contributions to biodiversity research, potential benefits from genetic research, links to the private sector and a broad range of other partners; and
- ◆ Strongly supported the proposed move of ICLARM's headquarters to Malaysia and the Center's plans to maintain a research program in the Philippines and close collaboration with NARS.

#### *Conclusions and Recommendations*

The *ad hoc* committee:

- ◆ Strongly endorsed the Panel's recommendations and positive assessment of ICLARM, thanking the Panel for an excellent report and ICLARM for its excellent preparations for the review;
- ◆ Praised ICLARM's progress since the mid-term review;
- ◆ Encouraged continued support of ICLARM's work;

- ◆ Endorsed the proposed move to Malaysia and encouraged Members to provide the necessary support and assistance to minimize disruptions to the Center's research programs;
- ◆ Emphasized the importance of fisheries research for food security and the environment; and
- ◆ Expressed confidence in ICLARM's capacity to meet the challenges of international fisheries research.

The Group endorsed the *ad hoc* committee's conclusions and recommendations.

## **ILRI**

At a parallel session chaired by Bongiwe Njobe-Mbuli, an *ad hoc* committee of interested CGIAR Members and other participants discussed the report of the first External Program and Management Review of ILRI as well as the Center's response and the TAC commentary. The discussion of the review report was based on a presentation of the conclusions and recommendations by Samuel Jutzi, Review Panel Chair, the Center's response by Board Chair Neville Clark and Director General Hank Fitzhugh, and the TAC commentary by TAC Chair Donald Winkelmann.

### ***Highlights of the Committee Discussion***

The *ad hoc* committee:

- ◆ Acknowledged the Review Panel's constructively critical, clear, and penetrating assessment of ILRI's accomplishments and progress since its founding in 1995, and commended ILRI's Board and Management for successfully integrating the former ILCA and ILRAD into a unified Center well positioned to contribute significantly to the CGIAR's global research agenda;
- ◆ Praised the initiation of a strategic planning process to redefine ILRI's long term vision and strategy;
- ◆ Encouraged the Center to focus its research programs on areas of high comparative advantage and those which benefit marginal farmers; the research focus should be determined in the context of current trends in livestock research and development, utilize cutting edge knowledge of natural resources management research, and more clearly address the goals of food security and poverty alleviation;
- ◆ Noted the Panel's concerns and recommendations about institutional governance, leaderships, and restructuring, and expressed satisfaction that the Center's Board and Management are responding promptly; and
- ◆ Urged ILRI to address problems regarding its role as convener of the System-wide Livestock Program and to seek full recovery of overhead costs for the Program and other restricted-funding projects.

***Conclusions and Recommendations:***

The *ad hoc* committee:

- ◆ Thanked the Review Panel for an outstanding report that is comprehensive, analytical, constructively critical, and strategic;
- ◆ Endorsed most of the Panel's recommendations and TAC comments;
- ◆ Commended the preliminary response by the Center Board and Management to the review report, and the follow up actions being taken, particularly regarding strategic planning for the next 10 years;
- ◆ Suggested that the ILRI management communicate with CGIAR Members and others engaged in leading livestock research to arrive at more specific answers on strategic and program questions related to its research focus;
- ◆ Recommended that ILRI's Board and Management prepare a brief substantive report for ICW99 on progress in implementing the recommendations of the Review Panel and *ad hoc* committee;
- ◆ Encouraged CGIAR Members to strongly support ILRI's research work; and
- ◆ Suggested that the CGIAR system draw lessons from ILRI's experience in consolidating two Centers into one and Board-Management relations, including the use of "joint board-management *ad hoc* committees" on strategic and high priority issues.

*Decision: The Group accepted the External Program and Management Review reports for ICLARM and ILRI, and endorsed the ad hoc committee's conclusions and recommendations.*

## *CGIAR Logframe and Knowledge Management*

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### *CGIAR Logframe*

TAC Chair Don Winkelmann presented a progress report on implementation of the CGIAR logical framework (logframe), which the Group endorsed at ICW98. The changeover to the logframe approach is anticipated by 2001. It was noted that continuing evolution of the logframe is important, especially in light of the integration of natural resource management and germplasm improvement research.

TAC and IAEG met with CIAT, IITA, IPGRI, and IRRI in March to discuss the extent to which the systemwide logframe accommodates Center logframes. The Centers commented on the logframe's advantages for planning, its central link to various administrative and management functions, and the added transparency for decisionmaking. On the other hand, introduction and installation of the logframe was a challenge requiring energy, commitment and perseverance. Overall, the Centers were optimistic about the logframe's utility in decisionmaking. Based on the discussion, TAC concluded that the logframe is a worthwhile tool for management, transparency, and accountability. However installation is a serious task and maintenance requires investment, which could necessitate support from Members.

Next steps include the introduction of a vocabulary and concepts on financial reporting, improving the usefulness of project information, and organizing workshops on the implications for record-keeping and budgeting. The TAC-IAEG meeting this fall will focus on a strategy to facilitate introduction of the logframe into Centers not currently using it.

The Group discussed the best uses of the logframe and the value emerging from the process of developing the logframe itself. TAC emphasized that the logframe's objective is to support decisionmaking and accountability, not to replace priority setting. Use of the logframe will lead to greater transparency, easier and more effective monitoring, and improved decisionmaking.

### *World Agricultural Information Center of FAO (WAICENT)*

Following an introduction by Henri Carsalade, Assistant Director General, Sustainable Development Department, FAO, F. Perez-Trejo and Anton Mangstl of the World Agricultural Information Center (WAICENT) reported to the Group on FAO's new strategic program for the management and dissemination of FAO information. FAO established WAICENT in direct relation to the World Food Summit Plan of Action (FAO, Rome, November 1996), which highlighted information as one of the priority areas in achieving food security.

WAICENT provides a platform to enable Member countries to access agricultural information that is essential for achieving food security and sustainable rural development. Through WAICENT information services, FAO is able to organize and disseminate its wealth of information resources on agriculture, fisheries, and forestry, and to provide vital data for the analysis, review, and improvement of agricultural policies on food security.

WAICENT is especially important because the developing world has traditionally had poor access to the world's store of scientific knowledge. Scientific libraries are expensive to establish and maintain, and long distances and poor transportation systems in much of the developing world have made access to them problematic. WAICENT recognizes that the communications revolution has the

potential to eliminate this lack of access and make the world's scientific and technical information available almost everywhere. WAICENT provides electronic search capabilities that allow users almost instantaneous access.

The WAICENT web site (<http://www.fao.org/waicent/>) offers a cost-effective opportunity to disseminate information around the world in multiple languages. For Member countries where Internet is not yet available, a portable set of WAICENT CD-ROMs has been developed.

## *CGIAR Partnership Activities*

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The Group received reports on partnership efforts from the Global Forum Steering Committee, NGO Committee, and Private Sector Committee.

### *Global Forum Steering Committee*

R. S. Paroda, Chair of the Global Forum Steering Committee (GFSC), presented a report on the status of institutional arrangements, GFAR activities at MTM99, the 1999-2000 work program, and the GFAR-2000 meeting.

**Institutional Arrangements.** With the appointment of Fernando Chaparro as Executive Secretary of the NARS Secretariat in October, both secretariats became fully operational. The first European Forum for Agricultural Research for Development has been formed by European advanced research institutes, and the private sector and farmers organizations, among others, are also increasing consultations with their constituencies. Three CGIAR Centers—ISNAR, IPGRI, and IFPRI—have been actively involved in GFAR activities and other Centers are encouraged to join them.

**GFAR Activities at MTM99.** The NARS Steering Committee, GFAR Steering Committee, and GFAR Support Group held meetings at Beijing. Support Group Members—including the European Union, France, Germany, IDRC, ISNAR, Germany, the Netherlands, and USAID—made strong statements of support for GFAR. In addition, the World Bank—through the CGIAR Finance Committee—agreed to renew its contribution as well as contribute to the GFAR-2000 meeting.

