

**The CGIAR at 31: An Meta-Evaluation of the Consultative  
Group on International Agricultural Research**

**Volume 3: Annexes**

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## Abbreviations and Acronyms

AGM	Annual General Meeting (CGIAR)
AIARC	Association of International Agricultural Research Centers
AIDS	Acquired immune deficiency syndrome
AKIS	Agricultural Knowledge and Information Systems (World Bank)
ARD	Agriculture and Rural Development Department, formerly RDV (World Bank)
ARI	Advanced research institution
ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa
BB	World Bank's administrative budget
BP	Bank Policy
BTO	Back to Office Report
CAS	Country assistance strategy (World Bank)
CAPRi	System-wide Program on Collective Action and Property Rights (CGIAR)
CBC	Committee of Board Chairs (CGIAR)
CBD	Convention on Biological Diversity
CDC	Center Directors' Committee (CGIAR)
CEP	CIMMYT Economic Program
CCER	Center-Commissioned External Review (CGIAR)
CDMT	Change Design and Management Team (CGIAR)
CGIAR	Consultative Group on International Agricultural Research
CIAT	Centro Internacional de Agricultura Tropical
CIFOR	Center for International Forestry Research
CIMMYT	Centro Internacional de Mejoramiento de Maíz y Trigo
CIP	Centro Internacional de la Papa
CORAF	Conseil Ouest et Centre Africain pour la Recherche et le Développement Agricoles
CODE	Committee on Development Effectiveness (World Bank)
CRM	Corporate Resource Management (World Bank)
DEC	Development Economics Vice-Presidency (World Bank)
DFID	Department for International Development (U.K.)
DG	Director General (CGIAR)
DGF	Development Grant Facility (World Bank)
Embrapa	Brazilian Agricultural Research Corporation
ESDAR	Environmentally Sustainable Development Agricultural Research and Extension Group (World Bank)
ESSD	Environmentally & Socially Sustainable Development Network (World Bank)
ESW	Economic and sector work
ExCo	Executive Council (CGIAR)
FAO	Food and Agriculture Organization of the United Nations
FARA	Forum for Agricultural Research in Africa
FY	Fiscal year
GEF	Global Environment Facility
GFAR	Global Forum on Agricultural Research
GPG	Global public good
GPPPs	Global public policies and programs
GRPC	Genetic Resources Policy Committee (CGIAR)
HIPC	Highly-indebted poor country
HRP	Special Programme for Research and Development in Human Reproduction
IAD	Internal Audit Department (World Bank)
IAEG	Impact Assessment and Evaluation Group (IAEG)
IBPGR	International Board on Plant Genetic Resources
IBRD	International Bank for Reconstruction and Development
ICAR	Indian Council on Agricultural Research
ICARDA	International Center for Agricultural Research in the Dry Areas

ICLARM	International Center for Living Aquatic Resources Management
ICRAF	International Center for Research in Agroforestry
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
ICW	International Centers Week (CGIAR)
ICWG-GR	Inter-Center Working Group on Genetic Resources (CGIAR)
IDA	International Development Association
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
IITA	International Institute of Tropical Agriculture
ILCA	International Livestock Center for Africa
ILRAD	International Laboratory for Research on Animal Diseases
ILRI	International Livestock Research Institute
IMF	International Monetary Fund
INIBAP	International Network for the Improvement of Banana and Plantain
INRM	Integrated natural resource management
IPG	International public good
IPGRI	International Plant Genetic Resources Institute
IPR	Intellectual property right
IRRI	International Rice Research Institute
iSC	Interim Science Council (CGIAR)
ISNAR	International Service for National Agricultural Research
IWMI	International Water Management Institute
LDC	Less developed country
LIL	Learning and Innovation Loan (World Bank)
MARP	Multi-country Agricultural Research Program for Africa
MAS	Marker-assisted selection
MD	Managing Director (World Bank)
MDGs	Millennium Development Goals
MTM	Mid-Term Meeting (CGIAR)
MTP	Medium Term Plan (CGIAR)
NARS	National agricultural research systems
NARES	National agricultural research and extension systems
NGO	Nongovernmental organization
NPG	National public good
NRM	Natural resource management
ODA	Official development assistance
OECD	Organization for Economic Cooperation and Development
OED	Operations Evaluation Department (World Bank)
OP	Operational Policy (World Bank)
OPCS	Operational Policy and Country Services (World Bank)
PREM	Poverty Reduction & Economic Management Network (World Bank)
PRSP	Poverty Reduction Strategy Paper
PSI	Private Sector Development & Infrastructure Network (World Bank)
QTL	Quantitative trait loci
R&D	Research and development
RDV	Rural Development Department (World Bank)
RPG	Regional public good
SACCAR	Southern African Centre for Cooperation in Agricultural and Natural Resources Research and Training
SC	Science Council (CGIAR)
SDC	Swiss Development Corporation
SGP	Special Grants Program (World Bank)
SINGER	Systemwide Information Network for Genetic Resources (CGIAR)
SPAAR	Special Program for African Agricultural Research
SPIA	TAC Standing Panel on Impact Assessment (CGIAR)
SRGP	Systemwide Genetic Resource Programme (CGIAR)

SRM	Strategy and Resource Management Vice-Presidency (World Bank)
SRO	Sub-regional organization
SSP	Sector Strategy Paper (World Bank)
SWIM	Systemwide Initiative on Water Management (CGIAR)
T&V	Training and visit extension system
TAC	Technical Advisory Council (CGIAR)
TDR	Special Programme for Research and Training in Tropical Diseases
TF	Trust funds administered by the World Bank
TFO	Trust Funds Operations Department (World Bank)
TRIPS	Trade-Related Intellectual Property Rights (WTO)
TSR	Third System Review (CGIAR)
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
USAID	United States Agency for International Development
VP	Vice-Presidency (World Bank)
VPU	Vice-Presidential Unit (World Bank)
WARDA	West Africa Rice Development Association
WBI	World Bank Institute
WTO	World Trade Organization

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## Preface

This report on the Consultative Group on International Agricultural Research (CGIAR) is part of an independent review by the Operations Evaluation Department (OED) of the World Bank's involvement in global programs. The first phase has been published – *The World Bank's Approach to Global Programs: An Independent Evaluation, Phase 1 Report* (OED, Washington D.C., 2002). The second phase, due in FY 2004, involves case studies of 27 programs of which the CGIAR is one.

**Why evaluate the CGIAR?** The inclusion of the CGIAR evaluation in the OED review of the Bank's global programs was requested by the Development Grant Facility (DGF) and Bank Management in June 2001, and endorsed by OED's global program advisory committee. The CGIAR was the first program providing global public goods to receive grants from the Bank's net income. It currently faces increasing competition for the 40 percent share that it receives of DGF funds going to global programs. The CGIAR has a special status because it is exempt from the normal DGF requirements that it have an exit strategy from DGF funding and an arm's-length relationship with the Bank. Over the years, the DGF has also expressed concerns that the CGIAR is not mobilizing sufficient finance from other sources, not partnering actively with the private sector and other key actors in the global research system, nor containing the costs of its Secretariat, sharing those costs with other donors, and establishing adequate linkages to World Bank country operations.

**Why a meta-evaluation?** The CGIAR has an impressive tradition of self-assessments unmatched by other major research systems (even in industrial countries) through External Program and Management Reviews (EPMRs), inter-Center reviews, and System-wide, issue-specific reviews. These assessments, often involving outside reviewers, have focused on the CGIAR's 16 international research Centers or on cross-cutting thematic issues. They have been managed by the CGIAR's Technical Advisory Committee (now the interim Science Council) and the CGIAR Secretariat. The CGIAR has also contributed to a substantial literature focusing on the impacts of its commodity Centers' germplasm research.

But evaluations have been few and far between at the level of the *System as whole*. The Third System Review (TSR) was completed in 1998, 17 years after the previous System-level review. System-level reviews have been managed by the CGIAR Secretariat and reported to the CGIAR Chairman. The TSR, carried out by a distinguished panel headed by Maurice Strong, drew from internal experts intimately knowledgeable about the CGIAR and from outsiders bringing fresh scientific and strategic perspectives. Yet it engendered little ownership from the membership and had little impact on the System. A few System-level reviews have been undertaken by specific donors, such as Anderson and Dalrymple (1999) for the World Bank. Other donors, such as Denmark and IFAD, have also undertaken reviews of their own involvement in the CGIAR. In view of the CGIAR's history of limited System-level reviews, the former Director-General of OED, Robert Picciotto, proposed an external independent "blue ribbon" commission appointed by the World Bank President to evaluate the CGIAR. The proposal was not taken up because the CGIAR had shown little receptivity to past System-level external reviews and had just initiated a Change Design and Management Process (CDMP). Therefore, given the number of previous evaluations and its own limited resources, OED determined that a meta-evaluation would most effectively assess CGIAR performance and inform OED's overall review of the Bank's involvement in global programs.

**Evaluation objectives.** This meta-evaluation is based on a review of previous reviews and impact assessments. In brief, its objectives are to:

- Evaluate the implementation of recommendations made in OED's 1998 *Process Review of the World Bank Grant Programs* relevant to the CGIAR, including an assessment of subsidiarity, arm's-length relationship with the Bank, and exit strategy

- Review the diagnosis, findings, and recommendations made by relevant previous CGIAR evaluations relating to the CGIAR's structure, governance, financing, and scientific strategy
- Identify issues confronting the CGIAR from a forward-looking perspective
- Consider the recent recommendations of the CGIAR Change Design and Management Team from the standpoint of previous evaluations, including the TSR
- Draw lessons for the Bank's overall strategy for global public policies and programs, and for the CGIAR – for developing and disseminating technologies for agriculture and natural resource management to reduce poverty and achieve sustainable development through productivity growth.

The focus of the review is on the Bank and on the strategic role it has played, and might ideally play in the future, to ensure the CGIAR's development effectiveness. Yet it is difficult to evaluate the role of one partner without assessing the performance and impact of the whole CGIAR partnership, particularly when the partner being evaluated plays a pivotal role. Moreover, it is difficult to assess the Bank's role without assessing the strategic responses of other partners to the Bank's decisions and vice versa. Accordingly, the meta-evaluation secured the perspectives of key actors who hold different views of the partnership and who have responded differently to changes in the CGIAR.

**Evaluation scope and tools.** The meta-evaluation is based on a comprehensive desk review, five Working Papers prepared by independent scholars: B. Gardner "Global Public Goods from the CGIAR: An Impact Assessment," C. B. Barrett, "Natural Resources Management Research in the CGIAR: A Meta-Evaluation," W. Lesser, "Reviews of Biotechnology, Genetic Resource and Intellectual Property Rights Programs," D. J. Spielman, "International Agricultural Research and the Role of the Private Sector," and C. K. Eicher and M. Rukuni, "The CGIAR in Africa: Past, Present, and Future." In addition, two CGIAR clients (Brazil and India) prepared country Working Papers: J. Macedo, M. C. M. Porto, E. Contini, and A. F. D. Avila, "Brazil Country Paper for the CGIAR Meta-Evaluation," and J.C. Katyal and Mruthyunjaya, "CGIAR Effectiveness – NARS Perspective." And two other clients (Kenya, Colombia) prepared country Background Papers: L. Romano, "Colombia Country Paper for the CGIAR Meta-Evaluation," C. Ndiritu, "CGIAR-NARS Partnership: The Case of Kenya." A background note was also commissioned on the Change Design and Management Process. In addition, the meta-evaluation team conducted extensive consultations with CGIAR, two of the three co-sponsors (FAO and IFAD), donors (USAID, SDC, DFID, Denmark, Germany, and the European Union), and private sector representatives and developing country nationals, and a formal survey of 235 CGIAR insiders and observers. (See Appendices 4, 5, and 6.)

The meta-evaluation report is in three volumes. The *Overview Report (Volume 1)* addresses strategic questions regarding the organization, financing, and management of the CGIAR as these have affected research choices, science quality, and the Bank's relationship to the CGIAR. The *Technical Report (Volume 2)* explores the nature, scope, and quality of the System's scientific work, assesses the scope and results of the reviews, and analyzes the governance, finance, and management in the CGIAR. The *Annexes (Volume 3)* provide supporting materials and are available on request.

**Evaluation review process.** An external advisory committee consisting of Yujiro Hayami, Michael Lipton, and Harris Mule offered guidance to the meta-evaluation team. The CGIAR Chairman and Bank staff commented on the first draft report. A Technical Briefing was given to the Bank's Board of Directors on September 11, 2002. A second draft was sent jointly by the OED Director-General and the CGIAR Chairman to the Directors-General of the 16 CGIAR Centers for technical comment. A brief presentation of key findings was made to, and comments received from, the general membership at the CGIAR's Annual General Meeting on November 1, 2002. Inputs from all consultations are reflected in this report.

## Acknowledgments

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The willingness of so many to take time from their busy schedules to share views with the meta-evaluation team testifies to their deep commitment to the ideals the CGIAR represents.



## Annex A: CGIAR Timeline: Key People and Events

### CGIAR Timeline, 1969 to 2002

Year	Event
1969-71	Pre-founding meetings held in Bellagio, Italy
1971	First formal meeting of the Consultative Group for International Agricultural Research, presided over by Richard H. Demuth, director of the World Bank's Development Services Department and first CGIAR Chairman, in Washington, D.C., May 19, 1971
1974	Warren Baum becomes CGIAR Chairman
1975	First developing country members join CGIAR (Nigeria and Saudi Arabia)
1977	First System Review of the CGIAR
1981	Second System Review of the CGIAR
1983	CGIAR begins conducting external management reviews CGIAR begins conducting impact studies
1984	S. Shahid Hussain becomes CGIAR Chairman
1987	David Hopper becomes CGIAR Chairman Review of CGIAR Secretariat conducted
1988	Review of TAC Secretariat conducted "Expansion inquiry" initiated by the CGIAR
1989	Canberra Declaration expands CGIAR's commitment to forestry and forest resources
1990	Wilfried Thalwitz becomes CGIAR Chairman
1991	Expansion of CGIAR through inclusion of natural resources Centers begins V. Rajagopalan becomes CGIAR Chairman CGIAR endorses TAC-recommended ecoregional approach IAD conducts audit of CGIAR (World Bank)
1992	Ecoregional and Systemwide programs introduced
1993	Financial crisis (U.S. and others cut funding for domestic reasons)  Consortium for the Sustainable Development of the Andean Region (CONDESAN) is first Ecoregional Program Oversight and Finance Committees established  Chairman commissions TAC restructuring study

Year	Event
1994	<p>Ismail Serageldin becomes CGIAR Chairman  Renewal Process initiated  Vision Panel, Strategy and Structure Panel established  GRPC established  ILCA and ILRAD merge to become ILRI  INIBAP folded into IPGRI</p>
1995	<p>Ministerial-level meeting held in Lucerne, Switzerland; Lucerne Declaration Reaffirms donor support to CGIAR, endorses focus on poverty, sustainability, food security, and calls for broadened partnerships and increased attention to impact</p> <p>Financial reforms and stabilization take place</p> <ul style="list-style-type: none"> <li>• CGIAR changes formula for allocation of World Bank resources</li> <li>• Group adopts Matrix as tool for resource allocation</li> <li>• Group broadens definition of Agreed Agenda</li> <li>• World Bank provides \$20 million emergency financial support</li> </ul> <p>Developing country membership begins to increase significantly</p> <p>NGO and Private Sector Committees established  Impact Assessment and Evaluation Group established</p> <p>IAD conducts audit of CGIAR (World Bank)  UNEP becomes cosponsor</p>
1997	<p>CGIAR commissions Third System Review  First Annual Impacts Report presented by IAEG  Developing country members outnumber industrialized country members</p>
1998	<p>Third System Review of the CGIAR completed</p> <p>Group expands mission to formally include poverty alleviation; Group endorses Third System Review recommendation for Integrated Gene Management and Integrated Natural Resources Management as twin pillars of CGIAR research, rejects creation of a central board with legal status</p> <p>Consultative Council established  SPIA, Science Partnership Committee (SPC) established  Future Harvest Foundation launched</p>
1999	<p>Follow-up to Third System Review officially ends</p> <p>CGIAR begins internal reform process, commissioning TAC to outline new vision and strategy</p>

