

International Centers Week 1998 Shaping the CGIAR's Future CGIAR System Review Report

Comments on the report and the recommendations Working Group I (Science)

The group expresses its appreciation for the description, analysis and judgement of the quality and nature of the research and the research agenda of the Centers by the Maurice Strong review team. The recognition of the unique character of the CGIAR and its value as a major player in development, agricultural research and environmental research is seen as an important support to the work of the Centers and the role the CGIAR wants to play. The review of the science and the emphasis on various points and need for change confirms the new directions of the Centers and the well accepted policy of the CGIAR in the major research fields.

In meeting its mission statement the overarching objective of the CGIAR's science is to address the needs of its clients - the rural poor, the urban poor and particularly poor women. To achieve this, the science program of the CGIAR must be holistic, systemsbased and integrate the thrusts of gene management and natural resource management through knowledge-based approaches. Its science must utilize both established and new tools; achieve more progress in less favored areas but also defend and build on the gains in more favored areas.

In response to the rapidly evolving external environment, the CGIAR's approach to its research is changing in several ways. Firstly, there is a need to broaden the range of research partnerships to more firmly embrace not only the public sector, but also the private sector, NGOs and farming communities. Secondly, given the rapidly evolving IP scenario, it is clear that the CGIAR must strengthen its role as a provider of international public goods, this will more frequently require defensive protection of the Centers' IP in order to keep it freely accessible for our partners.

To achieve these objectives the Centers must conduct first-class scientific research in both integrated gene management and natural resource management often necessitating re-tooling and new approaches. Through these approaches, the Centers' scientific program can continue to meet the changing needs of its clients, the resource-poor of the developing world.

System Review Recommendations

Modifications proposed: 1, 2, 4, 5, 7
Comments: 6, 8, 10, 14, 18

Proposed Action Plan

I The Centers must move forward to implement the scientific recommendations while formulating their long-term perspective plans and the next cycle of MTP.

2. Retooling of science be ensured by the CG Centers, which fully address the agroecologically relevant needs of the NARS. In the process, a balance between the traditional and scientific knowledge will be desirable.

3. Appropriate coordination mechanism for inter-center collaboration to address the specific problems of African NARS, especially in sub-Saharan Africa, be devised while ensuring also the appropriate focus on South Asia where maximum poverty still resides and NRM base is eroding fast.

4. Relating to global knowledge system for food security, CG Centers may take up those responsibilities which are science related since in this area other organizations such as FAO have comparative advantage.

5. The System Review contains an integrated set of recommendations including a statement of need for annual funding of the order of \$400 million, with at least 50% being unrestricted. The ambitious science agenda called for in the report is presumably based on this assumption. The Group, therefore, felt that less restricted funding is critically important to maintaining flexibility and responsiveness as well as to provide continuity to the research programs. Accepting this agenda needs to be matched with implementation of a financial plan that allows for fully costed implementation of the components.

6. A suitable mechanism to monitor the implementations of various scientific recommendation be devised and the proposed program and the system-wide reviews be initiated on priority progress reviewed in the MTM, 1999.

ICW98
SUMMARY TABLE: RECOMMENDATIONS OF THE SYSTEM REVIEW
PANEL
Working Group I (Science)

RECOMMENDATIONS	WORKING GROUP COMMENTS <i>(Proposed changes in bold)</i>
<p>RECOMMENDATION I</p> <p>The Panel recommends that the CGIAR's current mission statement-which is to contribute, through research, to promoting sustainable agriculture for food security in developing countries-be amended to read:</p> <p style="padding-left: 40px;">To contribute to food security and poverty alleviation through research promoting sustainable agricultural development based on the environmentally sound management of natural resources. This mission will be achieved through research leadership, partnerships, capacity building, and policy dialogue.</p> <p>We also recommend that each Center in the System modify its own mission statement to be consistent with the amended mission of the CGIAR. Center mission statements should be specific and focused enough to allow evaluation of the performance of each Center.</p>	<p style="padding-left: 40px;">To contribute to food security and poverty eradication, in <u>developing countries</u>, through research, <u>partnership, capacity building and policy support</u>, promoting sustainable agricultural development based on the environmentally sound management of natural resources.</p> <p>We therefore recommend that each Center in the System modify its own mission statement to be consistent with the amended mission of the CGIAR. Center mission statements should be specific and focused enough to allow evaluation of the performance of each Center.</p>