*1999-2000 GFAR Work Program.* The main objectives are to:

- ◆ Develop a global shared vision on agricultural research for development: A draft vision statement is being prepared and will be presented for endorsement at GFAR-2000. Preparations are also underway for a workshop on "Intellectual Property Rights and Agricultural Research for Development in NARS."
- ◆ Strengthen NARS and their regional/subregional fora. Regional and subregional fora are actively participating in preparations for GFAR 2000.
- ◆ Promote innovative research partnerships. The most successful partnerships between different GFAR stakeholders have been documented and new global and regional networks will be ready to operate by GFAR-2000.
- ◆ Develop a global knowledge system for Agricultural Research for Development. A consultation on information and communication technologies was held in March with the support of FAO and the World Bank.

**GFAR-2000.** The title of the meeting will be "Strengthening Partnerships in Agricultural Research for Development in the context of Globalization." The meeting will be hosted by Germany. A German representative is a Member of the GFAR-2000 working group and has also established its own German Preparatory Committee, which is working in close collaboration with the GFAR Secretariat.

### *NGO Committee*

NGO Chair Miguel Altieri presented the report of the Committee. During MTM99, the committee met twice to discuss restructuring issues, evaluate past activities, and plan future activities.

**NGOC Restructuring Proposal.** The NGOC redefined its overall role: "to assist the CGIAR and associated international agricultural research Centers to achieve their poverty eradication, food security, and sustainable agriculture goals by channeling civil society perspectives and NGO accumulated experiences, so that small-poor farmers directly benefit from international agricultural research." The NGOC's objectives are:

- ◆ Advocate priorities, interests, and concerns of small-poor farmers and NGOs as part of the international research agenda;
- ◆ Establish effective, mutually beneficial partnerships among NGO-farmers, organizations, and agricultural research Centers to mobilize research to benefit the rural poor in less favorable environments; and
- ◆ Enhance the international agricultural research Centers' capacity in areas where NGOs have a comparative advantage such as rural development, local governance, sustainable agriculture, natural resources management, agroecology, and participatory methods.

The NGOC proposes to have 11 members, with geographical and gender balance. It also proposes that NGOC representatives serve on GFAR-SC, TAC, and the Consultative Council.

**Past Activities.** Since ICW98, NGO members have engaged in a number of activities including the workshop on Agrobiodiversity in the Andean and Amazonian regions, NRM consultations in Indonesia, the African IPM workshop, the International Conference on Sustainable Agriculture at Bellagio, and China NRM consultations.

**Future Activities:** The NGOC will publish full reports on the Indonesian, Peruvian, Bellagio, and China workshops. Committee members want to facilitate constructive dialogue with European NGOs by participating in the "Research Against Hunger" conference in Germany. The CGIAR/NGOC and IITA IPM task force is developing an English-French IPM reader highlighting environmentally sound and cost effective ways to solve pest problems for small farmers. The NGOC will provide support for training of Latin American NGOs in agroecology and sustainable agricultural development. Prior to ICW99, the NGOC will hold a workshop on methodologies to scale up sustainable agricultural projects that have proven successful at the local level.

### *Private Sector Committee*

Chair Sam Dryden presented the Private Sector Committee (PSC) report to the Group. The PSC held its tenth meeting at the AgrEvo Conference Center in Hattersheim, Germany, in March. The PSC expressed appreciation that the TAC Chair attended.

Following a presentation by AgrEvo on its experience with research partnerships, the PSC concluded that the CGIAR has a common agenda with the private sector in specific areas. The private sector is increasingly interested in developing country markets and the CGIAR should monitor private sector work on a wider range of crops. Identifying the CGIAR's assets of value to others will help define potential partnerships with the private sector.

CGIAR activities that could complement the future role of the private sector in developing countries include:

- ◆ Helping resolve biosafety concerns in developing countries;
- ◆ Promoting and using IP laws, including promoting strong IP regimes;
- ◆ Helping ensure regulatory harmonization;
- ◆ Promoting utilization of technologies by farmers when these make economic sense for the poor;
- ◆ Supporting the privatization of NARS; and
- ◆ Developing natural resource management tools to promote people-centered development.

The PSC concluded that the CGIAR should carefully examine the extent to which its current portfolio of activities will have the largest possible impact on poverty and food security in light of the likely changes in developing country markets.

Regarding its future role, composition, and working procedures, the PSC offered the following suggestions to the Group:

- ◆ The PSC should provide policy advice based on its members' reflection of private sector views and experiences; and
- ◆ The Committee's size should be reduced by one third, but it should have the facility to invite experts to theme-based meetings. Half the membership should be drawn from private sector members already active in CGIAR boards and committees; the other half should be drawn from external private sector managers with international experience and broad policy perspectives on issues related to CGIAR work.

The PSC expressed concern that Centers' IPR audits have not been completed and discussed the issues surrounding proper use of IP by the Centers.

## *Reports from CGIAR Cosponsors and Committees*

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The Group received reports and adopted the recommendations of the Cosponsors, and the Oversight, Finance, and Genetic Resources Policy Committees as well as the Center Directors Committee (CDC) and the Committee of Board Chairs (CBC).

### *Cosponsors' Report*

UNDP representative Roberto Lenton presented the report of the CGIAR's cosponsors—Food and Agriculture Organization of the United Nations, United Nations Environment Programme, and United Nations Development Programme.

The Cosponsors met in two sessions at MTM99. Highlights of the discussions and decisions follow:

- ◆ As recommended by the Consultative Council, the role and status of the Cosponsors will remain unchanged; however, the Cosponsors acknowledge the need for greater transparency in their work, especially regarding systemwide appointments. CGIAR Members will be consulted at various stages of the search and selection process for the TAC Chair, and the final recommendation will be sent to the Group for endorsement.
- ◆ The Cosponsors discussed the streamlined function proposed by TAC and the modalities of its work. The Cosponsors recommended and the Group endorsed a TAC membership of 10 to 14, exclusive of the Chair. TAC members are selected on the basis of excellence in science and capacity for strategic visioning. In recruiting new members, balance across disciplines, geographic origin, and gender is also critical.
- ◆ The Cosponsors recommended and the Group endorsed an arrangement for integrating IAEG and TAC.
- ◆ Regarding TAC membership, the Cosponsored recommended the extension of Lucia de Vaccaro's term for another two year term, 2000–2001.
- ◆ It was agreed that the Cosponsors contributions in support of TAC/IAEG will be pooled and administered by FAO.
- ◆ Meeting as the TAC Chair search committee, the cosponsors agreed on a short list of eight candidates for the position of TAC Chair. The list will be broadly circulated to stakeholders.

### *Oversight Committee*

Andrew Bennett presented the report of the Oversight Committee. The Committee discussed its future role and function, in the context of follow up to the System Review. It was noted that the Oversight Committee should be a Committee of the whole, reporting to plenary; purposeful and systematic in its interactions with other CGIAR committees and the Chair; made up of a cross section of Members that contribute funding but serve in their own right; composed of six Members drawing equally from developed and developing countries; and more active in commissioning reviews and studies on governance issues while continuing to work informally through interaction during CGIAR meetings. The Oversight Committee will continue to focus on "due diligence" and governance issues, and will also work with TAC and the Finance Committee on longer term strategic and viability issues.

Committee members noted with regret the resignations of the Directors General of ICRISAT and CIAT. The Committee will interact with members of the CDC and CBC at ICW99 regarding improved guidance about relationships between Boards and Center senior management. The Committee commended initiatives to train and assist new board members; suggested that the Secretariat review and update guidelines on spouse employment; and supported ICLARM's decision to move its headquarters to Malaysia.

Regarding membership, the Committee:

- ◆ Is in the process of identifying two new Members from developing countries who would attend the next meeting at ICW99; and
- ◆ Agreed to canvass Members for suggestions about replacements for Teresa Fogelberg and John Lewis after ICW99, and Mervat Badawi and Andrew Bennett at MTM2000.

Future priorities include these specific governance issues:

- ◆ Lessons learned from the management and conduct of the System Review;
- ◆ Center Board and management relations and working practices;
- ◆ Board composition and competencies; and
- ◆ Center/host country agreements in a rapidly changing world.