<b>Year</b>	<b>Event</b>
2000	<p>Ian Johnson becomes CGIAR Chairman</p> <p>Consultative Council phased out</p> <p>TAC presents and Group endorses draft vision and strategy</p> <p>CBC/CDC issue Federation proposal</p> <p>Synthesis Group issues report integrating various inputs for reform</p> <p>CGIAR commissions Change Design and Management Team</p> <p>UNEP withdraws from cosponsor position</p>
2001	<p>Change Design and Management Team established</p> <p>CDMT presents proposals for change</p> <p>SPC, Oversight Committee, and Finance Committees dissolved</p> <p>Interim EXCO established, followed by establishment of EXCO and its Program Committee and Finance Committee</p> <p>Interim Science Council established</p> <p>Phase 1 of Challenge Programs initiated</p> <p>IFAD becomes cosponsor</p>

**CGIAR Membership, 1971 to Present**

<b>Date Joined</b>	<b>Members<sup>a, b</sup></b>	<b>Cumulative number of members</b>
1971	Belgium, Canada, Denmark, France, Germany, Netherlands, Norway, Sweden, Switzerland, United Kingdom, United States, Asian Development Bank, FAO, Inter-American Development Bank, International Development Research Center, United Nations Development Programme, World Bank, Ford Foundation, W.K. Kellogg Foundation, Rockefeller Foundation	20
1972	Australia, Japan	22
1975	Italy, Nigeria, Saudi Arabia <sup>c</sup>	25
1976	New Zealand	26
1977	Arab Fund for Economic and Social Development, Commission of the European Communities	28
1978	African Development Bank	29
1979	Ireland, International Fund for Agricultural Development	31
1980	Mexico, Philippines, OPEC Fund for International Development	34
1981	India, Spain, Leverhulme Foundation (Br.) <sup>c</sup>	37
1984	Brazil, China, Finland	40
1985	Austria	41
1991	Luxembourg, Korea	42
1993	Indonesia	43
1994	Russian Federation, Colombia	45
1995	Bangladesh, Egypt, Iran, Kenya, Romania, Syria, United Nations Environment Programme	52
1996	Côte d'Ivoire	53
1997	Pakistan, Republic of South Africa, Portugal, Peru, Thailand	58
1998	Uganda	58

a. The members of the CGIAR are international organizations, governments, and private foundations that support the mission of the CGIAR, participate in policy making, and provide support for the conduct of research at the 16 international Centers. Members are expected to contribute a minimum of \$500,000 annually to the research activities of the CGIAR.

b. The members will be asked to endorse Israel, Morocco, Syngenta Foundation for Sustainable Development, and the Gulf Cooperation Council as members at AGM02.

c. The Leverhulme Foundation left the CGIAR in 1989, and Saudi Arabia in 1998.

**CGIAR Leadership and Management, 1971 to Present**

CGIAR Chairman	Tenure
Richard Demuth	1971-1973
Warren Baum	1974-1983
S. Shahid Hussain	1984-1987
David Hopper	1987-1990
Wilfried Thalwitz	1990-1991
V. Rajagopalan	1991-1993
Ismail Serageldin	1994-2000
Ian Johnson	2000-

CGIAR Director	Tenure
Francisco Reifschneider	2001-

CGIAR Executive Secretary	Tenure
Harold Graves	1972-1975
Michael Lejeune	1975-1982
Curtis Farrar	1982-1989
Alexander von der Osten	1989-2001

TAC Chair	Tenure
Sir John Crawford	1971-1976
Ralph Cummings	1977-1982
Guy Camus	1982-1987
Alex McCalla	1988-1994
Donald Winkelmann	1994-1999
Emil Q. Javier	2000-

TAC Executive Secretary	Tenure
Peter Oram	1971-1976
Philippe Mahler	1976-1982
Alexander von der Osten	1982-1985
John Monyo	1985-1994
Guido Gryseels	1995-1996
Shelleemiah Keya	1996-

Director, Ag/Rural Dev. (World Bank)	Tenure
L.J.C. Evans	1971-1973
Montague Yudelman	1973-1986
Edward Schuh	1986-1989
Michel Petit	1989-1998
Alexander McCalla	1999-2000
Robert Thompson	2000-2001
Kevin Cleaver	2001-

### CGIAR Centers, 1971 to Present

Center	Joined CGIAR	Mandate
<b>Commodity-oriented Centers <sup>a</sup></b>		
CIMMYT	1971	Wheat, maize, triticale
IRRI	1971	Rice and rice-based ecosystems
CIP	1973	Potato, sweet potato
WARDA	1975	Rice production in West Africa
ILRI <sup>b</sup>	1995	Livestock diseases; cattle, sheep, goats; feed and production systems
<b>Ecoregional Centers <sup>c</sup></b>		
CIAT	1971	Beans, cassava, tropical forages, rice; hillsides, forest margins, savannas
IITA	1971	Soybean, maize, cassava, cowpea, banana, plantain, yams; sustainable production systems for the humid lowland tropics
ICRISAT	1972	Sorghum, pearl millet, finger millet, chickpea, pigeon pea, groundnut; sustainable production systems for the semi-arid tropics
ICARDA	1975	Barley, lentil, faba bean, durum and bread wheats, chickpea, pasture and forage legumes; small ruminants; on-farm water management; rangelands
<b>Natural resource management Centers</b>		
ICRAF	1991	Agroforestry; multi-purpose trees
IWMI	1991	Irrigation and water resources management
ICLARM	1992	Sustainable aquatic resources management
CIFOR	1993	Sustainable forestry management
<b>Policy and capacity- building Centers</b>		
IPGRI <sup>d</sup>	1974	Plant genetic resources of crops and forages; collection and gene pool conservation
IFPRI	1980	Socio-economic research related to agricultural development
ISNAR	1980	Strengthening national agricultural research systems

a. While these Centers focus principally on the enhancement of genetic resources, they also undertake research in natural resource management and in farming systems improvement, as they have been forced to confront the limits of production systems.

b. While ILRI was created from the merger of ILRAD and ILCA in 1995, ILRAD had been established in 1973 and ILCA in 1974.

c. These Centers were created with regional (and in some cases also global) mandates. They undertake both germplasm enhancement and natural resources management research.

d. While TAC/SC classifies IPGRI as a natural resources Center, its work may also be classified as relating to policy research. Hence, the meta-evaluation team has chosen to classify it as such.

## Annex B: The Evolution of the CGIAR Mission Statement

The CGIAR's original mission statement was **"... to support research and technology that can potentially increase food production in the food-deficit countries of the world"** (First System Review, 1977).

In the CGIAR's 1984 Annual Report, the program's articulated purpose was still very much focused on improving food production in developing countries (CGIAR Secretariat 1984). In the mid-1980s, the mission statement was amended to, for the first time, include the notion of sustainability. It read **"... to contribute to increasing sustainable food production in developing countries in such a way that the nutritional levels and general economic well-being of low income people is improved"** (TAC37 Los Baños; TAC Review of CGIAR Priorities and Future Strategies, 1985)

Then, in 1990, TAC's report on System expansion also included a recommendation to amend the mission statement to read **"... in partnership with national research systems, to contribute to sustainable improvements in the productivity of agriculture, forestry and fisheries in developing countries in ways that enhance nutrition and well-being, especially of low-income people"** (ICW90 Summary of Decisions and Proceedings; MTM92 Istanbul; TAC Review of CGIAR Priorities and Strategies, Part I).

As part of the renewal process, the CGIAR's mission statement was once again updated: **"... to contribute, through its research, to promoting sustainable agriculture for food security in the developing countries"** (Ministerial-Level Meeting, Lucerne, 1995).

The Third System Review in 1998 recommended formal amendment of the mission statement to include explicit reference to poverty and environmental sustainability. The Group responded with a decision to change the statement to read: **"... to contribute to food security and poverty eradication in developing countries through research, partnership, capacity building, and policy support, promoting sustainable agricultural development based on the environmentally sound management of natural resources"** (ICW98, Washington).

## Annex C: The Evolution of the CGIAR Centers

**The CGIAR Centers as of 2002.** The CGIAR currently supports 16 international agricultural research Centers (IARC), located in 15 countries (see Figure 2.1 for a map of all Centers), as follows:

- **Centro Internacional de Agricultura Tropical (CIAT)**, Cali, Colombia. Founded in 1967. Crops: beans, cassava, tropical forages, rice; Agroecosystems: hillsides, forest margins, savannas, fragile African and Asian environments ([www.cgiar.ciat.org](http://www.cgiar.ciat.org)).
- **Center for International Forestry Research (CIFOR)**, Bogor Barat, Indonesia. Founded in 1992. Sustainable forestry management ([www.cifor.org](http://www.cifor.org)).
- **Centro Internacional de Mejoramiento de Maíz y Trigo (CIMMYT)**, Mexico City, Mexico. Founded in 1966. Crops: wheat, maize, triticale ([www.cimmyt.org](http://www.cimmyt.org)).
- **Centro Internacional de la Papa (CIP)**, Lima, Peru. Founded in 1971. Crops: potato, sweet potato ([www.cipotato.org](http://www.cipotato.org)).
- **International Center for Agricultural Research in the Dry Areas (ICARDA)**, Aleppo, Syria. Founded in 1977. Crops: wheat barley, chickpea, lentil, pasture, and forage legumes; livestock: small ruminants ([www.icarda.org](http://www.icarda.org)).
- **International Center for Living Aquatic Resources Management (ICLARM)**, Penang, Malaysia. Founded in 1977. Sustainable aquatic resource management ([www.iclarm.org](http://www.iclarm.org)).
- **International Centre for Research in Agroforestry (ICRAF)**, Nairobi, Kenya. Founded in 1977. Agroforestry; multi-purpose trees ([www.icraf.org](http://www.icraf.org)).
- **International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)**, Patancheru, India. Founded in 1972. Crops: sorghum, pearl millet, finger millet, chickpea, pigeon pea, and groundnut; sustainable production systems for the semi-arid tropics ([www.icrisat.org](http://www.icrisat.org)).
- **International Food Policy Research Institute (IFPRI)**, Washington, D.C., USA. Founded in 1975. Food policy; socio-economic research related to agricultural development ([www.ifpri.org](http://www.ifpri.org)).
- **International Institute of Tropical Agriculture (IITA)**, Ibadan, Nigeria. Founded in 1967. Crops: soybean, maize, cassava, cowpea, banana, plantain, yams; sustainable production systems for the humid lowland tropics ([www.iita.org](http://www.iita.org)).
- **International Livestock Research Institute (ILRI)**, Nairobi, Kenya. Founded in 1995. Livestock diseases; cattle, sheep and goats; feed and production systems ([www.cgiar.org/ilri](http://www.cgiar.org/ilri)).
- **International Plant Genetic Resources Institute (IPGRI)**, Rome, Italy. Founded in 1974. Plant genetic resources of crops and forages; collection and gene pool conservation ([www.ipgri.org](http://www.ipgri.org)).
- **International Rice Research Institute (IRRI)**, Los Baños, Philippines. Founded in 1960. Rice and rice-based ecosystems ([www.irri.org](http://www.irri.org)).
- **International Service for National Agricultural Research (ISNAR)**, The Hague, the Netherlands. Founded in 1979. Strengthening national agricultural research systems ([www.isnar.cgiar.org](http://www.isnar.cgiar.org)).
- **International Water Management Institute (IWMI)**, Colombo, Sri Lanka. Founded in 1984. Irrigation and water resources management ([www.cgiar.org/iwmi](http://www.cgiar.org/iwmi)).
- **West Africa Rice Development Association (WARDA)**, Bouaké, Côte d'Ivoire. Founded in 1970. Rice production in West Africa ([www.warda.org](http://www.warda.org)).

**Original four Centers.** When the CGIAR was founded in 1971, it incorporated under its umbrella four existing IARCs created by the Ford and Rockefeller Foundations, as follows:

**Table C.1. Original Members of the System, Founded Before the CGIAR**

Center	Established	Joined CGIAR
International Rice Research Institute (IRRI)	1960	1971
Centro Internacional de Mejoramiento de Maiz y Trigo (CIMMYT)	1966	1971
International Institute for Tropical Agriculture (IITA)	1967	1971
Centro Internacional de Agricultura Tropical (CIAT)	1967	1971

Source: CGIAR, *Our Research Centers*, accessed at URL: [www.cgiar.org/who/www\\_ctrchronology.html](http://www.cgiar.org/who/www_ctrchronology.html), February 15, 2002.

**From 4 to 13 Centers.** In keeping with the sentiments of the CGIAR's founding declaration, which stated that "account will be taken not only of technical, but also of ecological, economic, and social factors," the CGIAR expanded its activity base over its first decade. As the scope of research widened, the number of CGIAR Centers grew as well.<sup>1</sup> In 1980, the CGIAR supported 13 Centers. Indeed, this was a time of general expansion of the System, as the number of members and the overall budget grew considerably.<sup>2</sup> (See Chapter 9 and Annex E).

**Table C.2. Centers Founded or Adopted by the CGIAR, to Broaden the System, After 1971**

Center	Established	Joined CGIAR
International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)	1972	1972
Centro Internacional de la Papa (CIP)	1970	1973
International Laboratory for Research on Animal Diseases (ILRAD)	1973	1973
International Livestock Center for Africa (ILCA)	1974	1974
International Board on Plant Genetic Resources (IBPGR) <sup>3</sup>	1974	1974
West Africa Rice Development Association (WARDA)	1970	1975
International Center for Agricultural Research in the Dry Areas (ICARDA)	1975	1975
International Service for National Agricultural Research (ISNAR)	1980	1980
International Food Policy Research Institute (IFPRI)	1974	1980

Source: CGIAR, *Our Research Centers*, accessed at URL: [www.cgiar.org/who/www\\_ctrchronology.html](http://www.cgiar.org/who/www_ctrchronology.html), February 15, 2002.

**From 13 to 18 Centers.** At the Consultative Group Meeting in May 1988, under the chairmanship of David Hopper, the Group discussed for the first time since 1978 the relationship between the CGIAR and other IARCs not under its umbrella ("non-associated centers"). The discussion was largely framed by the issue of how to address the challenges of achieving environmentally sustainable agricultural production, and how to incorporate forestry/agroforestry into the CGIAR, as the Group had agreed to do in its Canberra Declaration of 1989. The meeting ended with an agreement to launch an examination of

1. CGIAR, *Who We Are: History of the CGIAR*, accessed at ([www.cgiar.org/who/www\\_history.html](http://www.cgiar.org/who/www_history.html)), February 15, 2002.

2. Membership grew from 19 in 1971 to 33 in 1980. See CGIAR, *Our Research Centers*, accessed at URL: [www.cgiar.org/who/www\\_ctrchronology.html](http://www.cgiar.org/who/www_ctrchronology.html), February 15, 2002.

3. Name subsequently changed to the International Plant Genetic Resources Institute.

the potential for expanding the System to include a number of non-associated centers. Under a separate agenda item, the Group also endorsed the need for a program of research on vegetables.<sup>4</sup>

After more than two years of work, in September 1990, TAC presented its assessment of 10 non-associated centers and its recommendations concerning their inclusion in the CGIAR.<sup>5</sup> The CGIAR, led by TAC, undertook a simultaneous assessment of potential strategies for agroforestry and forestry research. The Centers examined included:

- Asian Vegetable Research and Development Center (AVRDC)
- International Center for Living Aquatic Resources Management (ICLARM)
- International Irrigation Management Institute (IIMI)
- International Network for the Improvement of Banana and Plantain (INIBAP)
- International Centre for Research in Agroforestry (ICRAF)
- International Union of Forest Research Organizations – Special Program for Developing Countries (IUFRO/SPDC)
- International Centre of Insect Physiology and Ecology (ICIPE)
- Centre de Recherche sur les Trypanosomes Animaux (CRTA)
- International Board for Soil Research and Management (IBSRAM)
- International Fertilizer Development Center (IFDC)

TAC's analysis was based on an examination of the need for expansion, focusing on the global context in which the CGIAR was likely to operate in the future. This included future trends in agriculture and forestry, as well as implications for each of the major developing regions. In assessing each of the non-associated centers, TAC employed a common set of guiding principles and specific criteria.<sup>6</sup>

Based on its analysis, TAC recommended AVRDC, ICLARM, and IIMI for inclusion in the CGIAR. Further, it advised that INIBAP should become an integral, but distinct component of IITA's banana and plantain program. TAC found that ICRAF, in its current form, was not recommended for inclusion; however, a modified ICRAF could play a useful role in the proposed CGIAR forestry/agroforestry program. Where forestry and agroforestry were concerned, TAC argued for a single center to address the related topics. Specifically, TAC concluded that the most effective way of dealing with priority forestry and "trees in land use" issues of concern within the CGIAR mission is to develop an integrated forestry/agroforestry approach. It believes that such an approach would be more effective in addressing the underlying causes of tropical deforestation than establishing separate forestry and agroforestry centers, since the problems associated with deforestation can only be addressed effectively with an approach that involves close interaction between agriculture, agroforestry, and forestry.<sup>7</sup> (See Chapter 9.)