<p>RECOMMENDATION 2</p> <p>The Panel recommends that IARCs strive to serve as global Centers of frontier science and technology for sustainable food security, serving as a bridge that brings advanced science and technology to bear on the needs of the world's poor. They should become resource centers on frontier technologies, policy research, sustainable use of natural resources, capacity building, and networking. They will need to enhance their symbiotic scientific links with NARS, ARIs, the private sector, and NGOs in industrialized and developing countries. At the same time, they should help develop and disseminate environmentally sensitive technologies based on appropriate blends of traditional and modern methods, while placing more emphasis on work in low-potential areas.</p>	<p>The Panel recommends that IARCs strive to serve as global Centers of frontier science and technology for sustainable food security serving as a bridge that brings advanced science and technology to bear on the needs of the world's poor. They should become resource centers on frontier technologies, policy research, sustainable use of natural resources, capacity building, and networking. They will need to enhance their symbiotic scientific links with NARS, <u>Global Forum</u> ARIs, the private sector, and NGOs in industrialized and developing countries. At the same time, they should help develop and disseminate environmentally sensitive technologies based on appropriate blends of traditional and modern methods, <u>which address the needs of the poor superficially including those in less favored areas.</u></p>
<p>RECOMMENDATION 3</p> <p>The Panel recommends that IARCs concentrate on topics relevant to improving sustainable food security and the generation of greater opportunities for rural income. This dual strategy will require:</p> <ul style="list-style-type: none"> • greater inter-Center collaboration; • new methods of increasing System synergy; • new and expanded partnerships; • IARCs, in conjunction with regional and sub-regional organizations, acting as neutral convenors of all the actors in the research-development continuum in each region, while providing access to assets and resources and filling gaps by providing what others cannot do as competitively; and • the CGIAR to use its moral force and its scientific credibility to get the type of cooperation and coordination established that makes optimal use of available resources. 	<p><i>[No comments.]</i></p>

RECOMMENDATION 4

The Panel recommends an integrated gene management approach based on:

- patenting processes and new varieties, and entrusting their use under free licensing;
- a legal entity which could hold CGIAR patents;
- the conservation of agrobiodiversity and its sustainable and equitable use;
- research on genomics and molecular breeding for the purpose of supporting NARS to enhance the productivity of ~~major farming systems~~ in an ecologically, economically, and socially sustainable manner;
- strict adherence to the equity and biosafety provisions of the Convention on Biological Diversity and national government regulations;
- a central coordinating and servicing unit for advising both IARCs and appropriate NARS;
- ~~a widened food security basket through inclusion of minor and underused millets, grain legumes, tubers, and other crops~~;
- the use of molecular and Mendelian methods of breeding in an integrated manner;
- an effective public information and communication system and total transparency and accountability in relation to work in the field of biotechnology; and
- a System-wide review of plant breeding efforts, ~~with the aim of freeing up resources for new priorities while accelerating the~~ of modern marker-assisted breeding and bioengineering technologies.

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- patenting processes and new varieties, and entrusting their use under free licensing;
- a legal entity which could hold CGIAR patents;
- the conservation, characterization and sustainable and equitable use of agrobiodiversity
- research on functional genomics and molecular breeding for the purpose of supporting NARS to enhance the productivity of **important** farming systems relevant to the poor in an ecologically, economically, and socially sustainable manner;
- strict adherence to the equity and biosafety provisions of the Convention on Biological Diversity and national government regulations;
- a central coordinating and, servicing unit for advising both IARCs and appropriate NARS;
- *[Shifted to Recommendation 5]*
- the use of molecular and Mendelian methods of breeding in an integrated manner;
- an effective public information and communication system and total transparency and, accountability in relation to work in the field of biotechnology; and
- a System-wide review of plant breeding efforts, **to address a balanced integration** of traditional breeding with modern marker-assisted breeding and bioengineering technologies.
- Quality and value addition to ensure nutritional security;

RECOMMENDATION 5

The Panel recommends that the CGIAR enhance its research methodology by adopting an integrated natural resource management approach. Further, the organization of an International Network for Integrated Natural Resource Management will link productivity research with the environmentally sound management of natural resources. The network should be based on, among other things:

- Centers that are retooled with sciences needed to manage the viability and sustainability of ecosystems;
- a definition of the corresponding methods at different spatial scales, particularly at local levels;
- adoption of precision farming techniques in relation to tillage, irrigation, nutrient supply and pest and post-harvest management;
- development of indicators for measuring sustainability;
- development of sustainable systems of management for aquatic resources;
- joint preparation of national agricultural research strategies by ~~respective NARS~~ and a consortium of IARCs; and
- development of more bottom-up, demand-driven projects.