### ***Finance Committee***

Alex McCalla presented the report of the Finance Committee. (*For details on the 1998 financial results and 1999 financing plans, see pages 48-50.*) The Committee discussed progress on three important financial projects during meetings at MTM99.

*CGIAR Accounting Manual.* Price Waterhouse, Philippines, has completed its review of the CGIAR accounting manual and a final draft of the proposed revisions was sent to all Centers for review. The manual will be effective July 1, 1999, and there is an 18-month transition period for Centers to implement the new policies. Major changes include the following:

- ◆ CGIAR policies will be in full compliance with US non-profit generally accepted accounting practices; and
- ◆ The fixed asset lines in financial statements will exclude building and structures which revert to host governments should the Center cease operations. They will not be subject to an annual depreciation charge.

*Indirect Costs.* Ernst & Young, India, is conducting a review of Center practices for indirect cost accounting and computation. The indirect cost working group—ICRISAT, IWMI, and the Secretariat—reviewed Ernst & Young's preliminary observations. A draft report will be circulated to Centers for comments by August and a final report is expected for ICW99.

*Currency Management.* Dr. Philippe Jorion, Professor of Finance at the University of California-Irvine, is analyzing opportunities for reducing the impact of currency fluctuations on Centers' income. A model of CGIAR foreign currency flows will help determine whether the CGIAR should adopt an active hedging policy, although preliminary results from system level simulations suggest only marginal benefits. A final report is due for ICW99.

### ***Genetic Resources Policy Committee***

Geoffrey Hawtin reported on the activities of the Genetic Resources Policy Committee (GRPC). The GRPC met in February, immediately following a meeting on global food security and underutilized crops. The meeting was hosted by the M. S. Swaminathan Foundation and sponsored by United States Agency for International Development (USAID) and International Fund for Agricultural Development (IFAD); it drew more than 50 participants from 12 countries, including 9 CGIAR Centers.

Regarding underutilized crops, the GRPC concluded the following:

- ◆ Many Centers are already conducting research on a large number of underutilized species. This work need to be better documented and communicated within the system and to partners.
- ◆ The Centers play an important role in collaborative research on underutilized crops and in promoting awareness of the value of these crops for food and nutritional security.
- ◆ Feedback on recommendations of the consultation will be solicited from TAC, GFAR, and others.
- ◆ Centers should develop pilot projects on underutilized crops that cover the full spectrum of activities from conservation, breeding, and production to processing, marketing and consumption.
- ◆ Lack of information about the potential, characteristics, and uses of underutilized crops is a significant impediment to their greater uses. CGIAR databases, including the Systemwide Information Network on Genetic Resources, as well as databases of FAO and the International Center for Underutilized Crops, can help address this problem.
- ◆ More economic and policy research is needed on the role and potential of underutilized crops in farming and food systems.
- ◆ Creation of an inter-Center "platform" or "forum" could benefit the CGIAR's work on underutilized crops. IPGRI would be the logical Center to lead this initiative.

The GRPC also acknowledged the proposed new terms of reference and structure for the GRPC. This was subsequently endorsed by the Group. For purposes of continuity, the existing committee should continue to operate until the new committee is constituted. The presence of the CGIAR on international issues and fora is extremely important and a mechanism must be in place to respond to rapidly changing situations.

### *Committee of Board Chairs*

Walter Falcon presented the report of the CBC. The CBC met extensively at MTM99.

The CBC and CDC have issued a joint statement reaffirming support for the FAO-CGIAR agreements on genetic resources. This is an indicator of the policy orientation of the CBC, and its close working relationship with the CDC.

The CBC is concerned with strengthening the CGIAR system and systemwide programs. The CBC will report at ICW99 on the success of systemwide initiatives.

Regarding management issues, the CBC discussed Board-Senior Management relations, the selection of Board Trustees, and the issue of spouse employment. A training session for new Board members will be held in conjunction with ICW99 and other training alternatives explored. The CBC will work with the Secretariat to assure that relevant documents are distributed to individual Board members to keep them apprised.

*Center Directors Committee*

Pedro Sanchez reported on the activities of the CDC since ICW98. In keeping with the System Review recommendation, the Center Directors have become more active in system decisionmaking. Strong Center Director participation was highly evident at MTM99. The CDC has also responded to the Consultative Council's challenge to develop innovative science proposals. The reports on policy and management sciences, gender, global information systems, and capacity building came to closure at MTM99. The reports on integrated natural resource management and integrated gene management will come to closure at ICW99, with a workshop on INRM scheduled for September in Wageningen.

A shared vision with the CGIAR's African partners on the role of the CGIAR in Africa resulted from the Nairobi workshop. A second "meeting of minds" will be held in late summer to finalize the strategy, which will then be presented to TAC and to the Group at ICW99 for final approval.

PARC's paper on resource mobilization will provide valuable input to the Finance Committee's development of a long-term funding strategy. Future Harvest has made significant progress with the successful launch of the study on agriculture and peace.

The CDC also:

- ◆ Noted the joint statement with the CBC in support of the FAO-CGIAR agreements on genetic resources;
- ◆ Strongly endorsed systemwide and multi-Center activities and agreed that the unfunded portion of these activities within the agreed agenda should have priority over new multi-Center initiatives, as suggested by TAC;
- ◆ Regarding World Bank funds still available, recommended that about 1 percent (about \$3.5 million) of the aggregate budget should be kept in reserve and that the balance, including the \$4.5 million earmarked for TAC initiatives, be distributed proportionally as unrestricted funds to the Centers, thus increasing the percentage of World Bank matching funds;
- ◆ Expressed concern about the diminished emphasis on Medium-Term Plans and External Program and Management Reviews;
- ◆ Called on Members to minimize restrictions on funding;
- ◆ Supported development of a clear, systemwide policy on indirect cost recovery of restricted funds within the agreed agenda; and
- ◆ Strongly acknowledge the contributions of departing Center Directors Grant Scobie and Shawki Barghouti.

# *Reports from the Technical Advisory Committee and the Impact Assessment Evaluation Group*

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## TAC

TAC Chair Donald Winkelmann reported on TAC activities since ICW98, including TAC's involvement with the System Review Panel and the findings of the Consultative Council.

The report highlighted progress and accomplishments in TAC's three principal areas of responsibility:

**1. Assuring the quality and relevance of the Centers' science.** External program and management reviews (EPMR) of ICLARM and ILRI have been completed and ICARDA's review is underway. External reviews of IWMI and WARDA will be implemented in late 1999 and early 2000, and the reviews of CIAT, IITA, and CIP are being planned.

**2. Developing priorities and strategies, recommending resource allocations, and monitoring program implementation.** The 1997 Report on CGIAR Priorities and Strategies is being revised in light of the rapid pace of change in science, decreasing biotechnology costs, increasing private sector research investments in selected crops, shifting circumstances of National Agricultural Research Institutes (NARIs), and declining real budget of the CGIAR. An initial version of the revised paper will be presented at MTM2001.

TAC's analysis of proposals for the 2000-2002 CGIAR research agenda indicates that the current strategy for funding Centers does not adequately support what the Group endorses. There has been a continuing shortfall in the share of resources allocated to germplasm improvement compared to the endorsed level, and for some commodities the trends in support are not at the level endorsed by the Group.

The changeover to the logframe approach for planning and reporting is anticipated in 2001, but both the logframe and current approach will be used during the 2000-2002 planning period to allow comparisons of System allocations during the transition and beyond. TAC is working with Centers and IAEG to ensure that Center and System level logframes are compatible.

**3. Reviewing strategic considerations within the external environment.** TAC is forming expert advisory panels to assist with 2001 planning. The topics and panel membership are evolving.

Mr. Winkelmann also reported on TAC commissioned strategic studies:

- ◆ Partnerships and Research: Lessons for the CGIAR. TAC and the CGIAR Secretariat will evaluate Centers' experience with research and research-related partnerships and suggest which types of partnerships might be most effective in the future.
- ◆ Collaborative Relationships with National Agricultural Research Systems. Hans Gregersen, TAC member and IAEG Chair, has completed this background study.
- ◆ CGIAR Commitments in Latin America and the Caribbean and a synthesis of the CGIAR Study on Marginal Lands will be presented at ICW99.