TAC saw the potential expansion of the CGIAR as a starting point for broader institutional and programmatic restructuring. In addition to its recommendations on the non-associated centers, TAC's report also proposed a medium-term strategy for the CGIAR consisting of two levels of activity:

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4. CGIAR Secretariat, 1998, Consultative Group Meeting, May 16-20, 1998, *Main Conclusions Reached and Decisions Taken*.

5. TAC Secretariat, 1990, *A Possible Expansion of the CGIAR*.

6. TAC Secretariat 1990, *A Possible Expansion of the CGIAR*.

7. TAC Secretariat, 1990, *A Possible Expansion of the CGIAR*.

global and “ecoregional” (see Annex I on reconfiguring the System), as well as new mission and goal statements for the System (see Annex B on evolving mission statements).<sup>8</sup>

At ICW90, the Group made several decisions after discussion of TAC’s expansion report. Specifically, it:

- Endorsed the concept of ecoregional activities within the CGIAR, and a request to TAC to elaborate their nature and mechanisms for carrying them out;
- Decided that two entities, ICRAF and a new institute to be developed by a working group [to become CIFOR], would cover agroforestry and forestry respectively, including coconuts;<sup>9</sup>
- Endorsed support for vegetables research, with a final decision to await political developments involving China;<sup>10</sup>
- Agreed that IBSRAM, IFDC, and ICIPE were not approved for CGIAR support;
- Decided that ICLARM would be considered for adoption by the CGIAR following external reviews;
- Offered support to IIMI on an unconditional basis;
- Decided INIBAP would be supported as an independent entity, to collaborate with IITA; and
- Deferred a decision on ITC pending completion of the Winrock International study of livestock in Africa.

**Table C.3. Centers Founded/Adopted by the CGIAR to Strengthen its Mission, After 1990**

Center	Established	Joined CGIAR
International Centre for Research in Agroforestry (ICRAF)	1977	1991
International Irrigation Management Institute (IIMI) <sup>11</sup>	1984	1991
International Center for Living Aquatic Resources Management (ICLARM)	1977	1992
International Network for the Improvement of Banana and Plantain (INIBAP)	1984	1992
Center for International Forestry Research (CIFOR)	1993	1993

Source: CGIAR, *Our Research Centers*, accessed at URL: [www.cgiar.org/who/www\\_ctrchronology.html](http://www.cgiar.org/who/www_ctrchronology.html), February 15, 2002.

While TAC had been charged with undertaking its assessment of the potential for expanding the System during David Hopper’s tenure as CGIAR Chair, the process was completed under a new Chair, Wilfred Thalwitz. In an interview with the meta-evaluation team, Thalwitz expressed that he did not agree with the decision to expand, as the System would be stretching itself too thin and

8. CGIAR Secretariat 1990, CGIAR International Centers Week 1990, *Summary of Proceedings and Decisions*.

9. TAC’s view that forestry and agroforestry should be regarded as a continuum was generally supported. The recommendation that the CGIAR should support a decentralized program was also endorsed. However, given a recent decision by ICRAF’s Board that it did not wish to take on additional responsibilities for forestry and its rejection of TAC’s suggested conditions for entry of ICRAF into the CGIAR System, the debate centered on alternative centralized mechanisms for forestry. During the Executive Session of donors that followed, a consensus emerged that a CGIAR program of work in forestry and agroforestry would most likely require two “entities” functioning in close collaboration with each other and with other stakeholders, including national and international institutions active in this area. The specific mandates of these two entities, and the division of labor between them, should be complementary, providing a coherent and efficient approach to global agroforestry/forestry research. The Group agreed that one of these entities should be ICRAF, with its mandate and strategy modified in terms of its relationship with the other “entity” (CGIAR Secretariat 1990, CGIAR International Centers Week 1990, *Summary of Proceedings and Decisions*).

10. Owing to political issues concerning Taiwan and China, AVRDC has not been adopted by the CGIAR.

11. Name subsequently changed to the International Water Management Institute.

risking venturing into areas beyond its comparative advantages. However, he had little choice but to continue the process due to political pressures.<sup>12</sup>

Indeed, with hindsight, many CGIAR stakeholders interviewed by the meta-evaluation team have questioned the soundness of the expansion decision. There was a general assumption that funding would increase with the inclusion of new centers, as well as with the creation of ecoregional programs promoted by TAC. In fact, for the most part, additional funds did not materialize, putting pressure on the existing Centers and high-payoff commodity improvement activities (see Annex E).

**From 18 to 16 Centers.** At MTM93, the Consultative Group wrestled with the issue of an effective institutional arrangement for banana and plantain activities within the CGIAR, noting the desire to effectively integrate related activities within CGIAR Centers and the high overhead costs of INIBAP, given its networking structure. Based in part on the suggestion of the TAC Chair, the Group decided that, rather than maintaining INIBAP as a stand-alone institution, its *musa* improvement activities, which should be the focus of CGIAR support to INIBAP, should be merged with IBPGR (now the International Plant Genetic Resources Institute, IPGRI).<sup>13</sup>

Also at MTM93, the Group continued its discussion of priorities and strategies for livestock research.<sup>14</sup> At that time, the CGIAR supported two livestock-related Centers: ILCA, a regional center for Africa, and ILRAD, which focused on animal diseases. In leading the MTM discussion, the Chairman stated that the CGIAR was undertaking an evolutionary process to derive a long-term strategy for livestock research, and that the Group would need to address some basic questions, including:

- Should the CGIAR have a unified strategy to guide future research?
- What is the appropriate balance between global and continental investment in livestock research?
- What is likely to be the most effective institutional arrangement for future research?
- If new institutional arrangements are required, what is the pace at which changes should be made from existing arrangements?

The debate built upon a preliminary report prepared by TAC that was tabled at ICW92. A working group that facilitated TAC's work recommended that livestock research would "benefit from interaction between and among programs. A more visionary CGIAR approach would help to make livestock research more effective, to reduce overlaps, and mobilize more resources." The Working Group made several suggestions for improvement of the CGIAR's existing strategy. In plenary discussion at MTM, the TAC Chair built upon these suggestions, noted that livestock research should be "based on a unified strategy and vision, as well as on an integrated institutional arrangement" and outlined four institutional options:

- Status quo, "which was unacceptable";
- An inter-Center collaborative mechanism;
- A simple merger of ILCA and ILRAD; and

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12. Interview with Wilfred Thalwitz, January 11, 2002.

13. During the discussion, the Group also considered folding INIBAP in with IITA, which also conducts *musa* breeding for Africa.

14. For a more detailed description of the ILCA/ILRAD merger experience, see Chapter 9.

- TAC's preferred option; the establishment of a new global mechanism or center for livestock research with global responsibilities for strategic research in genetics, physiology, nutrition, and health.<sup>15</sup>

Ultimately, the Group reached consensus that livestock research in the CGIAR should be entrusted to a single entity. Other major points brought up during the discussion included the following:

- ILCA and ILRAD were commended for their positive reaction to the views expressed and were assured that they would continue to be vital components of livestock research in the CGIAR System.
- The work already done by both Centers and the linkages they had established should be preserved and integrated with future programs. Similarly, institutional changes should be undertaken with minimum discomfort to existing staff.
- Livestock research should be guided by a single vision. This requires a combination of effort by several Centers. At the same time, further examination of species, products, activities, and so on would be helpful.
- National research systems, with whom some linkages have already been established, are an essential component of a holistic approach. Their contributions should be fostered under the proposed new institutional arrangement.
- The arguments for and against maintaining resource allocations were debated, with a final view that no change is called for at present.
- Institutional and programmatic changes based on the Group's decisions should be introduced with as little delay as possible. This would provide for an effective transition period, maintain continuity of effort, and reflect the positive nature of the discussion. The need for a knowledgeable steering group to suggest and monitor transitional arrangements was strongly endorsed.<sup>16</sup>

Thus, the International Livestock Research Institute (ILRI) was formed in 1995, with a global mandate. The Center's headquarters are in Nairobi, in the former ILRAD campus. At the same time, ILCA's Addis Ababa facilities have been maintained as a regional office of ILRI.

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15. CGIAR Secretariat 1993, CGIAR Mid-Term Meeting 1993, *Summary of Proceedings and Decisions*.

16. CGIAR Secretariat 1993, CGIAR Mid-Term Meeting 1993, *Summary of Proceedings and Decisions*.

## Annex D: Governance, Organization, and Management of the CGIAR

### 1. BACKGROUND TO CGIAR GOVERNANCE AND MANAGEMENT

The CGIAR, established in 1971, is an association of public and private members supporting a network of international agricultural research centers. Because the CGIAR's governance and management systems have experienced significant change in recent years, we review here the objectives, functions, and procedures of each CGIAR component in both present and past forms. Descriptions of the CGIAR's governance and management systems are taken directly from CGIAR documents.<sup>1</sup>

**Governing principles.** The governance and management systems of the CGIAR are designed to further a mission that has remained consistent, though modified and reformulated on various occasions, since inception in 1971. Currently, the CGIAR's stated mission is to *contribute to food security and poverty eradication in developing countries through research, partnership, capacity building, and policy support, promoting sustainable agricultural development based on the environmentally sound management of natural resources*. To achieve this mission, the CGIAR functions as an informal association of independent actors. It has no constitution, by-laws, or written rules of procedure, nor has it direct authority over the international agricultural research centers (Centers) that undertake the essential work of the CGIAR. The CGIAR conducts business through meetings of the Group or through meetings of its Committees, and decisions within the CGIAR are made by consensus, not voting.

**Growth, change, and reform processes.** The initial contributions of the CGIAR in the 1970s and its expansion into new programmatic areas in the 1980s were followed by a period of strategic and financial uncertainty in the 1990s that affected the entire System. A renewal process initiated in May 1994 led to a reaffirmation of the CGIAR's critical role in international agricultural research at a Ministerial-level Meeting held in Lucerne, Switzerland in February 1995, and a number of key recommendations for programmatic, management and governance reform. An independent assessment of the CGIAR conducted in 1997-1998 under the auspices of the Third System Review provided detailed recommendations for strengthening existing mechanisms and systems and streamlining decision making to ensure dynamism and a greater sense of participation by stakeholders. A formal follow-up exercise on the review continued through 1999, until the CGIAR undertook a more internal exercise to determine its future vision and strategy. Analyses conducted by various CGIAR committees were presented to the Group in 2000, leading to the establishment of a Change Design and Management Team (CDMT). The CDMT set forth its proposals for change and reform in the CGIAR in April 2001 (see Annex J for further details on the CDMT's terms of reference, composition, and findings).

The CDMT recommendations call for the establishment of both new systems and bodies in the CGIAR, as well as restructuring of existing CGIAR systems and bodies. The emerging structure of the CGIAR is comprised of the following main components:

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1. See, *inter alia*, CGIAR Secretariat 2000, *Committees and Units of the CGIAR: Roles, Responsibilities and Procedures*; CGIAR, *Structure and Governance*, accessed at URL: [http://www.cgiar.org/who/www\\_governance.html](http://www.cgiar.org/who/www_governance.html), May 15, 2002; CGIAR Secretariat 2000, Summary of Proceedings and Decisions, CGIAR Mid-Term Meeting, Dresden, Germany, May 26-30, 2000 (Charting the CGIAR's Future - A New Vision for 2010). Washington, D.C.; CGIAR 2001g, "Draft IEC Recommendations on CGIAR Reform—An Integral Proposal," paper presented at the Annual General Meeting 2001, Washington, D.C., October 30-31, Washington, D.C.: CGIAR Secretariat.

- The Consultative Group and its members (the “Group”);
- The international agricultural research centers (the “Centers”);
- The CGIAR Executive Council (the “ExCo”) and its committees;
- The advisory bodies, consisting of the CGIAR Science Council and Genetic Resources Policy Committee, (the “SC” and “GRPC,” respectively);
- The Partnership and Center Committees (collectively, the “Committees”);
- The Challenge Programs (the “CPs”); and
- The CGIAR Systems Office, including the CGIAR and SC Secretariats and the Future Harvest Foundation.

## 2. MEMBERSHIP AND LEADERSHIP IN THE CGIAR

**The Group: membership and leadership.** CGIAR members include representatives of the governments of industrialized, developing and transition countries, foundations, and international and regional organizations. The first CGIAR meeting was held at the World Bank on May 19, 1971, where representatives of 18 governments and organizations attended as members and 10 as observers, although none were from developing countries. Today, the Group has a stronger South-North identity, with 22 members representing governments of developing countries and 21 representing industrialized countries, in addition to 3 private foundations and 12 international and regional institutions. Membership in the Group is open to any government or agency that supports the CGIAR mission, is willing to participate in shaping a research agenda based on that mission, and provides financial support for the Centers to implement the research agenda. Although there is no formally required contribution for membership, there is a tradition of a minimum annual contribution of \$500,000.

The Group was originally sponsored by the FAO, UNDP, and World Bank to impart international legitimacy and an assurance of continuity to the CGIAR. UNEP joined as a cosponsor in 1995, but withdrew from this role in 2000. IFAD became a cosponsor in 2001. The Cosponsors’ functions are to finance the operations of key CGIAR components, including the CGIAR System Office and ExCo (described below), and to forward nominations for key positions to the Group.

The CGIAR Chairman is nominated by the President of the World Bank, in consultation with the CGIAR, from among the Bank’s vice presidents, generally the Vice President overseeing the Bank’s sectoral work on agriculture. The Group formally endorses the nomination. The CGIAR Chairman provides intellectual and managerial leadership to the Group and ensures that the interplay among multiple actors in the System is productive and harmonious, thus preserving the coherence, relevance, and vitality of the System.

**The International Agricultural Research Centers.** The 16 CGIAR Centers function as independent international institutions, each governed by an independent board of trustees. The first four Centers—CIAT (headquartered in Colombia, for tropical agriculture), CIMMYT (Mexico, maize and wheat), IITA (Nigeria, tropical agriculture), and IRRI (the Philippines, rice)—were established by the Ford and Rockefeller Foundations prior to the CGIAR’s inception, and have since been joined by other Centers located in various developing and industrialized countries. (Organizational structures and reform processes of the Centers are treated in detail in Annex C.)

The CGIAR Secretariat (discussed below) annually canvasses the members of the CGIAR for nominations to fill vacancies on Center boards, as specified by each board’s nominating committee. The Secretariat forwards the names submitted, supplemented by names from the CGIAR’s Candidate Information System database and the Secretariat’s own records, to the nominating committees, which select candidate(s) for approval by the board. These names are circulated by the CGIAR Secretariat to the Group for approval on a no-objection basis. CGIAR-nominated members of Center boards serve in

their personal capacities, and their terms of appointment are the same as those of at-large members. The by-laws of most Centers require that a specified number of board members be appointed by the CGIAR.

### 3. CGIAR GOVERNANCE AND MANAGEMENT SYSTEMS

**The Executive Council.** One of the CDMT's critical recommendations was the creation of an ExCo to carry out functions delegated by the Group between its annual general meetings. The initial decision to pursue this recommendation and form the ExCo was taken by the CGIAR in MTM 01. Prior to formally establishing the ExCo and appointing its members at AGM 01, the CGIAR appointed an Interim Executive Council (iExCo) to facilitate implementation of the ExCo and other key change design and management initiatives.