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- Centers that are retooled with sciences needed to manage the viability and sustainability of ecosystems;
- a definition of the corresponding methods at different spatial scales, particularly at local levels;
- adoption of **knowledge intensive farming** techniques in relation to tillage, irrigation, nutrient supply and pest and post-harvest management;
- development of indicators for measuring sustainability; development of sustainable systems of management for aquatic resources;
- joint preparation of national **and regional** agricultural research strategies by **NARs, regional and global fora**, and a consortium of IARCs; and
- development of more bottom-up, demand-driven projects, **in partnership with NARS**
- **development and implementation of new methodologies for ecoregional research including GIS, explorative and extrapolative approaches.**
- **a widened food security basket through inclusion of minor and underused millets, grain legumes, tubers, and other crops in relation to cropping systems approach.**

RECOMMENDATION 6

The Panel recommends that, the CGIAR, in partnership with FAO, the World Bank, NARS, ARIs, and NGOs, the CGIAR develop an effective Global Knowledge System for Food Security. This would be a central element in the CGIAR's future capacity building efforts. ISNAR and IFPRI should be considered as the convening Center for this initiative. This initiative should:

- benefit NARS, NGOs, civil society organizations, and the media;
- pay attention not only to frontier science and technology but also to traditional wisdom;
- be built on a decentralized management scheme for its various components;
- make international research databases available as free goods to developing nations;
- produce Web sites of special relevance to the developing world through a highly skilled central screening and coordinating unit;
- promote the organization, spread, and understanding of traditional knowledge systems;
- facilitate direct contact via e-mail between developing country scientists and individual experts throughout the world, beginning with the organizing of young professionals and IARC alumni;
- and promote cooperative activities through a
- geographically indexed Web database containing projects of all organizations performing agricultural research and development in each region.
- take account of existing relevant databases

[Comment: The Proposed Global Knowledge System should be limited to agricultural research and related information and not to all food security concerns, which are the mandate of FAO.]

RECOMMENDATION 7

The Panel recommends that:

- greater emphasis be placed on social and management sciences in order to ~~address~~ assist ~~issues of local policy-making, conflict resolution related to natural resource management, participatory research approaches, and research policy;~~
- policy analysis research be strengthened;
- policy ~~formulation~~ and analysis be carried out with selected developing countries;
- the CGIAR organize System-wide Dialogues for Policymakers at regular intervals;
- ~~in collaboration with ISNAR and other appropriate IARCs, NARS, and relevant bilateral and multilateral development institutions, IFPRI launch a special program strengthen the capacity for collaborative policy support is the major cause of a wide gap between potential and actual yields in farmers' fields; and~~
- capacity building in policy research cover economic policymaking and environmental and science and technology research policies.

The Panel recommends that:

- greater emphasis be placed on social and management sciences in order to assist NARs with policy-making, conflict resolution related to natural resource management participatory research approaches, and research policy;
- policy analysis research be strengthened; policy analysis be carried out in partnership with NARS and regional fora to conduct policy research which addresses issues relating to sustainability, equity and the concerns for a wide gap between potential and actual yields in farmers' fields, taking into account both productivity and sustainability;
- the CGIAR organize System-wide Dialogues for Policymakers, at regular intervals;
- capacity building in policy research cover economic policymaking and environmental and science and technology research policies.
- When asked to contribute to multilateral intergovernmental negotiations, the CGIAR provide information and policy options, but carefully- avoid taking positions or advocating specific policies.