**IAEG**

Hans Gregersen, IAEG Chair, presented a status report on the IAEG work program and activities.

The 1999 impact report, which will be presented at ICW99, will focus on the CGIAR's integrated pest management work and will include an analysis of CGIAR investments in IPM over the last ten years. The IAEG will also present the tentative results of other ongoing studies including the following:

- ◆ Preliminary analysis of the impact of the germplasm improvement programs; this collaborative research study to evaluate the aggregate productivity impact of CGIAR germplasm improvement programs is being conducted under the leadership of Robert Evenson of Yale University.
- ◆ Findings of phase one of the assessment of the CGIAR's impact on poverty; this began in January 1999 and will involve eight CGIAR Centers and more than 40 national partners. The study is being conducted in close collaboration with CIAT's international conference on the impact of agricultural research on poverty alleviation in September 1999.
- ◆ Initial results of a new study on the CGIAR's impact on the environment.

Other IAEG activities include a study of the CGIAR's impact on the scientific capacity of NARS, which will be conducted in close collaboration with the NARS Secretariat and ISNAR; a workshop on the impact assessment of agricultural research in eastern and central Africa, to be held in Entebbe, Uganda, in November 1999; a new website; and a policy paper on data sharing and publication.

## *Future CGIAR Meetings*

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Following are the dates and locations of future CGIAR meetings:

ICW99	October 25–29	Washington, DC
MTM2000	May 22–26	Dresden, Germany
ICW2000	October 23–27	Washington, DC
MTM2001	May 21–25	To be determined
ICW2001	October 29–November 2	Washington, DC

## *Chairman's Summation*

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Ladies and Gentlemen:

### *Introduction*

We have reached the end of another Mid-Term Meeting. This was a landmark meeting, for it brought closure to the third System Review of the CGIAR. The meeting's agenda was heavy in substance, as it should be, and our decisions here have opened the doors to continued effort and effectiveness in the new millennium.

Many friends and colleagues helped us with this meeting. Our thanks are due to all of them:

- ◆ The Government of China, for inviting us, for hosting our meeting, and for its hospitality;
- ◆ His Excellency Chen Yaobeng, Minister of Agriculture, for participating in our meeting, and for mobilizing his ministry to support us;
- ◆ Colleagues at the Ministry of Agriculture and at CAAS for their collaboration and guidance in all aspects of our meeting;
- ◆ The Beijing-based staff of CGIAR Centers for their support;
- ◆ The interpreters, for making sense of all we said, and helping us to understand each other; and
- ◆ Alexander von der Osten and CGIAR Secretariat staff for organizing this meeting, cheerfully giving many hours to the fulfillment of myriad tasks. I especially want to thank Ravi Tadvalkar and Selçuk Özgediz for their effective contribution to the success of this meeting, Ernest Corea on whom we can always depend even though he is in "retirement," and Frona Hall and her colleagues who attend to the detailed arrangements for all our meetings.

Please join me in expressing our appreciation of all that they have done for us.

Most of all, let me thank you, Members of the group and the System, whose presentations and deliberations lie at the heart of what has been accomplished at MTM99.

### *Discussions and Decisions*

I said that this has been a landmark meeting, because it marks the launch of the CGIAR into the new millennium. I want to stress, however, that in putting our house in order to confront the momentous challenges that lie ahead, we have remained faithful to the core values and spirit of the CGIAR. Our sense of mutual respect, our collegiality, our capacity to listen and, above all, the commitment that you bring to every CGIAR meeting, was manifested as strongly as ever. Our discussions at MTM99 were open and frank. Our exchanges of ideas were constructive. Differences were aired in a spirit of mutual respect and, at the end of the day, it is clear that all we said and all that we have pledged to attempt in the future, are based on mutual commitment to a shared vision.

In an opening statement, I placed before you a set of nine propositions. As in Brasilia, where I formulated propositions for your consideration for the first time, much of the discussion here revolved around those propositions. Where necessary, some of them have been modified to reflect your concerns and wishes. A matrix recording the full details of the decisions reached by the Group in

Beijing, and the next steps for implementing those decisions, has been compiled by the Secretariat. This will serve both as a record of this meeting, and as a guide to future action. Let me, however, in giving you my customary summation, present you with a flavor of our discussions, and record the consensus we reached on the basis of my nine propositions.

### System Review

Proposition #1 called on MTM99 to bring the third System Review to closure and, in doing so, to launch the implementation of all the action proposals emanating from that review, as amended and adopted by the Group. We have done that.

The action now moves to the Centers, standing committees and other groups charged with the responsibility of implementing the decisions taken here. At subsequent meetings, we will monitor the progress of implementation.

### Science and Science Partnerships

Our particular challenge within the context of an unfinished global development agenda is to mobilize frontier science and technology in a frontal assault on poverty and hunger, and for the sustainable management of natural resources. We cannot do this alone. We are called upon to act in concert with all our partners. We are fortunate in having in the Global Forum as the mechanism to accelerate consultation and action across the world's agricultural research system. So we will work together with the Global Forum, regional and national agricultural research systems, NGOs, advanced research organizations in the public and private sectors and, most especially, farmers in their fields, as we move forward.

The System Review, the Consultative Council that met in Brussels, the Centers and System committees, presented us with action proposals. It is particularly satisfying that the final package of proposals for the research agenda presented here came from the Centers themselves, in cooperation with TAC. These proposals commit the CGIAR System to pursue integrated gene management and integrated natural resource management programs as twin thrusts. The Group examined these proposals in plenary as well as in smaller groups, and the Group:

- ◆ Endorsed the recommendations for the strategic orientation of research priorities, as well as the ideas for expanded science partnerships, formulated by the System Review and Consultative Council, and further developed by TAC and the Centers.
- ◆ Agreed that Centers, in order to become effective partners in existing knowledge networks, should strengthen their databases, present their findings in a more user-friendly fashion, and expand their use of information technology, both for communication and dissemination.

TAC and the Centers will integrate these proposals into the evolving research agenda of the CGIAR.

We separated the questions of research partnerships and strategic collaboration in Africa from other science proposals because participants in the planning effort now underway feel that the process has not yet reached conclusion. We noted with great satisfaction that planning has been undertaken with African leadership and on the basis of a shared vision.

And that took us to the next proposition. The Group:

- ◆ Welcomed the consultations taking place between the Centers and African NARS leaders, encouraged all those engaged in this exercise to continue their discussions in a practical manner, and to present specific proposals for consideration and decision by the Group at ICW99.

Financial Strength

The research principles adopted by the Group, and the research agenda for the year 2000 whose outlines we have approved, reflects our resolve to make a double shift in the research paradigm, and to focus our efforts on poverty reduction. Appropriate levels of funding will enable the Centers to undertake all that we have agreed to do, and to achieve the expectation of our partners and intended beneficiaries.

As I said in my opening statement, our current financial position is healthy, but in no way justifies a sense of complacency. System funding is endangered by many factors including difficulties in the ODA environment and by fluctuations in exchange rates.

Moreover, we need to remain engaged in overcoming the recurring problems caused by restricted funds, unfinanced overheads, uneven reserves, delays in disbursement, and the fact that some systemwide activities approved by the Group remain unfunded. We salute the decisive action taken by the Finance Committee to redress this last problem. The resolution of all these questions requires a long-term strategic approach and, clearly, the Finance Committee has moved in that direction.

These issues are all encompassed by the proposition on the System's financial strength. Thus, taking all these matters into account, the Group:

- ◆ Endorsed the financing proposals of the Finance Committee, and requested the committee Chair to table at ICW99 a long-term funding strategy, a proposed structure for implementing that strategy, and proposals for managing the public awareness component of fund raising.

Governance

I now move on to governance.

The review of governance questions at MTM99 reinforced the tradition of a continued quest for exactly the right formula by which to protect the principles on which the CGIAR was founded while at the same time undertaking whatever changes are necessary to improve effectiveness and efficiency. I appreciate the candor with which your views were stated and, as before, the ability of this group to identify a core area of agreement. In that spirit, the Group:

- ◆ Endorsed the governance recommendations presented by the Consultative Council, specifically, the continued role of the cosponsors who will strive to ensure systematic consultation with Members as they conduct business, the need to further strengthen the working of TAC, the rationale for folding IAEG into TAC, the need to redefine the composition and activities of the GRPC, and the basis for creating a Partnership Committee for Science.