The iExCo functioned from May to October 2001 and consisted of the Cosponsors, the CGIAR director, members of the Oversight and Finance Committees, and the Chairs of the Committee of Board Chairs, Center Directors Committee, Technical Advisory Committee, NGO Committee, Private Sector Committee, and the Global Forum on Agricultural Research. The iExCo's recommendations for the ExCo's rules of procedures, and the responses from the Group noted on record at AGM 01, constitute the key documents guiding the ExCo's terms of reference.<sup>2</sup>

The ExCo is a representative body appointed by the CGIAR to facilitate CGIAR decisions, carry out certain delegated functions and follow-up actions arising out of its annual meeting. According to the iExCo proposal, the ExCo is responsible for the following functions:

#### *Goal Setting and Planning:*

- Coordination and oversight of the CGIAR-wide strategic and operational planning processes, as directed by the general body of the CGIAR (the "General Body");
- Recommendations to the General Body of the System's strategic and operational plans and the selection of CPs, drawing on inputs and advice from the SC and other stakeholders;
- Deciding on planning grants to assist in preparation of CPs;
- Recommendation to the General Body of policies and decisions on resource mobilization and allocation plans;
- Recommendation to the General Body of medium-term plans and annual financing plans for the System and its advisory and support units;
- Direction to the SC to provide scientific advice on programmatic and other Systemwide matters.

#### *Monitoring Implementation:*

- Supervision of the administrative actions arising out of the decisions of the General Body, including those pertaining to resource mobilization and allocation;
- Monitoring of the progress, quality, and effectiveness of CPs, with advice from the SC, for reporting to the General Body.

#### *Evaluation:*

- Oversight of evaluation activities on behalf of the General Body, with support from SC and the secretariats;

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2. CGIAR, "Stakeholder Meeting: Draft IEC Recommendations on CGIAR Reform—An Integrated Proposal," presented at the International Centers Week 2000, October 30-31, 2000, Washington, D.C.; and CGIAR, "Summary Record of Proceedings and Decisions," Annual General Meeting, October 30-November 1, 2000, Washington, D.C.

- Recommendations to the General Body on actions to be taken in the light of evaluations of the Performance and impact of the Centers and CPs.

*Self Governance:*

- Recommendation of key appointments to the general body; appointment of other Systemwide posts (e.g., Science Council and SPIA members, CGIAR-nominees on Center boards);
- Oversight of the work programs and performance of advisory and support units;
- Advice and counsel to the General Body on all other matters of Systemwide governance.

ExCo membership, as proposed by the iExCo and amended with input from the Group at AGM 01, is comprised as follows:

Selection of members will be by consultation, not voting, and only contributing CGIAR members will be eligible for selection. Rotating members will have a term of two years, with the proviso that initial members should be appointed to terms of varying length to ensure a balance between continuity and orderly rotation. ExCo members should represent diverse perspectives rather than fixed constituencies or countries. A balanced representation of perspectives (e.g., regional) should be sought in the selection and rotation of ExCo members. (See Annex J for the composition of ExCo.)

In addition to addressing membership issues, the iExCo outlined the key tasks and procedures of the ExCo, as follows:

- All ExCo decisions will be based on consensus, not voting.
- The ExCo will meet semi-annually or as frequently as necessary to discharge its responsibilities, either in person or electronically.
- ExCo meetings will be chaired by the CGIAR Chairman, while the CGIAR Director will serve as Executive Secretary.

**The Consultative Council.** Previously, many of these functions were charged to the Consultative Council, established *ad hoc* in 1998 to follow up on discussions generated from the Third System Review (1998). In recognition of the Consultative Council's constructive contribution to the CGIAR, the Chairman was empowered in 1999 to call the Consultative Council into session when required. The Consultative Council was composed based on the principles of (a) balanced representation with a provision for regular rotation; (b) inclusion of the Group's major constituencies, e.g., members, Centers, and Committees; and (c) recognition of member effort. The Chair of each major CGIAR standing and partnership committee served as *ex-officio* members of the Consultative Council, while the Committee of Board Chairs and the Center Directors Committee were represented *ex-officio* by their respective Chairs and one additional committee member each. In the context of the Change Management and Design Team's recommendations and proposals (see Annex J), the Consultative Council was phased out following ICW00.

**The Program and Finance Committees.** The ExCo was provided additional support from the Group with the decision at AGM01 to establish a Program Committee (PC) and a Finance Committee (FC), as committees of and reporting directly to the ExCo. The PC's purpose is to facilitate the ExCo's business by providing specialized and focused attention to the CGIAR's programs, to ensure their effectiveness and relevance.<sup>3</sup> The PC's functions are to

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3. Adapted from the Program Committee of the CGIAR Executive Council, Terms of Reference.

- Assist the ExCo in ensuring that due care and diligence are exercised in the operations of the CGIAR and the Centers, in cooperation with the FC, through a set of policies and instruments, including decision-making processes, that are conducive to an effective and efficient operation and, when warranted, to propose changes in existing policies and instruments to the ExCo;
- Maintain a watching brief on CGIAR efforts to assess the continuing relevance of the CGIAR's vision and strategy;
- Provide oversight of the planning guidance given to the Centers and Challenge Programs;
- Ensure that effective evaluation and impact assessment instruments are in place and functioning effectively in the System; and
- Carry out other activities as requested by the ExCo.

The PC consists of eight members, five of which come from within the ExCo. PC membership rotates every two years. At its first meeting, each PC elects one of its members as Chair from among those who are ExCo members, and another PC member as Vice Chair, both to serve for two years. The Vice Chair need not be an ExCo member. Further, the CGIAR Director nominates a member of the CGIAR Secretariat to serve as the PC Secretary. Appointment to the PC is as follows: (a) Members of the ExCo are asked to indicate their own interest to serve on the PC or nominate others from the CGIAR membership; (b) The CGIAR Chairman proposes a committee for endorsement by the ExCo, taking into account the nominations and the need for diversity and balanced representation; and (c) the CGIAR Chairman proposes the ExCo-endorsed committee for approval by the CGIAR.

The FC's purpose, similar to the PC's, is to provide advice and recommendations for efficient management of the Group's finances.<sup>4</sup> Specifically, the FC assists the ExCo by

- Ensuring due care and diligence in operations, in cooperation with the PC;
- Considering and making recommendations on CGIAR financial policies and procedures, including such issues as: types of funding, auditing practices, cost structures, indirect costs, Center financial management and control; procedures governing the administration of financial flows to Centers; and overheads;
- Following up on the findings of CGIAR-commissioned evaluations of Centers and CPs at the request of ExCo and in cooperation with the PC;
- Providing oversight of the System's long-term financial planning and associated resource mobilization efforts; and
- Carrying out other activities requested by the ExCo.

The FC is chaired by the World Bank. The composition of and appointments to the FC are structured in the same manner as the PC: eight members, five from the ExCo, two-year rotations, a Vice Chair selected by the FC from its members, and an appointment process based on ExCo nominations, subject to ExCo endorsement and Group approval.

*The Oversight and Finance Committees.* Previously, two standing committees—the Oversight and Finance Committees—advised the Group on programmatic strategies and financial management. Both were established in 1993. The Oversight Committee provided advice and recommendations to the CGIAR on key operational and strategic issues relevant to the System. The Finance Committee provided overall leadership for the efficient management of the Group's finances. Both committees provided findings and recommendations to the Group for its review and decision; neither was

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4. Adapted from the Finance Committee of the CGIAR Executive Council, Terms of Reference.

sanctioned to take independent decisions on behalf of the CGIAR. With the formation of the ExCo, both were dissolved.

The Oversight Committee consisted of six members serving in their personal capacities and nominated by the CGIAR Chairman following consultation with the CGIAR members and endorsement by the Group. Each member of the Oversight Committee served for a one-year term on a renewable basis. A member of the CGIAR Secretariat served as secretary to the Oversight Committee. Meetings were conducted at least twice a year.

The original Finance Committee consisted of 10 members, including the World Bank, which held permanent membership. Caucuses of CGIAR delegations nominated members to the original FC: two members were selected by and from among developing country members; six members were selected by and from among those industrial country members that, in the previous year, had contributed the equivalent of U.S. \$1 million or more to support Center activities included in the CGIAR's agreed research agenda; and one member was selected by the foundation and organization members. Membership was for a renewable three-year term, and appointments were made only after Oversight Committee appointments were complete to ensure fuller participation by the membership of the CGIAR. The original Finance Committee members nominated a Chair, whose appointment was ratified by the Group; a member of the CGIAR Secretariat served as secretary. Meetings were conducted at least twice a year. Unless otherwise indicated, meetings were only open to members.

#### 4. CGIAR ADVISORY BODIES

**The Science Council.** One of the ExCo's first decisions in November 2001 was to appoint an Interim SC (*iSC*) for 2002, made up of the existing members of its predecessor, the Technical Advisory Committee (TAC), who had not completed their maximum terms (six years) in 2001, in addition to the Chair of the SPIA and the former TAC Chair. The *iSC* was charged with fulfilling the SC's functions until the SC was inaugurated in January 2003, following submission of a detailed proposal for the transition to a permanent SC from a working group appointed by the ExCo.

The primary responsibilities of the SC (and, in the interim, the *iSC*) were to (a) serve as guardian of the relevance and quality of science in the CGIAR; and (b) advise the CGIAR on strategic scientific issues relevant to the Group's goals and mission. The SC was to assist the ExCo and its committees by providing them with scientific advice on the strategic framework and set priorities conducive to achieving CGIAR objectives. Specifically, the SC was to

- Conduct periodic assessments of global and regional trends, scientific challenges, and research opportunities;
- Prepare the planning context at the System level;
- Provide a critical review of System-level strategic plans and the CGIAR project portfolio;
- Review Challenge Program proposals and mount peer review mechanisms, as needed, to review the proposals; and
- Coordinate the CGIAR's science monitoring and evaluation (including oversight of the peer-review and other quality assurance mechanisms used by the Centers) as well as System-level impact assessment activities.

At AGM01, the Group recommended that (a) the SC's terms of reference be reconciled with the ExCo's Program Committee; and (b) the SC should continue TAC's present involvement with regional priority setting and strive to strengthen the regional fora by providing them with ideas.

The Proposal further states that the size and the range of skills required of SC members should be kept under review by the ExCo. In this context, search and selection of the SC Chair and members would be done through an open, global nomination process. The Cosponsors, serving as Nominating Committee, would submit a short list to the Executive Council, which in turn would make the final recommendation to the CGIAR. Serving on a full-time basis, the Chair would have a maximum five-year term, with an initial appointment of three years, which could be extended up to a total term of five years. A member's term would be for two years, renewable up to six years without further extension. The SC would adopt, as a principal *modus operandi*, the mobilization of global scientific expertise from both industrialized and developing countries as well as from the public and private sectors. (See Annex J for additional discussion of the Science Council.)

*Technical Advisory Committee.* The SC's predecessor, the Technical Advisory Committee (TAC), was established in 1971 to provide independent advice and judgments on strategic issues and the quality of the scientific programs supported by the CGIAR. Its key functions were to recommend research priorities and strategies to the CGIAR and ensure the quality of research supported by the Group and its relevance to the CGIAR's goals. TAC was also sanctioned to recommend the allocation of resources among Centers in the context of CGIAR-approved priorities and strategies.

TAC was composed of respected scientists and experts from developed and developing countries, and acted either as requested by the Group or on its own initiative. Up to 14 individuals formed the TAC membership and were appointed by the Group based on recommendations from the Cosponsors. Members served in their personal capacities for terms of two years or less, with membership renewable for up to six years. Typically, TAC's membership was equally divided between developing and developed countries.<sup>5</sup> The TAC Chair was responsible for TAC's operations and reported to the Group at its mid-term and annual meetings on key agenda items and other TAC activities not covered under other agenda items during these meetings. Members of the CGIAR could participate as observers in open sessions of TAC meetings. The TAC Secretariat (discussed in further detail below) was administered by FAO in Rome and funded by the Cosponsors.

A key component of the TAC was the Standing Panel on Impact Assessment (SPIA), established in 1998 by incorporating the CGIAR's Impact Assessment and Evaluation Group (IAEG, see below) into the TAC as an independent subcomponent. The main functions of the SPIA were to (a) facilitate the strengthening of the CGIAR's ex post impact assessment capabilities, provide guidance and oversight to impact assessment activities, and recommend appropriate action by the CGIAR and/or Centers; and (b) ensure that the design and conduct of evaluations document the impact of the CGIAR as a system. The SPIA was comprised of a Chair drawn from the TAC, and two members, each serving in a personal capacity, who were initially appointed for renewable two-year terms. As in the case of TAC members, the Cosponsors served as a search and selection committee and proposed the appointment of the SPIA Chair and members to the CGIAR for endorsement. The SPIA met at least twice annually and interacted closely with the Inter-Center Working Group on Impact Assessment, commissioned studies, and organized meetings and workshops with Center staff and evaluation experts. It presented an annual report as well as thematic reports to the CGIAR on the System's impact. The iExCo proposal recommended that membership of the current SPIA be maintained until the regular SC can reconstitute the panel.

*The Impact Assessment and Evaluation Group.* The SPIA's predecessor, the IAEG, was itself formed in 1995 as a result of a proposal from the Lucerne Meeting that called for a body to conduct independent evaluations of the CGIAR's performance and impact. The IAEG reported to the Group at

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5. Putting TAC in the FAO, where most of the agricultural expertise on developing countries then existed, was intended to ensure a strong voice for developing countries in research priorities.

Systemwide meetings and to the CGIAR Chairman between meetings. The Third System Review (1998) recommended a streamlining of the committee structure and merging impact assessment with priority setting and evaluation functions, resulting in the integration of the IAEG with TAC in 1998-1999 to form the SPIA as an independent panel on impact assessment.

**The Genetic Resources Policy Committee.** The GRPC was established at ICW 94 to advise the CGIAR on policy matters regarding genetic resources issues and assist the Chairman of the CGIAR in his leadership role in this area. The GRPC aims to enhance the openness and transparency of discussions on genetic resources policy issues within the CGIAR community. The main functions of the GRPC are to:

- 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 Centers;
- monitor and analyze policy, legal, and ethical developments within the CGIAR relating to genetic resources and recommend action as necessary to the Group;
- Monitor implementation of the agreements that placed the Centers' germplasm collections within the International Network of *Ex Situ* Collections, under the auspices of FAO. Where necessary, the GRPC also assists in interpretation of the agreements and proposes any necessary changes; and
- Keep developments in intellectual property protection under review and advise the CGIAR on the further modification and implementation of the Centers' IPR guiding principles and related policies.

The GRPC is comprised of 11 members and the Chair, all appointed by the CGIAR Chairman based on nominations invited from CGIAR constituencies and following consultations within the CGIAR. These constituencies are as follows: three CGIAR members (nominated by the CGIAR membership), one NARS representative (nominated by the NARS Steering Committee), one FAO representative (nominated by the FAO), one NGO representative (nominated by the NGOC), one private sector representative (nominated by the PSC), one TAC/SC member (nominated by the TAC/SC), the Center Board Chair (nominated by the Committee of Board Chairs), and two Center Directors (nominated by the Center Directors Committee). The members of the Committee serve in their personal capacities and have an initial term of two years.

The GRPC meets twice a year for approximately two days, and conducts business electronically between meetings. The GRPC organizes workshops and commissions studies, and as necessary, participates in international fora on genetic resources. The GRPC can co-opt experts from inside or outside of the CGIAR to assist as resource persons in its work. The Director General of IPGRI serves as secretary to the GRPC, and IPGRI provides secretariat services and staff support on technical matters. The GRPC's work program and budget are presented for endorsement to the CGIAR at the Group's meetings. The GRPC budget is funded from the World Bank's allocation to the CGIAR and is authorized by the FC (since reconstituted under the ExCo), based on a request from the GRPC.

## 5. CGIAR PARTNERSHIP AND CENTER COMMITTEES

**The NGO and Private Sector Committees.** At MTM 95, the Group endorsed establishment of the NGO Committee (NGOC) and the Private Sector Committee (PSC) based on recommendations from the 1995 CGIAR Ministerial-Level Meeting in Lucerne. These committees were created with the objective of strengthening the CGIAR's relationships with other actors and stakeholders in

international agricultural research. This was followed by the establishment of the Science Partnership Committee (SPC) in 1998 in response to similar recommendations from the Third System Review.

*The NGO Committee.* The NGOC was created to strengthen the voice of NGOs in CGIAR decision making and enable the CGIAR to build an enduring and effective relationship with the NGO community. The NGOC's terms of reference are to:

- help the CGIAR take into account NGO experience and perspectives in the formulation of its policies, priorities, and strategies;
- Provide inputs on the best ways to improve farmer-scientist collaboration and consideration of gender issues in the CGIAR's work, and to broaden the list of candidates for Center boards;
- Advise the CGIAR on possible ways to engage in a broad-based, worldwide consultation process with interested NGOs, covering issues of common interest; and
- Recommend ways of ensuring greater engagement by the Centers, national research systems, and CGIAR members in farm-level activities and strengthening national agricultural research systems and their linkages with the rest of the global agricultural research system.