RECOMMENDATION 8

- The Panel recommends that:
 - the CGIAR continue to emphasize the capacity building efforts that have been successful in the past;
 - the CGIAR strengthen partnerships with bilateral and multilateral development agencies providing technical assistance and support in capacity building
 - there be an increased emphasis on broadening the range of capacity-building efforts that the CGIAR considers essential for its work, particularly policy-making capacity in NARS;
 - new emphasis be placed on establishing national-, regional-, and sub-regional-level consultative processes for research and development;
 - the CGIAR play a leading role in organizing, and if necessary producing, a large menu of Web-based, highly interactive distance education and training courses;
 - Centers pursue meaningful collaborative partnerships with strong NARS in areas of strategic research;

 - the CGIAR encourage the internationalization of certain strong NARS, thereby facilitating more South/South research collaboration; and
 - a stepped-up CGIAR public awareness program is needed to promote awareness of CGIAR/NARS collaboration and the importance of research to developing-country governments.
- the CGIAR, **together with ARIs**, continue to emphasize capacity building efforts, **including human resource development**, that have been successful in the past.

 - Centers pursue meaningful collaborative partnerships with strong NARS in areas of strategic research **and training ensure capacity enhancement**

[Comment: also include HRD collaboration]

<p>RECOMMENDATION 10</p> <p>The Panel recommends a special collaborative focus on Africa that incorporates the following elements to create an effective strategy for African agriculture and that complements the efforts of other organizations, including sub-regional associations.</p>	<p><i>[Comment: Such a strategy should take account of the continuing degradation of Africa's natural resource base. At the same time it should acknowledge the degradation of the natural resource base in South Asia].</i></p>
<p>RECOMMENDATION 14</p> <p>The Panel recommends that:</p> <ul style="list-style-type: none"> • the CGIAR establish a special task force, including TAC and Center Directors, for improving the efficiency of the evaluation processes; • the EP MR site visit be reduced in scale so as to require no more than one week of each reviewer's time; • the CGIAR institute Review Workshops for each major type of CGIAR activity, both to improve the review process and to reduce the amount of time and effort required for EP MRs and CCERs; • Centers be financially compensated by donors that wish to conduct their own reviews of Center projects; • EP MRs give greater attention to Board governance; and • the present IAEG be replaced with a more pragmatic unit, possibly located within TAC. 	<p><i>[Comment: The review cost to be reduced by devising suitable cost-effective measures.]</i></p>

RECOMMENDATION 18

The Panel recommends that the current Committee structure be streamlined to improve effectiveness and efficiency, and to ensure compatibility with other proposed changes in System-level governance. Specifically:

- The functions of the Oversight Committee should be assumed by the Executive Committee of the proposed central Board.
- The Finance Committee should become a committee of the proposed central Board.
- The scientific capacity of TAC needs to be strengthened and its independent scientific advice maintained. TAC should be reorganized to include the TAC Chair and two or three strategic thinkers or "visionaries," who together would constitute the TAC nucleus. They would assist the proposed chief executive officer in formulation of a CGIAR Strategy, and would serve renewable three-year terms.
- The IAEG should cease to exist in its current form. The central Board should establish an impact unit in cooperation with TAC. This unit may be incorporated within TAC.
- The important tasks of public awareness and public relations, including PARC and the "Future Harvests" campaign, should be taken over by a new Media and Communications unit that is closely linked with the proposed central Board and chief executive officer. It should be supplemented with a media consultation each year at ICW.
- An independent committee similar to GRPC remains necessary. Such a Policy Committee should be attached to the proposed CGIAR central Board. Alternatively, it may be attached to TAC as a permanent sub-panel.

[Comment.- The scientific capacity of TAC needs to be strengthened and revitalized to provide independent scientific advice by constituting competent ad hoc scientific panels, without too much emphasis on budgetary aspects, which could be left to the Centers and the Finance Committee to decide. The recommended size of TAC may be too small to provide needed representation to various disciplines and regions.]

[Comment.- This is a good recommendation and should be implemented.]

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| <ul style="list-style-type: none">• The NGO Committee and the Private Sector Committee should be replaced with wider consultative processes with representatives of each sector during each ICW. These representatives would be invited to participate in relation to relevance of the issues being considered. The two committees should continue to exist in the interim until such consultative processes are implemented.• The <u>input</u> of the CDC and CBC should be <u>sought</u> and valued. | |
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