We asked, as well, for a progress report on actions taken to be tabled at ICW99, for information.

Turning now to the question of CGIAR chairmanship. You have made it very clear that you wish the Bank to remain involved in providing the Group with System leadership. In this connection,

I conveyed to you the continuing commitment of the Bank's senior management to support the CGIAR, and clarified the Bank's views on CGIAR chairmanship.

As some of you know, I may be leaving the World Bank in November. Should that happen, the Bank will propose to you the appointment of a person of recognized standing as full-time Vice Chairman—not a CEO—and a Bank Vice President as Chairman, but not spending 50 percent of his or her time on the CGIAR. If, on the other hand, I do not leave the Bank in November, I will be your Chairman for at least another year, serving close to full-time.

The proposition on chairmanship follows. The Group:

- ◆ Welcomed the continued commitment of the Bank to support the CGIAR, and decided to await further consultation on chairmanship with the Bank in November.

Also in the area of governance, you reviewed the recommendations of both the System Review and the Consultative Council for facilitating decisionmaking at the System level. Those recommendations emphasized the need to be nimble, and the advantage of drawing the talent and experience of the Centers into the decisionmaking process.

You decided at ICW98 and confirmed at MTM99 that the CGIAR will not be incorporated into a legal persona, and that no central executive committee will be making decisions on behalf of the Group. Decisionmaking is your prerogative and cannot be usurped by any institution or institutional arrangement. The next proposition is set in this context, and has been modified to incorporate the views expressed around this table. The Group:

- ◆ Recognized that the Consultative Council operated very well, and empowered the Chairman to call a council into session as and when required, on the clear understanding that the council will be reduced in size. The convening of the Council is not going to replace the mid-term meeting. We agreed that we would take stock of the effectiveness of this flexible instrument in about three years.

Finally, to ensure the continuing credibility and influence of the System, you adopted my ninth proposition:

- ◆ The CGIAR will make a special effort to seek out a new generation of talent, with greater gender and national diversity in all key positions of the System, without compromising quality and standards.

*Conclusion*

My friends.

We have come a long way from the concerns that clouded the future of the CGIAR some five years ago. At that time, I proposed a program of renewal, you responded with enthusiasm, and we have progressively moved forward. Subsequently, and more recently, we submitted the entire System to an independent, external review by a prestigious panel. We tackled the review panel's recommendations with seriousness and vigor, from ICW98 through the Consultative Council's meeting in Brussels, to MTM99. Here in Beijing, we have put our house in order to better confront the challenges of the new millennium. Confronting those challenges will need yet another phase of renewal, not in the processes of doing business, but in the substance of the science we practice.

At International Centers Week, I will present to you some options of a science vision for the year 2000 and beyond. That vision must have two connected components. The first, is that our science must remain on the cutting edge. The potential of all that is happening in the biological sciences is truly exciting. We cannot drop behind. For if we do so, we will become irrelevant; and what is irrelevant eventually disappears. The second, is that the most advanced science we engage in must be clearly directed at providing the basis for advancement on the development front.

Every research project we formulate, and every research result we achieve, must be geared to participation in a global effort to fight poverty, abolish hunger, and protect the environment. That is an exacting and ennobling challenge. Let us accept that challenge in the spirit that we inherited from the founders of the CGIAR and which we have faithfully nurtured. Let us move into the future, rededicated, renewed, and resolute.

And now, safe journeys.

# *Annexes*

A  
CGIAR 1999  
Mid-Term

# *MTM99 Agenda*

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**Monday, May 24 – Friday, May 28**

## **1. Opening Session**

- i. Welcome by Chinese hosts
- ii. Chairman's opening statement
- iii. Chairman's announcements
- iv. Adoption of agenda

## **2. Sustainable Agriculture for Food Security in China: CGIAR-China Collaboration in Addressing the Challenge**

- i. Presentation by Centers and their Chinese collaborators on the challenge, strategies, and plans for addressing the challenge
- ii. Discussion

## **3. System Review Follow-up**

- i. Report from the Chairman about the Consultative Council Meeting
- ii. Discussion of Consultative Council propositions under the headings of:
  - Science
  - Partnerships
  - Governance
  - Finance
- iii. Summary of decisions on Consultative Council recommendations
- iv. Next steps: Implementation plan

## **4. Research Agenda and Funding Requirements**

- i. 2000-2002 Research Agenda Framework
- ii. 2000 Research Agenda
- iii. Discussion
- iv. 2000 Funding Requirements
- v. Discussion

## **5. Evaluation**

- i. Parallel Session—ILRI EPMR
- ii. Parallel Session—ICLARM EPMR

## **6. Knowledge Management**

- i. Presentation by FAO on Agricultural Information Systems
- ii. CGIAR Logframe

## **7. Committee Recommendations and Reports**

- i. As required from: Cosponsors, OC, FC, TAC, GRPC, NGOC, PSC, CBC, CDC

## **8. Closing Session**

## *List of Documents*

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- Preliminary End-of-Meeting Report  
 MTM/99/01: Draft Agenda  
 MTM/99/02: Timed and Annotated Agenda  
 MTM/99/03/Rev.1: Schedule of Events  
 MTM/99/04: Financial Requirements of the 2000 CGIAR Research Agenda  
 MTM/99/05: Summary Report of the Consultative Council Meeting  
 MTM/99/06: List of Documents  
 MTM/99/07: Conclusions and Recommendations from the CGIAR-NGOC Consultation on NRM,  
 October 22-23, 1998  
 MTM/99/08: System Review Follow-Up: Consultative Council Propositions on Science  
 MTM/99/09: System Review Follow-Up: Consultative Council Propositions on Partnerships  
 MTM/99/10: System Review Follow-Up: Consultative Council Propositions on Governance  
 MTM/99/11: System Review Follow-Up: Consultative Council Propositions on Finance  
 MTM/99/12: Report of the Genetic Resources Policy Committee (GRPC)  
 MTM/99/13: NGOC Comments on the CGIAR Consultative Council's Deliberations of the System  
 Review  
 MTM/99/14: Future CGIAR Meetings  
 MTM/99/16: Reports from the CGIAR Private Sector Committee (9th and 10th meetings)  
 MTM/99/17: IAEG: Report on Activities  
 MTM/99/18: WAICENT—The World Agricultural Information Center of FAO  
 MTM/99/19: System Review Follow-Up: Consultative Council Propositions on Science (progress report  
 on improving the CGIAR's effectiveness in Sub-Saharan Africa)  
 MTM/99/20: System Review Follow-Up: Consultative Council Propositions on Science (progress reports  
 on IPR matters and proposal for review of plant breeding)  
 MTM/99/21: TAC Chair's Report  
 MTM/99/22: System Review Follow-Up: Consultative Council Propositions on Science (action proposals  
 on policy analysis, gender analysis, global information sharing and capacity building)  
 MTM/99/23: System Review Follow-Up: Consultative Council Propositions on Governance  
 (recommendation by Cosponsors on the integration of TAC and IAEG)  
 MTM/99/24: Finance Committee Report  
 MTM/99/25: Report of the CDC  
 SDR/TAC:IAR/99/2: Report of the Second External Review of ICLARM  
 SDR/TAC:IAR/99/3: Report of the First External Review of ILRI  
 SDR/TAC:IAR/99/07: CGIAR 2000 Research Agenda and Initial Proposals for 2002