The NGOC is comprised of eight members serving in their personal capacity. They are expected to consult with the wider NGO community and bring their concerns to the CGIAR. The composition of the NGOC seeks a reasonable balance along several dimensions: geographic coverage (South-North balance among regional perspectives); thematic interests (macro-policy issues and farm-level concerns; agricultural and environmental concerns); outreach capability (to reach global, regional, and national networks of NGOs); and gender (perspective; male-female balance). Candidates for membership are identified through wide consultation with the NGO community. Upon recommendation of the NGOC, candidates are formally invited by the CGIAR Chairman to serve as members for an initial renewable two-year term.

The NGOC meets at least twice a year and reports to the Group. It formulates and undertakes its own work program on an annual basis, which is reviewed and endorsed by the CGIAR. Activities include, but are not limited to, visits to the Centers, holding of workshops and consultation meetings with NGOs and other stakeholders, elaboration of position papers on various research and policy issues, and encouraging concrete collaborative partnerships between NGOs and the Centers. Committee members interact with various components of the System, particularly the Centers, the PSC, and the TAC/SC. The NGOC's budget is funded from the World Bank's allocation to the CGIAR and is authorized by the FC, based on a request from the NGOC. Assistance is provided to the NGOC as required by a staff member of the CGIAR Secretariat.

*The Private Sector Committee.* The PSC was established to improve the dialogue with and facilitate collaboration between the private sector and the CGIAR. The PSC's terms of reference are to:

- Interact with the CGIAR to provide a private sector perspective on the current status of global agricultural research and future needs. It serves as a link between the CGIAR and agricultural private sector organizations at large, in both the North and South. Through rotation of its membership, the PSC facilitates over a time a representation of the views of a broad cross-section of the private sector in relation to policies, strategies, research priorities, and program activities in agricultural research and development in the North and South; and
- Bring to the CGIAR its perspectives on such questions as: current and future needs and priorities for agricultural research and development in developing countries; current and future strategies of the private sector, especially in the South, to respond to those needs;

private sector views on CGIAR policies, strategies, and activities, including views on recent private sector research breakthroughs and cutting-edge technologies the private sector would be willing to share with the CGIAR; identification of program thrusts that provide opportunities for collaboration for the private sector and the CGIAR and that optimize the comparative advantage of the respective partners to achieve mutual goals and objectives; and evolution of a new partnership between the private sector and the CGIAR that represents a holistic and all-encompassing global approach to food security.

The PSC is made up of eight members who serve in their personal capacities. Membership ideally reflects a North-South balance, covers all geographical regions, and large and small companies. PSC members and its Chair are appointed by the CGIAR Chairman for renewable three-year terms. They represent the principal subsectors that are of particular interest to the CGIAR, specifically, agribusiness, fertilizers and crop protection, seeds/biotechnology, animal health/biotechnology, animal production, forestry, and fisheries.

Like the NGOC, the PSC meets at least twice a year and reports to the Group. It interacts with other components of the System and formulates and undertakes its own work program on an annual basis, which is reviewed and endorsed by the CGIAR. The PSC's budget is funded from the World Bank's allocation to the CGIAR and is authorized by the FC (since reconstituted under the ExCo), based on a request from the PSC. Assistance is provided to the PSC as required by a staff member of the CGIAR Secretariat.

*The Science Partnership Committee.* The Third System Review (1998) called for establishment of an additional body to facilitate collaboration and partnerships with other actors in the field of research and development. As a result of the recommendation and a subsequent proposal submitted by the Consultative Council in 1999, the Group endorsed the creation of a Science Partnership Committee (SPC), which was ultimately dissolved in 2001.

The SPC's terms of reference were to strengthen communication and collaboration between the CGIAR System and the broader international science community and to help provide the CGIAR with advice and guidance on major scientific issues in environmentally, socially, and economically sustainable agricultural development. The SPC consisted of eight internationally recognized scientists drawn from apex science bodies in the North and South. Members served in their personal capacity for a two-year renewable period. Candidates for membership were identified through consultation within the CGIAR System and the broader international science community, and invited to serve on the committee by the CGIAR Chairman. A committee chairman, selected by agreement among committee members, served a renewable two-year term. The committee would meet at least twice a year and report to the Group at its mid-term and annual meetings. The SPC's annual work program and budget were reviewed and endorsed by the CGIAR and the budget was funded from the World Bank's allocation to the CGIAR and authorized by the FC, based on a request from the SPC. Pursuant to the recommendations of the CDMT, the role of the SPC was subsumed and merged with the scientific mandates of TAC under the Science Council. However, the NGOC and PSC continued to function within the System.

**The Committee of Board Chairs.** The Committee of Board Chairs (CBC) serves as a bridge between components of the CGIAR System. The CBC's main functions are to

- Encourage and develop effective leadership by Center boards. Through the CBC, Board Chairs are able to exchange experiences and information on issues of common concern, which should result in improved board performance to the mutual satisfaction of both board and Center management;

- Facilitate increased coordination between Centers. Discussions, either within the CBC or an exchange of views in joint sessions with Center Directors, help to optimize each Center's contribution toward the achievement of CGIAR objectives and help ensure the Centers adopt roughly similar standards and operating procedures; and
- Contribute to the development of CGIAR policy. The CBC discusses all aspects of CGIAR policy and presents its views and advice in discussions with various components of the System.

All Chairs of CGIAR-supported Centers are members of the CBC. The Chair of the CBC is annually elected by its members, with the term commencing at the conclusion of ICW/AGM. The Committee meets twice annually and at other times, as necessary. Except for those agenda items the CBC lists as "closed sessions," interested parties within the System can attend CBC meetings as observers. A staff member of the CGIAR Secretariat usually serves as secretary to the CBC.

**The Center Directors Committee.** The Center Directors Committee (CDC) strengthens the CGIAR System by providing ongoing support and perspective on Systemwide issues and on technical and management concerns of the Centers. Its main functions are to:

- Inform members of important internal and external developments affecting the System and especially the Centers;
- Discuss issues of common interest put forward by any part of the CGIAR System or its Members, and decide on a common position;
- Implement activities of collective interest to the System and Centers through appropriate mechanisms for planning, sharing costs, and achieving results;
- Ensure linkages with TAC/SC and other components of the CGIAR System on matters of joint interest; and
- Undertake certain public awareness activities for the System and prepare a collective position of the CDC for discussions with representatives of any component of the System and presentation at CGIAR meetings.

The director general of each Center is an *ex officio* member of the CDC. The Chair of the CDC is offered to a director general according to his/her seniority as a Center director, provided he/she has not served in the position of Chair of the CDC before. The Chair rotates on an annual basis, with the term of office beginning at the end of ICW/AGM. The Chair of the CDC is assisted by an Executive Committee, which consists of the immediate past, present, and incoming Chairs of the CDC. The CDC meets at least semi-annually. The CDC has also established the Center Deputy Directors Committee (CDDC) to assist in its work. Typically, the CDDC is chaired by a deputy director general of the Center chairing the CDC. The CDC also establishes task forces, chaired by one of its members, as necessary. The CDC has appointed an executive secretary to assist with its workload.

**The Public Awareness and Resource Mobilization Committee.** The Public Awareness and Resource Mobilization Committee (PARC) is a strategic planning group, whose purpose is to help increase Member confidence in the CGIAR and its Centers and their work, and to expand the financial resource base available for financing the core programs of the CGIAR-supported Centers.

The main functions of the PARC are to:

- Design, review, and periodically update an overall strategy for public awareness and resource mobilization in support of programs of the CGIAR Centers; set priorities for implementation of the various components of the strategy; and monitor implementation and impact in close collaboration with the CDC, the Finance and Oversight Committees, the IAEG, the Public

- Awareness Association (PAA, consisting primarily of Center Information Officers), the CGIAR Secretariat, and other relevant components of the CGIAR System;
- Coordinate and monitor activities deemed by PARC to be important to enhance the impact of the overall strategy – for example, specific public awareness activities, impact analyses, and concentrated efforts in individual countries; and
  - Assess feasibility and likely impact of public awareness and resource mobilization activities proposed from inside and/or outside the CGIAR System.

The PARC is composed of four Center Directors (one of whom is the Chair), the Chair of the FC (since reconstituted under the ExCo), the Chair of the PAA, and two external experts on public awareness and/or resource mobilization from outside the CGIAR. Center Directors are elected annually by the CDC, following an initial two-year term; the outside experts are elected annually by PARC. The Committee meets at least twice annually. Execution of activities resulting from PARC's work is undertaken by the PAA, various CGIAR committees, and others.

## 6. CGIAR ADMINISTRATIVE SYSTEMS

**The CGIAR System Office.** At AGM01, it was decided to establish a System Office composed of and integrating the activities carried out by the CGIAR Secretariat, the Science Council Secretariat, entities providing common services to the Centers, and the Future Harvest Foundation. The System Office will serve the entire System and help it function in an integrated and responsive manner, implementing a compelling vision, mission, and strategy. Its specific functions will be developed and integrated gradually. The System Office will operate in a “virtual” and decentralized mode.<sup>6</sup>

**The CGIAR Secretariat.** The CGIAR Secretariat, a major component of the System Office, serves as the staff arm of the Group. It is, in effect, the CGIAR's principal service unit, and functions under the direction of the CGIAR Chairman. It is headed by the CGIAR Director, and implements or facilitates implementation of the Group's decisions. It focuses on finance, information, and management matters, complementing the SC's work in scientific and program matters and serving as a financial clearinghouse for the CGIAR to ensure the System's research agenda is fully funded. The Secretariat's Science Advisor assists the CGIAR Chairman, Cosponsors, and other staff of the CGIAR Secretariat on science matters. The CGIAR Secretariat carries out three broad sets of activities:

- Policy and analytical support to the CGIAR and its Chairman, committees, and other actors in the System.
- Development of partnerships and management of relations, both within and outside of the CGIAR System, in support of the efforts of the CGIAR Chairman.
- Administrative services to the CGIAR and its committees and to the broader System.

Administratively, the CGIAR Secretariat is a department of the World Bank, which appoints its staff and pays all costs of its operations. The position of CGIAR director, which was upgraded from executive secretary in 2001, reports to the CGIAR Chairman. The staff of the Secretariat work in three teams: Investor Relations and Finance; Governance and Partnerships; and Information and Corporate Communications.

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6. For additional information on the System Office's role, see CGIAR, “Stakeholder Meeting: Draft IEC Recommendations on CGIAR Reform—An Integrated Proposal,” presented at the International Centers Week 2000, October 30-31, 2000, Washington, D.C. See also Annex J.

**The Science Council Secretariat.** The Science Council Secretariat succeeds the TAC Secretariat and carries on the responsibility of supporting the CGIAR's main scientific advisory body. The TAC/SC Secretariat's main functions include (a) supporting TAC in its assessment and monitoring of CGIAR priorities and strategies by identifying and analyzing scientific policy issues; (b) preparing documents for TAC and organizing TAC and subcommittee meetings; (c) supporting the resource allocation process by reviewing Center programs and budgets; (d) helping identify emerging issues and new initiatives by regularly visiting Centers and interacting regularly with the CGIAR Secretariat; and (e) organizing external reviews of the Centers and assisting with the recruitment of experts for review teams.

According to the iExCo's proposal, the present TAC Secretariat at FAO is proposed to be constituted as interim SC Secretariat, effective January 2002. A transition period of one year is suggested for the organization of the regular SC Secretariat. Early in that period (i.e., by March, 2002) and a formal agreement covering the terms of FAO's hosting of the SC and SC Secretariat should be negotiated and signed. Such agreement would provide the legal framework for the organization of the regular SC Secretariat. The interim SC Secretariat would need to gear up to enable it to respond effectively to new demands anticipated with the initiation of the process for development and evaluation of Challenge Programs in 2002. The SC Chair and the Executive Secretary would institute changes in staff assignments as necessary and draw consultant expertise to fill the gaps.

**The Future Harvest Foundation.** Beginning with initiatives undertaken by the PARC as early as 1995, the CGIAR has made efforts to increase public awareness of and rally support for its long-term vision of international agricultural research. In MTM98, the Centers launched the Future Harvest Foundation as a means of reaching out to new constituents and strengthening the financial basis of the System's strategic goals. The objectives of the Foundation are to:

- Develop and manage a coherent unified marketing, communication, and resource mobilization strategy for the CGIAR;
- Enhance the capacity of the System to maintain and strengthen ODA support through the use of effective marketing and communications strategies;
- Diversify the funding base of the CGIAR within 10 years so that foundations, corporations and wealthy individuals are contributing a minimum of 20 percent of the CGIAR revenue;
- Establish and manage a brand image for the System that is recognized globally;
- Develop marketing messages for the Future Harvest Network of Organizations and for Future Harvest Centers that form a core for all marketing initiatives but can be tailored to the specific needs of a Center or project;
- Assist in building capacity in all Centers in the areas of marketing, fundraising, and communications through a variety of training mechanisms and delivery of services.<sup>7</sup>

As a non-profit corporation, the Foundation is governed by a Board of Directors charged with determining the Foundation's mission, purposes, and strategic direction; selecting, supporting and evaluating the Chief Executive; ensuring effective organizational planning and provision of adequate resources to achieve its goals; overseeing the proper use and investment of resources; determining and monitoring the Foundation's programs and services; communicating about the Foundation to constituents; ensuring legal and ethical integrity and maintaining fiduciary accountability; and recruiting and orienting new Board members and assessing board performance.

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7. CGIAR, "Charting the CGIAR's Future—Reshaping the CGIAR's Organization," presented at the International Centers Week 2000, October 23-27, 2000, Washington, D.C.

The governance structure of Future Harvest is currently under development and will likely incorporate the following features. Future Harvest's Board of Directors will be composed of no more than 14 to 16 Board members, including the current 4 directors. All members, regardless of their constituency or expertise, must be fully committed and willing to contribute innovatively and devote the necessary time and effort. Individuals from the following constituencies will be represented: CGIAR Centers (directors); CGIAR Director (ex officio, potentially as Chair); academic agricultural specialists; marketing and communications specialists; prominent individuals with strong interest; senior fundraising experts; donors; leading business individuals/entrepreneurs; developing country experts; and business leaders. Certain constituencies, such as the center directors, will have a reserved number of seats on the board if desired.

This Board will convene quarterly, in person or by conference call, to decide on all policy matters concerning Future Harvest; consider resource mobilization projects to determine their compatibility with CGIAR principles; review activity reports from regional nodes, international consultants and Centers and make recommendations if necessary with regard to resource mobilization RM and public awareness, and decide the growth and strategy of the Future Harvest offices, including the approval of audits, membership approval, or termination.

The Board will have terms for members and be reflected in the by-laws of the organization. Re-election is contingent on individual performance, as based on the statement of Board member roles and responsibilities. Term limits are optional and may be used as a way to regularly add members with new skills and talents as the organization matures and evolves.

Given the difficulty of convening individuals from all over the world, an Executive Committee, consisting of seven members, will also make decisions between Board meetings. Initially, it will meet monthly. The Board may choose to create committees that deal with specific issues and report to the Board. These may include fundraising, public awareness, public policy, etc. The Board may also choose to create advisory bodies in particular areas. Eventually, the creation of national Future Harvest organizations around the world would necessitate the creation of individual Boards of Directors. Over time this would necessitate a body to coordinate all national organizations, which would become the Global Future Harvest Board.

Additionally, as the program grows, an International Program Advisory Council will be created, which would be independent of the Board and would not have policy-making authority but would provide programmatic advice to the Executive Director of Future Harvest (the program in this case would be related to Future Harvest work in marketing, communications, and fundraising.) This group will eventually grow to consist of representatives of national Future Harvest organizations and Centers and will meet once a year during a Systemwide meeting. Roles and responsibilities will be determined as this group develops.

The Board will have the responsibility to coordinate on policy issues with the larger CGIAR. The cross appointment of the CGIAR Director as an *ex officio* Board member assures an ongoing linkage to the System. In the event that there is significant restructuring of the System as a result of the current vision exercise, the linkage will be with the chief executive of the restructured entity. The Board will have the responsibility of reporting annually to the general membership of the CGIAR in open forum at annual general meetings.