## *Decisions and Implementation Steps on the CGIAR System Review*

### **Consultative Council Propositions on Science**

<b>Subject</b>	<b>Decision</b>	<b>Implementation</b>
Integrated Gene Management: Plant breeding review	Endorsed the TOR for the review proposed by TAC.	TAC to make recommendations to the CGIAR by MTM2000.
Integrated Gene Management: Patents and IPR	Endorsed the Consultative Council recommendation not to create a system-level legal entity to hold patents.  Encouraged the Centers to complete IPR audits expeditiously.	Centers to conduct feasibility study on a wholly-owned subsidiary (possibly of 2–3 Centers).  Centers to report on results and progress at ICW99.
Integrated Natural Resources Management	Endorsed the action plan proposed by the CDC.	TAC and CDC to report on results and progress at ICW99.
Global Knowledge System	Encouraged the Centers to strengthen their databases, present their findings in a more user-friendly fashion, and expand their use of information technology for communication, dissemination, capacity building and organizing research.  Endorsed the Consultative Council recommendation that the CGIAR should not attempt to function as the hub of a global knowledge system.	CDC to report to the CGIAR on progress (as part of its regular reports.)
Policy Research	Endorsed the CDC proposal on strengthening policy research and capacity building for policy research.	TAC to monitor progress.
Capacity Building	Endorsed the Consultative Council recommendation that the CGIAR should maintain its emphasis on capacity building without creating a new mechanism for this work.	
Women in Agriculture	Endorsed the CDC recommendation that the CGIAR should not establish an additional network; instead it should continue to rely on the existing programs on gender analysis and gender staffing.	
Focus on Africa	Welcomed the consultations between the Centers and African NARS leaders and encourage all those engaged in this exercise to continue and complete their discussions in a practical manner.	CDC/SPAAR/FARA to present specific proposals for consideration at ICW99.

### Consultative Council Propositions on Partnerships

Subject	Decision	Implementation
Partnership Committees	<p>Endorsed the Chairman's proposal to establish a Science Partnership Committee.</p> <p>Total membership of partnership committees to remain unchanged from present.</p> <p>Requested the Chairman to review with NGOC and PSC the structuring of their membership and operations.</p>	<p>Chairman to inform the CGIAR of progress in establishing the Science Partnership Committee.</p> <p>NGOC and PSC to inform the CGIAR of the changes.</p>
Review on Partnerships	<p>Endorsed the TOR proposed by the TAC Chair for an analytic review on <i>"Partnerships and Research: Lessons for the CGIAR."</i></p>	<p>TAC and CGIAR Secretariat to conduct the review by ICW2000.</p>
Meeting with Private Sector CEOs	<p>Chairman to take the lead role in convening such a meeting.</p>	<p>Chairman to report on progress at ICW99.</p>

### Consultative Council Propositions on Governance

Subject	DecisionDecision	Implementation
Conditions of CGIAR Membership	<p>Endorsed the Consultative Council proposal that conditions of CGIAR membership should remain unchanged for the present.</p>	
Chairman of the CGIAR	<p>Welcomed the continued commitment of the World Bank to support the CGIAR and decided to await further consultation with the Bank in November.</p>	
Role of Cosponsors	<p>Endorsed the Consultative Council proposal that the status of Cosponsors should remain unchanged. Searches for major System posts (such as TAC chair and CGIAR Executive Secretary) should be planned so as to enable wide consultation and endorsement of the nominee at a CGIAR meeting.</p> <p>Current TAC Chair selection process to follow procedures approved earlier for this search.</p>	
Regional Representation	<p>Endorsed the Consultative Council proposal that the system of regional representation at the CGIAR should be phased and agreed to ask FAO to act accordingly.</p>	<p>FAO Cosponsor to consult with FAO governing bodies on implementation.</p>

**Consultative Council Propositions on  
Governance (continued)**

Subject	Decision	Implementation
CGIAR Decision-making Process	Endorsed the Consultative Council proposal to maintain the informal style of decision-making by consensus and rejected the System Review recommendation to have the CGIAR reconstituted as a legal entity.	
CGIAR Decision-making Structure	Recognized that the Consultative Council operated very well, and empowered the Chairman to call a council into session as and when required, on the clear understanding that the council will be reduced in size. The convening of the Council is <u>not</u> going to replace the mid-term meeting. The Council should prepare, but not take decisions for the CGIAR.	Left to the Chairman's discretion.
CGIAR Meetings	Agreed to retain the Mid-Term Meetings.	
Human Resource Services	Endorsed the Consultative Council proposal that the System should commit itself to seeking the best talent for all openings and that the search for suitable talent be widened and deepened to ensure diversity (particularly in terms of gender and nationality) and infusion of new generation scientists.	
Organization of TAC	Endorsed TAC's proposals on its composition, and working arrangements.  Reaffirmed TAC's present mandate.	
IAEG Linkage with TAC	Endorsed the recommendation by the Cosponsors on the integration of TAC and IAEG.	The Cosponsors (in particular, FAO and UNDP), TAC and IAEG to implement the decision.
Evaluation Processes	Endorsed the TAC proposal on streamlining evaluation processes.	TAC and CGIAR Secretariat to implement the proposals and inform the Group of progress.
Genetic Resources Policy Committee	Agreed with the Consultative Council proposal that GRPC should continue to function as a policy resource, generally reporting directly to the Group, but reporting through TAC on the financial aspects of its recommendations.  Endorsed the GRPC proposal on its future composition and terms of reference.  GRPC should be mandated to represent the CGIAR in international fora, but not commit the CGIAR on	Chairman to invite stakeholders to nominate members and consult with them on committee chairmanship.

	policy positions.	
Global Forum	Reaffirmed the importance of the Global Forum for Agricultural Research and agreed that the CGIAR should continue to support GFAR.	CGIAR to examine ways of evolving its relationship with GFAR after the next Global Forum to be held in Dresden.

### **Consultative Council Propositions on Finance**

Subject	Decision	Implementation
Long-term Financing Strategy	<p>Endorsed the Finance Committee's plan of work in this area, which includes:</p> <ul style="list-style-type: none"> <li>- developing a financing strategy;</li> <li>- proposing a structure for implementing the strategy, and,</li> <li>- proposing arrangements for managing public awareness activities/programs relating to the financing strategy.</li> </ul>	FC to present elements of a financing strategy at ICW99.
Financing Guidelines	<p>Endorsed the guidelines proposed by the FC in the areas of:</p> <ul style="list-style-type: none"> <li>- multi-year commitments;</li> <li>- unrestricted funding;</li> <li>- disbursement of funds;</li> <li>- recovery of indirect costs.</li> </ul>	Members to use the guidelines.
Structures for Fund Raising, Constituency Building and Public Awareness	Endorsed the Finance Committee's plan of work in this area.	FC to make a recommendation to the Group at ICW99.
Funding and Management of Systemwide Programs	Welcomed the progress report presented by the CBC.	A task force led by the CBC Chair to make specific recommendations to the Group at ICW99. The task force should include CGIAR members and those involved with design and implementation of systemwide programs.

## List of Participants

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### CHAIRMAN

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Ismail Serageldin  
 Chairman, CGIAR, and  
 Vice President, Special Programs  
 The World Bank  
 Washington, DC

### DELEGATIONS OF MEMBERS OF THE CONSULTATIVE GROUP

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#### *African Development Bank*

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Akililu Afework  
 Principal Agricultural Economist

#### *Arab Fund for Economic and Social Development*

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Mervat W. El Badawi  
 Director, Technical Department

#### *Asian Development Bank*

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Bradford R. Philips  
 Manager  
 Agriculture and Rural Development (East)

Dimiyati Nangju  
 Lead Agronomist

#### *Australia*

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Robert J. Clements  
 Director  
 Australian Centre for International Agricultural  
 Research (ACIAR)

Ian Bevege  
 Principal Adviser, ACIAR

#### *Austria*

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Ralph F. Gretzmacher  
 Professor, University of Agricultural Sciences

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#### *Bangladesh*

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Zahurul Karim  
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Alberto Duque Portugal  
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#### *China*

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Yaobang Chen  
 Minister of Agriculture  
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Lu Ming  
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Director General  
Department of Science, Technology and  
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Zhengping Tang  
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# *Science in the Service of Humanity*

## *The Challenge to Agricultural Research in China and the World*

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### **Keynote Statement at Session on “China and the CGIAR,” Tuesday, May 25 by Ismail Serageldin, Chairman CGIAR**

#### ***Introduction: China Then and Now***

Ladies and gentlemen, friends and colleagues.

A thousand years ago, the world was on the eve of a new millennium, as we are today. And, no less than in the world of today, there were concerns about the future, as well as hopes that what the human family had already achieved would endure.