The Board of Directors (or its agent in the person of the Executive Director) will be empowered to enter into agreements and licensing arrangements on behalf of Future Harvest. As the organization expands and national Future Harvest organizations emerge with independent Boards, the cooperative agreements entered into by the Board may dictate rules, cooperation, and standards of operations.

Similarly, Future Harvest may enter into agreements with the Centers or with the governing bodies of the CGIAR on a variety of issues, including, but not limited to:

- Use of the Future Harvest name
- Use by Future Harvest of scientific studies by the Centers
- International Property Rights
- International Public Goods
- Representation of the work of the Centers
- Standards for entering into relationships with corporate entities

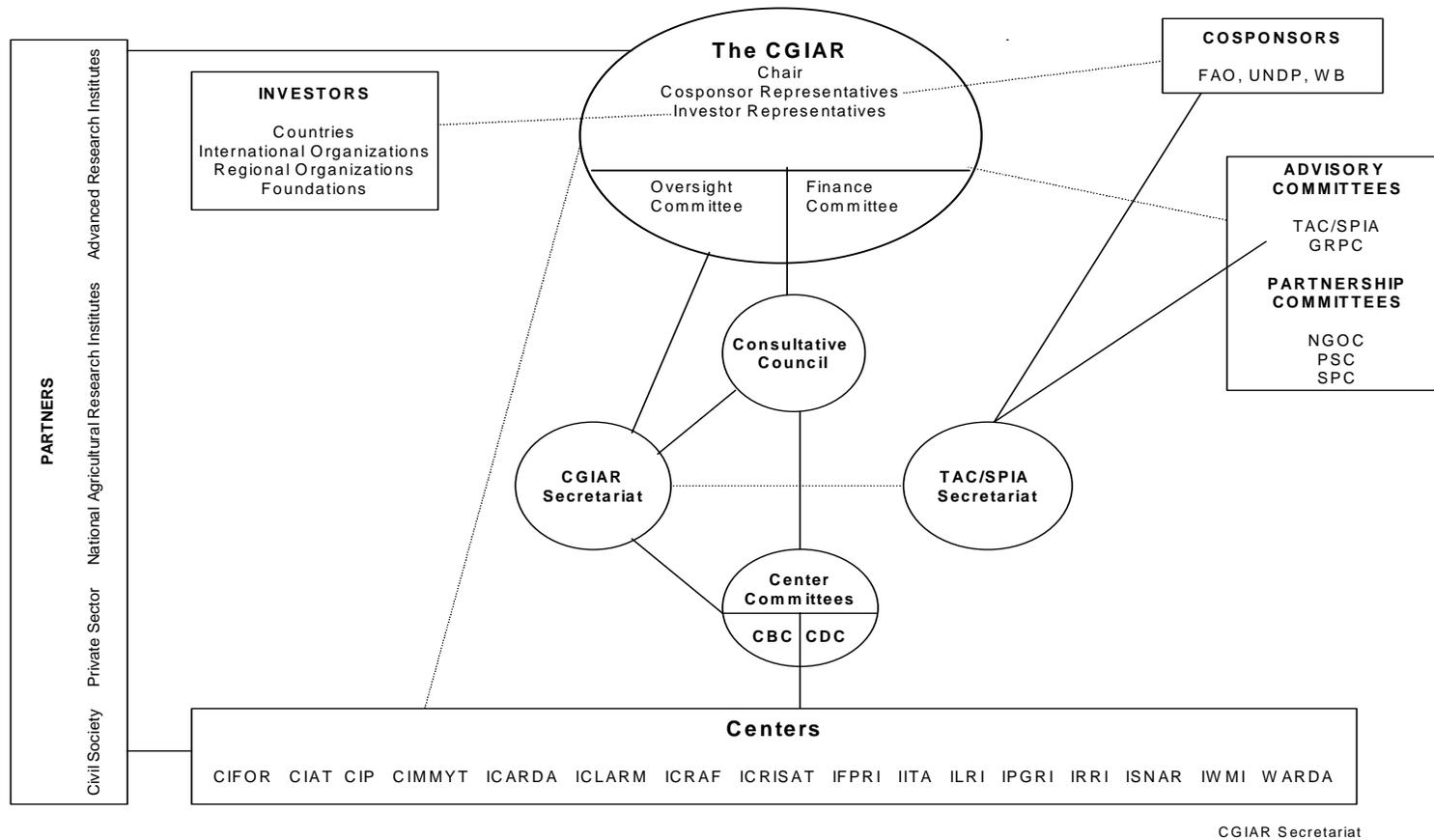
The Board of Directors of Future Harvest, in coordination with the governing structures of the CGIAR, will establish a structure to set guidelines and policies on private sector relationships, including partnerships. All proposed private sector partnerships will be reviewed to ascertain that the relationship is not in conflict with the ethical standards of the System and will not, in any way, harm the reputation or operating ability of the System or individual Centers.

In AGM01, the ExCo was charged with conducting further discussion and examination of the Foundation, including its specific role, governance, monitoring and evaluation, relationship with the CGIAR and, bilaterally, with each member, as well as its impact on the CGIAR and its stakeholders. The ExCo will undertake this task in the context of the integrated communication strategy currently being developed by a task force.<sup>8</sup>

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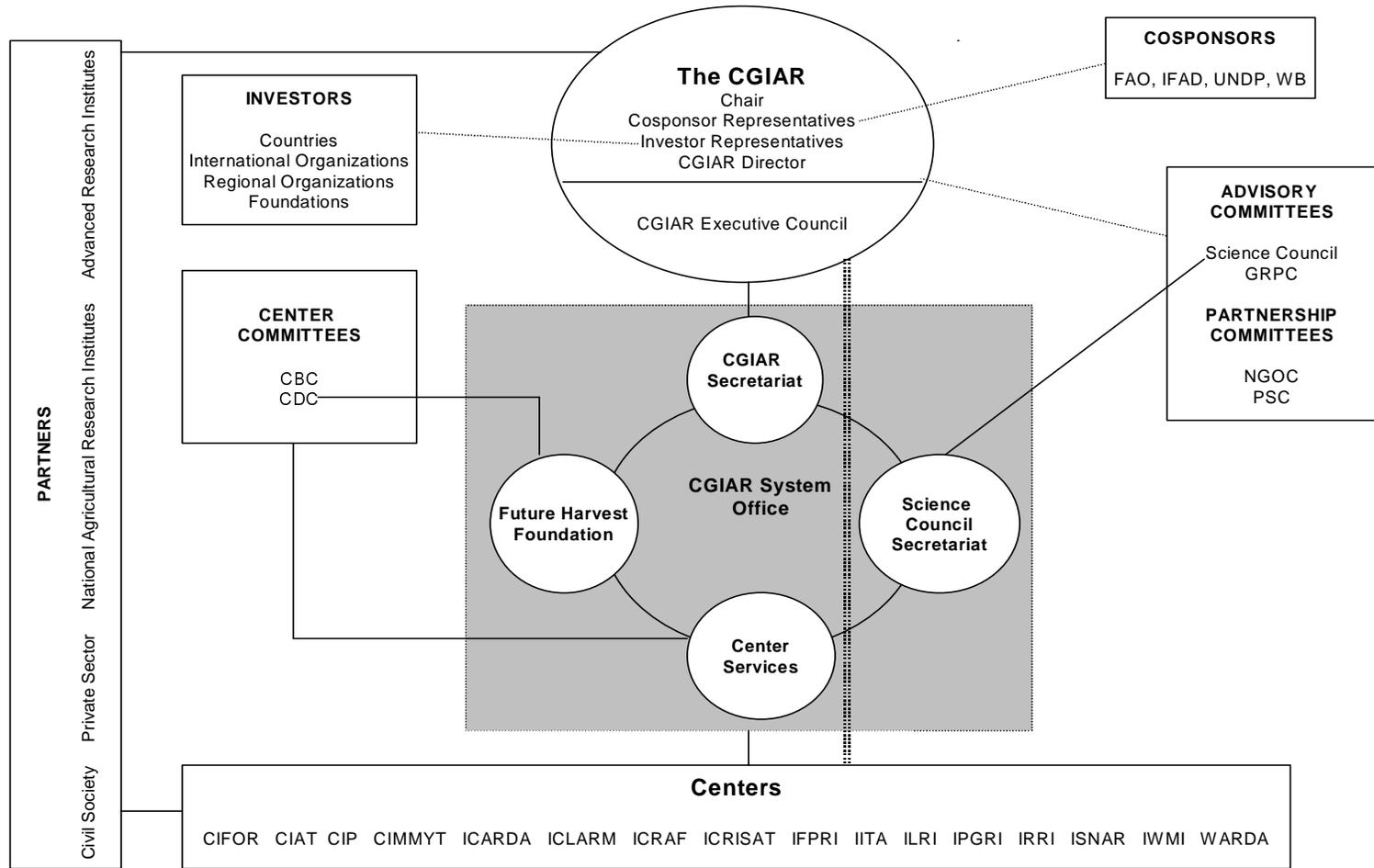
8. CGIAR, "Summary Record of Proceedings and Decisions," Annual General Meeting, October 30-November 1, 2000, Washington, D.C.

## The CGIAR System Before the Reform Program (Before November 2001)



# The CGIAR System

(as of January 2002)



CGIAR Secretariat, January 2002

## Annex E: Financial Analysis of the CGIAR

### Overview

The CGIAR is a two-level financial system. The first (System) level comprises the financial contributors (including sponsors, members, and non-members) to the administrative and research activities of the System, the Consultative Group and its various committees, the Secretariat, and the Technical Advisory Committee (TAC), which is in the process of being transformed into a Science Council (SC). The second (Center) level comprises the 16 Centers. Table E.1 presents the sources and uses of funds for the overall System in fiscal year 2001 (equal to calendar year 2000), which consolidates System-level accounts presented in Table E.2 and combined Center-level accounts for the 16 Centers in Table E.3. Table E.4 presents the World Bank's financial involvement in the CGIAR in 2001.

The System as a whole received financial contributions of \$337.3 million in 2001 towards the research activities of the System, compared to \$331.3 million in 2000. Of this, 95 percent came from CGIAR members and 5 percent from non-members. Of this, \$330.7 million was allocated to the 16 Centers in 2001.<sup>1</sup> The 16 Centers generated an additional \$15.7 million of their own income in 2001,<sup>2</sup> resulting in total revenues of \$346.4 million. Collectively, the Centers spent \$354.8 million on their research activities, resulting in a net deficit of \$8.4 million compared to surplus of \$11.8 million in 2000.

Of the \$330.7 million allocated to the Centers in 2001, \$38.8 million came from the World Bank, \$81.8 million was channeled from other contributors through a global trust fund administered by the World Bank for this purpose, and \$210.1 million flowed directly to the 16 Centers. About 88 percent (or \$290.9 million) was disbursed to the 16 Centers during the calendar year, leaving \$39.8 in accounts receivable.

The three co-sponsors – the World Bank, FAO, and UNDP – provided an additional \$6.0 million in co-sponsor support for the CGIAR and TAC Secretariats in 2001.<sup>3</sup> Therefore, the total sources of funds for the System as a whole was \$359.0 in 2001.

These accounts do not include two additional sources of funds. First, while the System pays for the CGIAR chairman, TAC members, and Center officials to attend meetings of the System such as International Centers Week (ICW) and the Executive Council (ExCo), most CGIAR members pay their own way to these meetings and donate their staff time to the System throughout the year.<sup>4</sup> Second, these accounts do not include in-kind contributions of land or buildings from developing

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1. This demonstrates that financial contributions from donors to the research activities of the 16 Centers are not necessarily the same as financial allocations to the 16 Centers in any given year, depending on the management of the CGIAR System-level reserves.

2. These are revenues that include, but are not limited to (1) interest earned on bank accounts and time deposits, (2) consultancy income earned from third parties, (3) gains, net of losses, resulting from transactions involving currencies other than the U.S. dollar and restatement of foreign currency denominated assets and liabilities at year-end or at reporting date, and (4) other miscellaneous income, including any other items not specifically covered above. See CGIAR Accounting Policies and Reporting Practices Manual (Financial Guidelines Series, No. 2, March 1999), p. 24.

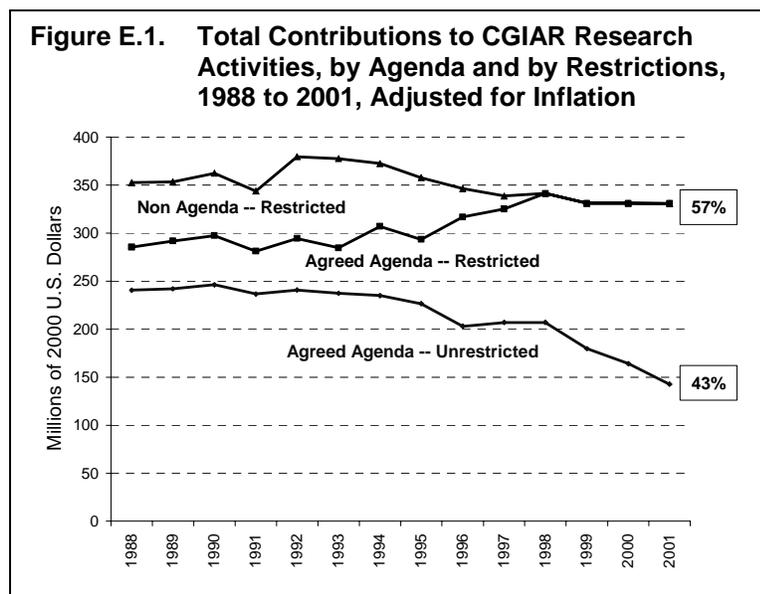
3. The Bank contributed \$4.75 million to the CGIAR Secretariat and \$0.75 million to the TAC Secretariat. FAO contributed \$0.6 million to the TAC Secretariat.

4. The CGIAR Secretariat has estimated the approximate gross savings (excluding costs associated with two of three ExCo meetings in 2002) from the elimination of the Mid-Term Meeting to be about \$3.9 million.

countries for the Centers and their regional offices, genetic materials, funds devoted to collaborative research, and time spent by officials of the NARS on group matters.

### Total contributions have been declining in real terms and becoming more restricted

The System as a whole received financial contributions of \$337 million toward its research agenda in 2001.<sup>5</sup> Overall financial contributions have been fairly stable during the last 10 years—growing at an



average annual rate of 0.7 percent in nominal terms between 1992 and 2001 and declining by 1.8 percent in real terms (Table E.5 and Figure E.1).

This overall picture hides the funding crisis that occurred between 1992 and 1994 when the United States and Canada reduced their funding by \$24 million and \$6 million, respectively, over this two-year period. Among the top 10 donors, the World Bank made up \$12.4 million of this shortfall over the two-year period, Japan another \$10 million, Denmark \$3.3 million, and the Netherlands \$2.8 million (Table E.6).

While the 1994 renewal process was successful in sustaining the aggregate level of financial support for the System, it fundamentally changed the way in which the System was financed. The proportion of restricted funding has increased from 36 percent in 1992 to 57 percent in 2001 (Table E.5 and Figure E.1). **Non-agenda funding**, called complementary funding before 1995, refers to activities that individual Centers were qualified to undertake because of experience, location, size, or other factors, but that were not part of the “official” research agenda endorsed by the CGIAR as a group. Since 1998, the **agreed agenda**, called core funding before 1995, has been redefined to include all Center activities, including what had previously been called non-agenda or complementary funding. **Unrestricted** funds may be allocated to any program or cost according to a Center’s institutional needs or priorities, while **restricted** funds are provided either by attribution (to a particular research program or region) or by contract (to a project, subproject, or activity). Although CGIAR Centers carry out long-term research, multi-year commitments are uncommon for unrestricted funding commitments, while restricted funding is often a multi-year commitment.

The small amount of Center-generated income (\$15.7 million in 2001), which is also an unrestricted source of funds, does not alter this overall picture in any significant way. At whatever point one makes the comparison – in terms of financial contributions, allocations to the Centers, or the total revenues of the Centers – more than 50 percent of the funds are now restricted (Tables E.2 and E.3). Excluding the World Bank’s contribution, which has been totally unrestricted, restricted funding now represents two-thirds of total research funding (Table E.7 and Figure E.2.)

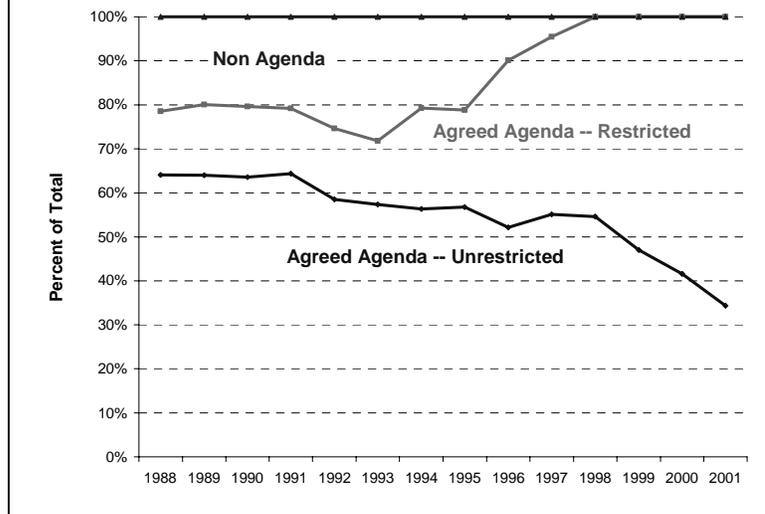
5. A modest (less than 1 percent) proportion of these are in-kind contributions, usually technical assistance (scientific experts) from industrialized countries.

### The Top 10 Contributors Account For More Than Two-Thirds of Total Funding

The World Bank has been the largest financial contributor to the CGIAR during the last 10 years. It contributed \$483.0 million to CGIAR research activities and \$58.4 million to secretariat and committee costs, for a total of \$541.4 million between 1991 and 2001.

Overall, the three largest donors—the World Bank, the United States, and Japan—contributed \$1.37 billion in research funding, equal to 38.3 percent of total funding between 1991 and 2001, and the top 10 donors contributed \$2.54 billion, or 71.3 percent over the decade. But diversification of funding also occurred as the share of other contributors has increased from 25 percent in 1991 to 34 percent in 2001.

**Figure E.2. Total Financial Contributions to CGIAR Research Activities (excluding the World Bank), 1988 to 2001**

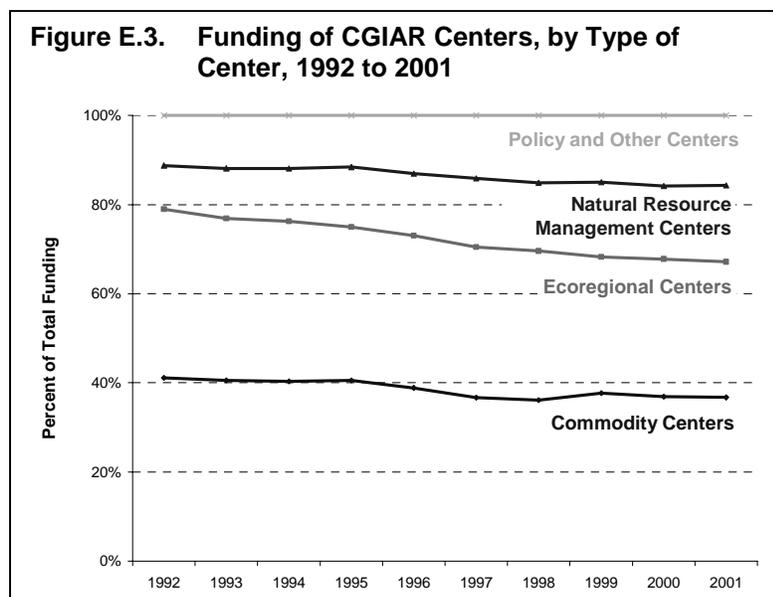


### Financial Allocations to the 16 Centers Have Diverged

The CGIAR System has had 16 Centers since 1992. This resulted from the addition of five new Centers – CIFOR, ICLARM, ICRAF, INIBAP, and IWMI<sup>6</sup> – in the early 1990s, and two consolidations in 1994. The International Livestock Center for Africa (ILCA) and the International Laboratory for Research on Animal Diseases (ILRAD) were merged into the International Livestock Research Institute (ILRI), and the International Network for the Improvement of Banana and Plantain (INIBAP) was merged into the International Board on Plant Genetic Resources (IBPGR), which was subsequently renamed the International Plant Genetic Resources Institute (IPGRI).

Excluding the first two pre-expansion years (1992 and 1993), overall financial allocations to the 16 Centers has declined by an average of 1.6 percent annually in real terms since the financial policy reforms in 1994 (Table E.8). However, as shown in the table and in Figure E.3, this overall average masks considerable differences among Centers. Funding of the four natural resource management Centers (ICLARM, CIFOR, ICRAF, and IWMI) grew by 3.3 percent annually over the period, from 12 percent of total funding in 1994 to 17 percent in 2001 (Figure E.3). Funding of the three policy Centers (IPGRI, IFPRI, and ISNAR) grew by 3.1 percent annually in real terms, from 12 percent of total funding in 1994 to 16 percent in 2001. Funding of the five commodity Centers (CIMMYT, WARDA, CIP, ILRI, and IRRI) declined by 3.1 percent annually, from 40 percent in 1994 to 37 percent in 2001. Funding of the four ecoregional Centers (ICARDA, IITA, CIAT, and ICRISART) declined by 4.1 percent annually, from 36 percent in 1994 to 30 percent in 2001.

6. CIFOR was a brand new operation, while the other four were existing operations.



### Centers' Expenditures on Enhancing Productivity Have Been Declining

Tables E.9 and E.10 show the annual expenditures of the CGIAR Centers by type of investments for the two time periods, 1992-2001 and 1986-1991, respectively. While total expenditures declined by an average of 1.6 percent per year in real terms between 1994 and 2001, expenditures on increasing productivity declined by 6.5 percent per year in real terms, from a share of 47.0 percent in 1994 to 34.8 percent in 2000

(Figure E.4). Expenditures on improving policies grew by 4.5 percent per year in real terms, from a share of 9.8 percent in 1994 to 13.8 percent in 2000. Expenditures on protecting the environment grew by 1.7 percent per year and on strengthening NARS by 1.0 percent by year, while expenditures on preserving biodiversity declined by 0.4 percent per year in real terms between 1994 and 2001.

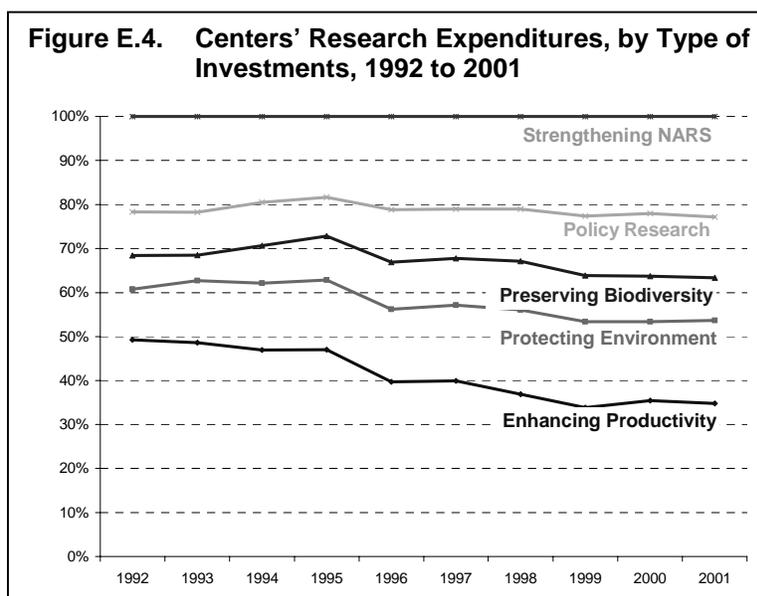
In its official publications, the CGIAR refers to all Centers' expenditures as "investments," whether for capital or recurrent costs, and whether for management or program-related costs. While collectively these constitute investments and are useful in, for example, estimating rates of return to CGIAR research outputs, this is not a very useful way to report expenditures for managing a research system.

### Sub-Saharan Africa and Asia Account for Most of Centers' Expenditures

The regional allocation of research expenditures has been fairly stable over the past decade with one major difference (Table E.11.).

Expenditures on sub-Saharan Africa increased slightly, from 39 percent of total expenditures in 1992 to 44 percent in 2001. During the same period, expenditures on West Asia and North Africa declined from 12 percent to 9 percent.

The shares of Asia and Latin American and the Caribbean have been relatively constant.



### Management of Centers' Programs Vary from 10 to 30 Percent of Centers' Expenditures

Table E.12 breaks down Centers' expenditures by program-related, management, and other costs in 2000. These have been calculated from the Centers' audited financial statements for 2000.

Management costs average 18.0 percent of total costs for the 16 Centers, ranging from 9.3 percent for ICRAF to 30.6 percent for WARDA. Unrestricted funding finances 89.1 percent of management and general costs. Only 3.6 percent of unrestricted funding was used to cover management costs. Overall, 34.5 percent of unrestricted funding was used for management costs and only 62.7 percent for program-related costs.

It is not obvious why there are such huge differences in the program-related expenditures. Had the System been managing itself well financially, it would have had this information and would have tried to increase the efficiency of the Centers and the share of resources going to program-related expenditures. This is a particularly important point, as the temptation to spend resources on public relations and outreach-related in relation to that spent on research seems to have increased over time.

Table E.12 and Figure E.8 show the staff profiles per Center. The percentage of international staff varies from 50.7 percent for ISNAR to 4.7 percent for ICRISAT. The average cost per person varies from \$74,000 per person for IFPRI to \$12,000 per person for ICRISAT, because of a much higher proportion of local staff, most at very low wages. Both the proportion of international staff and the average costs per staff person are highest in the two Centers (ISNAR and IFPRI) that are located in industrial countries.

What would also have been useful is to know is the ratio of local to international salaries for professional staff, or staff carrying out comparable jobs. Again, if the CGIAR were acting cost-effectively, it would have collected such information and tried to get research carried out at the lowest possible cost. Based on data available from the CGIAR Secretariat, the System appears to have spent more resources to collect information on the gender balance of the staff than on the quality, quantity, composition, and the cost of its scientific staff. The efficiency of the international System could be increased by addressing these issues.

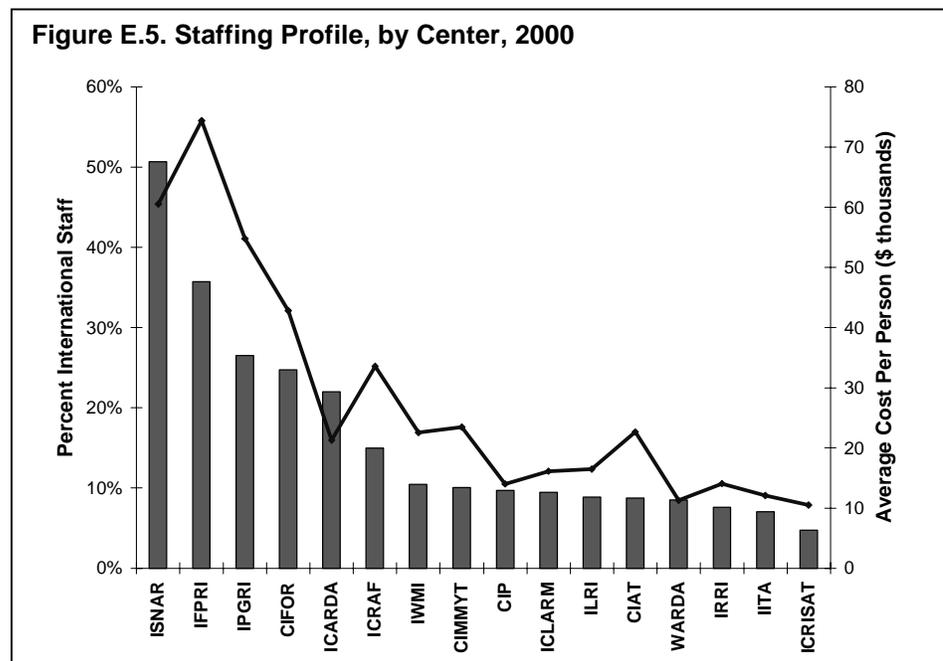


Table E.1. CGIAR System, Consolidated Accounts, 2001

Sources of funds		Uses of funds	
<b>Financial contributions</b>	<b>337.3</b>	<b>Centers' expenditures</b>	<b>354.8</b>
Unrestricted - from members	145.4	Increasing productivity	123.3
Restricted	191.9	Protecting the environment	67.2
From members	168.8	Saving biodiversity	34.2
For multidonor projects	5.8	Improving policies	49.0
From non-members	17.3	Strengthening NARS	81.1
<b>Center-generated income</b>	<b>15.7</b>	<b>Centers' surplus (+)/ deficit (-)</b>	<b>-8.4</b>
<b>Co-sponsor support</b>	<b>6.0</b>	<b>Central expenditures</b>	<b>6.0</b>
From World Bank	5.0	CGIAR Secretariat	4.25
For CGIAR Secretariat	4.25	TAC/SPIA	1.75
For TAC	0.75		
From FAO - for TAC/SC	0.6	<b>Other central uses of funds</b>	<b>6.6</b>
From UNDP - for TAC/SC	0.4	For CGIAR committees	1.45
		To CGIAR reserves	1.75
		Reimbursement of World Bank's advance on 2001 contribution	3.0
<b>Other sources of funds</b>	<b>0.0</b>	Unallocated	0.4
<b>Total sources of funds</b>	<b>359.0</b>	<b>Total uses of funds</b>	<b>359.0</b>

Sources: CGIAR Annual Report 2001

Table E.2. CGIAR, System-Level Accounts, 2001

Sources of funds		Uses of funds	
<b>Financial contributions</b>	<b>337.3</b>	<b>Allocations to Centers</b>	<b>330.7</b>
By agenda		By composition	
Agreed agenda	337.3	Unrestricted	139.2
Unrestricted	145.4	Restricted	191.5
Restricted	191.9	From members	168.4
Non-agenda – restricted	0.0	For multidonor projects	5.8
		From non-members	17.3
By member group		By Center group	
Industrialized countries	224.9	Commodity Centers	121.4
Europe	130.8	Ecoregional Centers	100.6
North America	57.0	NRM Centers	56.8
Pacific Rim	37.1	Policy and other Centers	51.9
International organizations	66.5	By channel	
World Bank	45.0	From World Bank	38.8
UNDP	1.6	Through WB trust fund	81.8
FAO	0.4	Directly to Centers	210.1
Other	19.5		
Foundations	9.2		
Developing/transition countries	13.6		
Other	23.1		
For multidonor projects	5.8	<b>Central administration</b>	<b>6.0</b>
From non-members	17.3	CGIAR Secretariat	4.25
		TAC/SPIA	1.75
<b>Co-sponsor support</b>	<b>6.0</b>	<b>Other uses of funds</b>	<b>6.6</b>
From World Bank	5.0	For CGIAR committees	1.45
From FAO	0.6	To CGIAR reserves	1.75
From UNDP	0.4	Reimbursement of World Bank's advance on 2001 contribution	3.0
<b>Other sources of funds</b>	<b>0.0</b>	Unallocated	0.4
<b>Total sources of funds</b>	<b>343.3</b>	<b>Total uses of funds</b>	<b>343.3</b>

Table E.3. CGIAR, Consolidated Center-Level Accounts, 2001

Sources of funds		Uses of funds	
<b>Allocations to Centers</b>	<b>330.7</b>	<b>Expenditures by Centers</b>	<b>354.8</b>
By Center		By type of investments	
Commodity Centers	121.4	Increasing productivity	123.3
CIMMYT	39.3	Germplasm enhancement	64.1
CIP	18.7	Production systems	59.2
ILRI	24.3	Crops	32.7
IRRI	30.3	Livestock	16.7
WARDA	8.8	Forestry	7.9
Ecoregional Centers	100.6	Fisheries	1.9
CIAT	27.5	Protecting the environment	67.2
IITA	31.6	Policy research	49.0
ICARDA	21.1	Biodiversity preservation	34.2
ICRISAT	20.4	Strengthening NARS	81.1
Natural resource management Centers	56.8	Training	31.5
CIFOR	12.3	Doc / Pub / Info	21.7
ICLARM	12.1	Org / Mgt	10.7
ICRAF	21.6	Networks	17.2
IWMI	10.8		
Policy and other Centers	51.9	By region	
IFPRI	21.7	Sub-Saharan Africa	154.5
IPGRI	22.3	Asia	112.0
ISNAR	7.9	West Asia & North Africa	57.7
		Latin America & Caribbean	30.7
By disbursements			
Received by year end	290.9	By cost object	
Accounts receivable	39.8	Personnel costs	171.7
		Supplies/services	143.1
<b>Center-generated income</b>	<b>15.7</b>	Travel	24.8
		Depreciation	15.3
		<b>Net surplus (+)/ deficit (-)</b>	<b>-8.4</b>
<b>Total revenues</b>	<b>346.4</b>	<b>Total uses of funds</b>	<b>346.4</b>
By composition			
Unrestricted	154.9		
From members	139.2		
Center income	15.7		
Restricted	191.5		
From members	168.4		
For multidonor projects	5.8		
From non-members	17.3		