In China, it was the period of the Song dynasty, a time of grandeur across this land. As Yale historian Jonathan Spence describes it:

“The Chinese of that time seemed to excel in virtually every sphere: in the visual arts, literature, government, civil society, the economy and technology. There was nowhere else on the planet—especially not in the fragmented and self-destructive West that was just emerging from the Dark Ages—that one could find such richness both in mental and material life, and in the ways that those two aspects intersected.”<sup>1</sup>

But time does not stand still for any civilization. Over the years, this country has experienced many transformations, some of them tumultuous. And, periodically, China has re-emerged, strengthened and ready for the future, learning from past weaknesses, and building on the foundation of past strengths.

Today, as President Jian Zemin puts it, this nation is poised to see the birth of a New China “with the people succeeding, through hard work, in building a strong and prosperous country, achieving national rejuvenation, and securing a happy life for themselves.”<sup>2</sup> The CGIAR is pleased to be China’s partner in this quest. The partnership between China’s scientists and the CGIAR Centers began even before China formally joined the Group in 1984. It has grown steadily since then, and was reaffirmed at the China-CGIAR Forum (November 10–12, 1997, Beijing), which I was privileged to attend with several Center representatives. More opportunities for joint action lie ahead. And we expect that China will play an increasingly strong role in the CGIAR.

Much has already been done, in pursuit of the goal of New China. Perhaps most important, some 200 million people have been rescued from poverty.<sup>3</sup> The contribution of agricultural research and agricultural transformation have been crucial. Much more remains to be done. Many issues demand resolution. We are concerned, however, only with those issues directly connected with the mission of the CGIAR: food security and sustainable agricultural development. Allow me, therefore, to explore three connected themes:

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<sup>1</sup>“Paradise Lost” by Jonathan Spence, *Far Eastern Economic Review*, April 15, 1999

<sup>2</sup> Policy Statement issued during State Visit to the USA, 1997

<sup>3</sup> *China 2020*, The World Bank, 1997

- ◆ Shared Challenges;
- ◆ The Role of Agricultural Research; and
- ◆ Dimensions of Partnership.

### *Shared Challenges*

A range of challenges confront China and the world: population, poverty, productivity, and the environment, for example.

#### The World

The global scale of demographic pressures in the new millennium will be unprecedented. The world's population is expected to exceed 8 billion by 2025, an increase of 2.5 billion in the next 25 years. Much, but not all, of the increase will occur in developing country cities, where urban populations will more than triple. There will be many more mouths to feed in complex circumstances. Nobel laureate Norman Borlaug calculates that "to meet projected food demands, by 2025 the average yield of all cereals must be 80 percent higher than the average yield in 1990."<sup>4</sup> These increases must come primarily from increasing biological yields, not from area expansion and more irrigation, because land and water are becoming increasingly scarce.

Dramatic over-consumption and waste in the rich countries and population pressure in poor countries are placing enormous burdens on the ecosystems on which we all depend. The marine fisheries of the world are grossly over exploited. The soils are eroding. Deforestation is continuing. The global challenges of desertification, climate change and biodiversity demand redoubled efforts. Within the next 25 years, a quarter of the human family could be affected by severe water scarcity that will threaten food security, health, and environmental balance, unless corrective measures are taken soon.

Meanwhile, poverty remains pervasive in our world of plenty, despite the enormous burst of output and productivity, the dazzling changes wrought by science and technology, and the amazing achievements recorded on the social indicators for so many of the people on the planet. Let me remind you: in the 47 "least developed" countries of the world, 10 percent of the world's population subsists on less than 0.5 percent of the world's income. Some 40,000 people die from hunger related causes every day. A sixth or more of the human family has been marginalized.

#### China

Turn now to China's challenges. China today feeds some 22 percent of the world's population with 7 percent of the world's arable land. The demand for food will grow and change as the population increases and dietary patterns are altered by rising income. The prospect of China's demand for food grains increasing from 437 million tons in 1996 to 697 million tons in 2020—when the population is expected to be more than 1.6 billion—poses a colossal challenge to farmers, scientists, and policymakers. The group of scholars who prepared the research compendium "Agriculture in China, 1949–030"<sup>5</sup> believe that yield increases in the order of 30–40 percent will be required to meet this challenge. Productivity, moreover, has to be increased without harm to natural resources that are already at grave risk.

The dimensions of the environmental problems that threaten China have been spelled out in a report prepared by the World Bank in consultation with colleagues in China.<sup>6</sup> Acid rain threatens to damage 10 percent of

<sup>4</sup> "Feeding the World: The Challenge Ahead" by Norman Borlaug, paper delivered at the *Fourth World Bank Conference on Sustainable Development*, Washington DC.

<sup>5</sup> "Agriculture in China, 1949-2030," edited by T. C. Tso, Francis Tuan, and Miklos Faust, *IDEALS*, Beltsville, Maryland, USA, 1998

<sup>6</sup> *Clear Water, Blue Skies*, The World Bank, 1996

the land area, and may have reduced crop and forestry productivity by some 3 percent. Several contaminated river sections do not meet the lowest standards for irrigation water and are no more than waste sinks. Insufficient and unevenly distributed water supplies are a particular cause for concern. Water scarcity has, in fact, been described as “China’s most limiting agricultural production resource, particularly in northern corn and wheat-growing regions.” Improved water control and delivery systems are of the utmost importance. The economic costs of air and water pollution damage is estimated at around \$54 billion a year. The cost in human terms is incalculable. Pollution causes 178,000 premature deaths annually in urban areas. Indoor air pollution causes 110,000 premature deaths annually in rural areas. Tens of millions are at risk of losing future access to safe drinking water.

Failure to overcome these challenges could have disastrous consequences for China’s anti-poverty battle. Poverty has been dramatically reduced in China, primarily as a result of “soaring agricultural incomes,” but has not been abolished. Calculations of the extent of poverty in China range from 6 percent of the population (the government’s figure) to some 22 percent (based on the international poverty line of \$1 per day). The elimination of poverty is a fundamental goal, and an anti-poverty workshop held in this city last month was told of the need to work even harder to achieve the national target: eliminating poverty very early in the new millennium. At least half the poor live in “abject poverty, lacking even the basic resources to survive,” speakers at the workshop said. More than 20 million people in some 529 counties lack water. Women, who account for over half the poor, are particularly vulnerable. “More women are mired in poverty than men and find it more difficult to shake off the shackles of destitution.”<sup>7</sup> Improvements in agricultural productivity and off-farm income are considered the most effective means of turning this situation around.

So the world, no less than China, is challenged to transform agriculture yet again, making it productive, sustainable, and functioning as an engine of growth. The challenges are both technological and political in nature. The political challenge is to ensure that international and domestic policies, institutional frameworks, and public expenditure patterns are conducive to cost-effective and sustainable agricultural development. The technological challenge is to develop high-productivity, environmentally sustainable production systems.

### ***The Role of Agricultural Research***

Analysts from CAAS, IFPRI, and the World Bank have suggested a combination of initiatives for continued growth in agriculture.<sup>8</sup> These include the following:

- ◆ Improved agricultural research and extension;
- ◆ Balanced fertilizer application;
- ◆ Improved efficiency of water distribution and increased supplies of irrigation water;
- ◆ Land development and reclamation to maintain current levels of arable land; and
- ◆ Market-determined pricing policies.

I will lay these on the table, but will not go into all of them in detail. Nor will I spend time exploring and explaining the importance of effective policies that remove a bias against agriculture, responsive institutions, an outreach program to provide the poor with access to financial services, and all the other factors that produce a vibrant rural sector, which is the foundation of environmentally sustainable and socially equitable development. I want to focus on one part of that complex picture: the challenge to agricultural research.

The policy reforms introduced from the end of 1978 resulted in a surge of productivity. China’s agricultural scientists have been important partners in this effort. Despite the setback caused by political upheavals in the sixties, China’s national agricultural research system is robust. Its impact has been assessed by several

<sup>7</sup> *South China Morning Post*, Internet Edition, April 9, 1999

<sup>8</sup> *At China’s Table*, The World Bank, 1997

studies. A survey<sup>9</sup> carried out under ISNAR's auspices found that 20 percent of the agricultural growth in the years from 1965 to 1993 can be attributed to research. This is second only to the contribution of increased inputs (39 percent). Some 85,000 researchers and technicians in 400 institutions and 70 agricultural universities comprise China's agricultural research complement. They were supported by increases in the amount of investment in agricultural research between the late 1970 and the early 1990s, but investment has since tapered off. This is one of the problems facing national agricultural research. The most appropriate utilization of funds, a decline in research intensity, the need for improved facilities and equipment, duplication of effort, conflicting priorities in the selection of the subject matter of research, and weak links between research and extension, are other issues waiting for resolution.

Despite the problems, China's agricultural scientists maintain high standards, have developed great skills, and have established close links with the rest of the global agricultural research system.

Their next big challenge is to combine conventional research with the promise of the genetic revolution. We are living in a time unmatched for the opportunities that it provides the biological sciences. It is an exhilarating time; similar to what physics experienced in the glorious 40 years between 1905 and 1945, when all the concepts were changed, from cosmology to quantum physics, from relativity to the structure of the atoms. Today we are decoding the very blueprints of life; we are learning to manage the deployment and expression of genes. We must utilize the most cutting edge work associated with genetic mapping, molecular markers and biotechnology to accelerate the breeding process and achieve the promise of all that science can do for the poor and the environment.

China has begun this process, and its biotechnology programs absorb some \$30 million of investment annually, and are therefore better funded than in many countries outside the industrialized North.

But the revolution in the biological sciences has both promise and problems. We are confronted by profound ethical and safety issues, complicated by the new issues of proprietary science. Some of the concerns come from scientists who fear that "novel" products will destroy agricultural diversity thus changing agricultural patterns into unrecognizable and uncontrollable forms. Many protests have been made by civil society institutions on ethical or ecological grounds. The dominance of the private sector has raised fears that this will create a new phase of comparative disadvantage and increased dependency in the South.

Very much at issue are patenting and intellectual property rights (IPR). Supporters of patenting point out that if the private sector is to mobilize and invest large sums of money in agrobiotechnology R and D, it has a powerful claim to protecting and recouping what it has put into the exercise. On the other side of the argument is the fear that patenting and the exercise of IPR will lead to a monopolization of knowledge, restricted access to germplasm, controls over the research process, a selectivity in the focus of research and, thereby, the increasing marginalization of the majority of the world's population.

These concerns cannot and must not be ignored. Effective regulatory mechanisms and safeguards need to be universally installed so that the impact of agrobiotechnology is both productive and benign. The critical issue is that every instrument of agricultural transformation should be mobilized in our efforts to feed the hungry, help the poor, and protect the environment. We must find ways of realizing the promise of biotechnology while avoiding the pitfalls. The CGIAR will be cosponsoring an international conference on the eve of International Centers Week this year to examine these issues; in particular, to discuss safeguards against the perceived hazards of biotechnology.

### *Dimensions of Partnership*

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<sup>9</sup> *Agricultural Research in China* by Shenggen Fan and Philip G. Pardey, ISNAR, 1992

How can China and the CGIAR collaborate to their mutual benefit?

Substantial achievements have already resulted from several years of collaboration between CGIAR scientists and China's NARS. The specifics of collaboration compiled by China's Ministry of Agriculture<sup>10</sup> are indeed impressive:

- ◆ Eleven of the 16 CGIAR Centers have established formal links with Chinese research institutions, and five Centers maintain offices in Beijing.
- ◆ Over 50 Chinese institutions have engaged in collaborative activities with CGIAR Centers.
- ◆ CGIAR Centers have provided Chinese scientists with 110,000 copies of scientific publications.
- ◆ Over 40 international conferences and workshops have been held in China and attended by over 4000 scientists, with the sponsorship of CGIAR Centers.
- ◆ CGIAR Centers have trained 3400 Chinese scientists ranging from short-term trainees to post-doctoral staff.
- ◆ CGIAR-trained scientists are senior project leaders, chiefs of research divisions, or senior fellows in their own institutions.
- ◆ Chinese nationals have served the CGIAR system as Center scientists and board members.
- ◆ China has bred 252 crop varieties which contain genetic material from CGIAR Centers (wheat, rice, corn, corn, peanut, potato, and sorghum). These varieties are grown on 5.6 million hectares.

The China-CGIAR Forum recommended further action in four areas:

First, increased support by China to both national and international agricultural research.

Second, increased capacity building efforts by the CGIAR for China's scientists, research managers, and policy makers.

Third, the provision of improved seeds to China's farmers at a reasonable cost.

Fourth, enhanced exchange of germplasm between China and the CGIAR Centers for the benefit of farmers and consumers in China and throughout the world.

We have accepted these proposals. There are other possibilities, particularly in the fisheries sector and in water management. Details will be forthcoming as today's discussion progresses. CGIAR Centers will contribute their scientific strength, to work collaboratively with China's NARS, as well as with others in the global agricultural research system. We expect reciprocal collaboration from China as well.

Today, China is an acknowledged world leader. The potential for China to expand its economy is universally acknowledged. It exerts influence on the international scene. From such a powerful country, we expect to hear an ever-stronger voice on behalf of the South in the international agricultural research system. From the CGIAR perspective, we would welcome:

- ◆ Enhanced investment in agricultural research, national and international;
- ◆ Greater activity in decision making bodies;
- ◆ Strong participation by China's delegation in CGIAR committees;
- ◆ Substantial participation in designing research programs; and
- ◆ Greater collaboration between China's NARS and the CGIAR Centers.

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<sup>10</sup> Review and Future Prospects of China-CGIAR Collaboration, presentation by Gan Zufo, Deputy Director, Department of Foreign Cooperation, Ministry of Agriculture, at China-CGIAR Forum, 1997.

I submit these suggestions for consideration by our Chinese colleagues.

***Envoi***

My friends.

As we contemplate the triple challenge of abolishing hunger, eliminating poverty, and protecting the environment, we can all take comfort in the knowledge that neither China nor the world is in crisis. Clearly, however, both could be, if we do not act boldly and decisively. The “danger signals” are all around us. But the opportunities to overcome potential danger are more abundant than they have ever been.

Science has already contributed to undreamt of changes in human life. It has more contributions to make for the well-being of our generation, for the well-being of the planet, and for the generations of the future. If that is actually to happen, we must have the courage of our convictions and the wisdom to act with sagacity.

So I say to our Chinese colleagues and to ourselves: Let us grasp the opportunities and bend them to our will.

Thank you.

## *Acronyms and Abbreviations*

ARI	Advanced Research Institute
CBC	Committee of Board Chairs, CGIAR
CDC	Center Directors Committee, CGIAR
CGIAR	Consultative Group on International Agricultural Research
EPMR	External Program and Management Review
FAO	Food and Agriculture Organization of the United Nations
FARA	Forum for Agricultural Research in Africa
GFAR	Global Forum on Agricultural Research
GFSC	Global Forum Steering Committee
GRPC	Genetic Resources Policy Committee, CGIAR
IAEG	Impact Assessment and Evaluation Group, CGIAR
ICW	International Centers Week, CGIAR
IFAD	International Fund for Agricultural Development
IGM	Integrated Gene Management
INRM	Integrated Natural Resources Management
IPR	Intellectual Property Rights
MTM	Mid-Term Meeting, CGIAR
MTP	Medium-Term Plan
NARI	National Agricultural Research Institute
NARS	National Agricultural Research System (s)
NGO	Non-Governmental Organization
NGOC	NGO Committee, CGIAR
ODA	Official Development Assistance
PAA	Public Awareness Association, CGIAR
PAC	Public Awareness Campaign, CGIAR
PARC	Public Awareness and Resource Mobilization Committee, CGIAR
PSC	Private Sector Committee, CGIAR
SPAAR	Special Program for African Agricultural Research
TAC	Technical Advisory Committee, CGIAR
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
USAID	United States Agency for International Development
UNESCO	United Nations Educational, Scientific and Cultural Organization
\$	All financial data are given in US dollars



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