Table E.4. World Bank's Financial Involvement in the CGIAR System, 2001

Sources of funds		Uses of funds	
<b>DGF allocation</b>	<b>50.0</b>	<b>Co-sponsor support</b>	<b>5.0</b>
		For CGIAR Secretariat	4.25
<b>Other BB</b>	<b>0.0</b>	For TAC	0.75
<b>Other sources of funds</b>	<b>0.0</b>	<b>Allocations</b>	<b>45.0</b>
		To Centers	38.8
		Matching funds: 12 percent	38.4
		Agricultural indicators project	0.4
		Other	6.2
		Partnership committees	0.4
		Restructuring costs	1.05
		To CGIAR reserves	1.75
		Reimbursement of 2001 advance	3.0
<b>Trust funds receipts</b>	<b>81.8</b>	<b>Trust fund disbursements</b>	<b>81.8</b>
		United States	32.3
		European Commission	17.9
		Canada	8.3
		Norway	6.7
		Belgium	4.9
		Italy	4.1
		Finland	2.4
		France	2.2
		Austria	1.5
		Others	1.5
<b>Total sources of funds</b>	<b>131.8</b>	<b>Total uses of funds</b>	<b>131.8</b>

Table E.5. Total Financial Contributions to CGIAR Research Activities, by Agenda and by Restrictions, 1988-2001

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	1992-2001 /1
<b>\$ millions</b>															
Agreed agenda	211.8	224.5	234.9	232.0	247.3	234.7	268.1	269.6	304.0	320.3	339.5	330.0	331.0	337.1	
Unrestricted	178.5	186.2	194.5	195.2	202.2	195.6	205.0	208.2	194.9	203.9	205.8	179.0	164.0	141.6	
Restricted	33.3	38.3	40.4	36.8	45.1	39.1	63.1	61.4	109.1	116.4	133.7	151.0	167.0	195.5	
Non-agenda – restricted	49.8	47.3	51.4	51.6	71.4	76.6	57.1	59.0	28.4	13.1	0.0	0.0	0.0	0.0	
<b>Total</b>	<b>261.6</b>	<b>271.8</b>	<b>286.3</b>	<b>283.6</b>	<b>318.7</b>	<b>311.3</b>	<b>325.2</b>	<b>328.6</b>	<b>332.4</b>	<b>333.4</b>	<b>339.5</b>	<b>330.0</b>	<b>331.0</b>	<b>337.1</b>	<b>0.7%</b>
<b>Percent of total</b>															
Agreed agenda	81%	83%	82%	82%	78%	75%	82%	82%	91%	96%	100%	100%	100%	100%	
Unrestricted	68%	69%	68%	69%	63%	63%	63%	63%	59%	61%	61%	54%	50%	42%	
Restricted	13%	14%	14%	13%	14%	13%	19%	19%	33%	35%	39%	46%	50%	58%	
Non-agenda – restricted	19%	17%	18%	18%	22%	25%	18%	18%	9%	4%	0%	0%	0%	0%	
<b>Real 2000 \$ millions</b>															
Agreed agenda	285.4	291.7	297.3	281.2	294.4	284.6	306.9	293.4	316.6	325.1	341.2	331.0	331.0	335.4	
Unrestricted	240.6	242.0	246.1	236.6	240.7	237.2	234.7	226.6	203.0	207.0	206.8	179.5	164.0	140.9	
Restricted	44.8	49.7	51.2	44.6	53.7	47.4	72.2	66.8	113.6	118.2	134.4	151.5	167.0	194.5	
Non-agenda – restricted	67.1	61.5	65.0	62.5	85.0	92.9	65.4	64.2	29.6	13.3	0.0	0.0	0.0	0.0	
<b>Total</b>	<b>352.5</b>	<b>353.2</b>	<b>362.3</b>	<b>343.7</b>	<b>379.5</b>	<b>377.4</b>	<b>372.3</b>	<b>357.6</b>	<b>346.2</b>	<b>338.4</b>	<b>341.2</b>	<b>331.0</b>	<b>331.0</b>	<b>335.4</b>	<b>-1.8%</b>
<b>System-level inflation rate</b>	5.3%	3.7%	2.7%	4.4%	1.8%	-1.8%	5.9%	5.2%	4.5%	2.6%	1.0%	0.2%	0.3%	2.0%	

/1 Average annual rate of growth of funding, 1992 to 2001.

Source: CGIAR Financial Reports, 1988-2001.

**Table E.6. Total Financial Contributions to CGIAR Research Activities, by Members, 1988-2000 /1**

\$ millions	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	1992-2001 Total
USA	58.0	59.0	60.1	61.5	66.2	55.6	42.3	40.6	36.2	40.4	40.5	39.4	42.1	45.4	448.6
World Bank	30.2	34.4	34.3	35.5	37.6	40.0	50.0	50.0	44.9	45.0	45.0	45.0	45.0	45.0	447.5
Japan	23.4	21.9	24.6	25.0	28.3	34.9	38.5	37.3	37.5	33.7	35.3	39.9	34.6	29.2	349.2
Switzerland	11.1	13.2	15.3	16.2	16.1	15.9	18.6	18.4	23.6	23.4	22.7	22.8	18.3	15.7	195.4
EC	9.4	12.0	16.2	14.6	15.1	14.3	16.6	18.6	20.1	23.1	24.9	6.0	22.3	21.7	182.8
Germany	13.3	13.7	14.4	13.4	22.5	22.3	20.2	20.9	18.2	17.0	16.3	15.5	10.2	12.2	175.4
Canada	18.6	19.0	19.7	22.1	23.8	19.6	18.1	14.4	14.3	12.9	12.3	12.3	11.4	11.6	150.7
Netherlands	7.0	6.8	8.6	7.5	11.2	11.0	14.0	16.2	16.2	14.5	14.7	11.6	13.7	12.2	135.2
U. K.	11.5	11.0	12.2	12.1	11.9	9.9	11.0	12.3	11.3	10.4	11.5	13.9	14.9	19.1	126.4
Denmark	2.7	2.7	3.7	3.6	5.5	5.9	8.8	11.2	18.1	19.2	17.7	14.0	11.0	10.6	121.9
<b>Top 10</b>	<b>185.4</b>	<b>193.7</b>	<b>209.0</b>	<b>211.4</b>	<b>238.2</b>	<b>229.3</b>	<b>238.0</b>	<b>239.8</b>	<b>240.4</b>	<b>239.6</b>	<b>240.9</b>	<b>220.4</b>	<b>223.5</b>	<b>222.7</b>	<b>2,333.1</b>
Others	75.9	78.2	77.3	72.2	80.5	81.9	87.2	88.8	92.0	93.8	98.8	109.1	107.6	114.4	954.0
<b>Total</b>	<b>261.3</b>	<b>271.8</b>	<b>286.3</b>	<b>283.6</b>	<b>318.7</b>	<b>311.3</b>	<b>325.2</b>	<b>328.6</b>	<b>332.4</b>	<b>333.4</b>	<b>339.7</b>	<b>329.5</b>	<b>331.1</b>	<b>337.1</b>	<b>3,287.0</b>
<b>Percent of total</b>															
USA	22.2%	21.7%	21.0%	21.7%	20.8%	17.9%	13.0%	12.3%	10.9%	12.1%	11.9%	12.0%	12.7%	13.5%	13.6%
World Bank	11.6%	12.6%	12.0%	12.5%	11.8%	12.9%	15.4%	15.2%	13.5%	13.5%	13.2%	13.7%	13.6%	13.3%	13.6%
Japan	8.9%	8.1%	8.6%	8.8%	8.9%	11.2%	11.8%	11.3%	11.3%	10.1%	10.4%	12.1%	10.5%	8.7%	10.6%
Switzerland	4.3%	4.8%	5.3%	5.7%	5.1%	5.1%	5.7%	5.6%	7.1%	7.0%	6.7%	6.9%	5.5%	4.7%	5.9%
EC	3.6%	4.4%	5.7%	5.2%	4.7%	4.6%	5.1%	5.7%	6.1%	6.9%	7.3%	1.8%	6.7%	6.4%	5.6%
Germany	5.1%	5.0%	5.0%	4.7%	7.1%	7.2%	6.2%	6.4%	5.5%	5.1%	4.8%	4.7%	3.1%	3.6%	5.3%
Canada	7.1%	7.0%	6.9%	7.8%	7.5%	6.3%	5.6%	4.4%	4.3%	3.9%	3.6%	3.7%	3.4%	3.4%	4.6%
Netherlands	2.7%	2.5%	3.0%	2.6%	3.5%	3.5%	4.3%	4.9%	4.9%	4.3%	4.3%	3.5%	4.1%	3.6%	4.1%
U. K.	4.4%	4.0%	4.2%	4.3%	3.7%	3.2%	3.4%	3.7%	3.4%	3.1%	3.4%	4.2%	4.5%	5.7%	3.8%
Denmark	1.0%	1.0%	1.3%	1.3%	1.7%	1.9%	2.7%	3.4%	5.5%	5.7%	5.2%	4.2%	3.3%	3.1%	3.7%
<b>Top 10</b>	<b>70.9%</b>	<b>71.2%</b>	<b>73.0%</b>	<b>74.6%</b>	<b>74.7%</b>	<b>73.7%</b>	<b>73.2%</b>	<b>73.0%</b>	<b>72.3%</b>	<b>71.9%</b>	<b>70.9%</b>	<b>66.9%</b>	<b>67.5%</b>	<b>66.1%</b>	<b>71.0%</b>
Others	29.1%	28.8%	27.0%	25.4%	25.3%	26.3%	26.8%	27.0%	27.7%	28.1%	29.1%	33.1%	32.5%	33.9%	29.0%

/1 Includes both agreed agenda and non-agenda funding. Does not include contributions to secretariat costs or to CGIAR committees. The World Bank contributed \$51.2 million to the latter between 1992 and 2001, making it the largest donor overall during the last 10 years.

Source: CGIAR Financial Reports, 1988-2001.

**Table E.7. Unrestricted and Restricted Funding, Excluding the World Bank, 1988-2000**

<b>\$ in millions</b>	<b>1988</b>	<b>1989</b>	<b>1990</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>
Unrestricted	148.3	151.8	160.1	160.1	164.6	155.6	155.0	158.2	150.0	158.9	160.8	134.0	119.0	96.6
Restricted	83.1	85.6	91.8	88.4	116.5	115.7	120.2	120.4	137.5	129.5	133.7	151.0	167.0	195.5
Agreed agenda	33.3	38.3	40.4	36.8	45.1	39.1	63.1	61.4	109.1	116.4	133.7	151.0	167.0	191.9
Non-agenda	49.8	47.3	51.4	51.6	71.4	76.6	57.1	59.0	28.4	13.1	0.0	0.0	0.0	0.0
<b>Total</b>	<b>231.4</b>	<b>237.4</b>	<b>252.0</b>	<b>248.5</b>	<b>281.1</b>	<b>271.3</b>	<b>275.2</b>	<b>278.6</b>	<b>287.5</b>	<b>288.4</b>	<b>294.5</b>	<b>285.0</b>	<b>286.0</b>	<b>292.1</b>
<b>Percent of total</b>														
Unrestricted	64%	64%	64%	64%	59%	57%	56%	57%	52%	55%	55%	47%	42%	33%
Restricted	36%	36%	36%	36%	41%	43%	44%	43%	48%	45%	45%	53%	58%	67%

Source: CGIAR Financial Reports, 1988-2001.

**Table E.8. Annual Financial Allocations to CGIAR Centers (By Center Group and Center), 1988-2001**  
(Includes both agreed agenda and non-agenda funding)

\$ millions	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	1994-2001 /1
<b>Commodity Centers</b>	<b>122.3</b>	<b>130.7</b>	<b>134.4</b>	<b>133.8</b>	<b>131.9</b>	<b>124.6</b>	<b>131.0</b>	<b>132.3</b>	<b>128.4</b>	<b>122.1</b>	<b>121.7</b>	<b>123.7</b>	<b>123.8</b>	<b>121.2</b>	<b>-3.1%</b>
CIMMYT	31.3	34.1	32.5	34.1	31.4	29.3	31.2	31.7	28.9	28.6	30.1	33.8	37.9	39.3	1.7%
WARDA	6.0	6.3	6.4	6.7	9.6	8.9	8.1	9.7	8.7	8.6	10.0	10.8	8.5	8.6	-1.1%
CIP	20.1	21.9	21.3	21.5	20.9	20.6	22.8	23.2	24.2	23.4	22.2	20.0	20.5	18.7	-5.1%
ILRI	31.2	34.5	34.8	33.4	28.5	22.2	29.1	29.6	28.3	26.1	24.6	26.6	23.1	24.3	-5.2%
IRRI	33.7	33.9	39.4	38.1	41.5	43.6	39.8	38.1	38.3	35.4	34.8	32.5	33.8	30.3	-5.5%
<b>Ecoregional Centers</b>	<b>118.4</b>	<b>123.6</b>	<b>124.5</b>	<b>122.1</b>	<b>121.3</b>	<b>112.0</b>	<b>116.8</b>	<b>112.2</b>	<b>113.0</b>	<b>112.5</b>	<b>113.0</b>	<b>100.1</b>	<b>103.6</b>	<b>100.6</b>	<b>-4.1%</b>
ICARDA	20.1	22.6	18.7	19.5	18.4	16.3	19.0	19.3	21.1	22.3	25.2	19.5	22.6	21.1	-0.3%
IITA	33.6	32.1	35.3	34.3	35.8	34.1	33.4	31.4	31.2	30.8	29.2	30.7	29.4	31.6	-2.9%
CIAT	28.3	32.6	32.4	33.0	32.4	30.1	33.6	31.5	31.0	31.7	32.1	28.7	29.7	27.5	-4.2%
ICRISAT	36.4	36.3	38.1	35.3	34.7	31.5	30.8	30.0	29.7	27.7	26.5	21.2	21.9	20.4	-8.5%
<b>Natural resource management Centers</b>					<b>31.5</b>	<b>34.5</b>	<b>38.6</b>	<b>43.9</b>	<b>46.0</b>	<b>51.4</b>	<b>51.7</b>	<b>55.1</b>	<b>55.0</b>	<b>56.8</b>	<b>3.3%</b>
ICLARM					6.8	6.8	6.6	7.8	9.6	9.0	10.6	14.2	12.3	12.1	7.4%
CIFOR					3.2	5.1	6.1	9.0	9.0	10.6	11.3	11.5	12.4	12.3	6.8%
ICRAF					12.5	13.4	17.0	16.9	17.4	21.8	20.4	20.6	21.5	21.6	2.0%
IWMI					9.0	9.2	8.9	10.2	10.0	10.0	9.4	8.8	8.8	10.8	-1.7%
<b>Policy and other Centers</b>	<b>24.2</b>	<b>28.3</b>	<b>29.9</b>	<b>32.4</b>	<b>36.0</b>	<b>36.4</b>	<b>38.7</b>	<b>37.7</b>	<b>43.1</b>	<b>46.9</b>	<b>50.9</b>	<b>49.1</b>	<b>53.1</b>	<b>51.9</b>	<b>3.1%</b>
IPGRI	6.2	7.6	7.6	8.7	12.4	13.2	14.5	12.6	16.4	18.8	21.2	20.1	22.8	22.3	6.0%
IFPRI	9.1	10.9	12.3	13.4	13.0	12.9	13.8	13.8	16.0	18.2	20.1	20.8	21.5	21.7	5.5%
ISNAR	8.9	9.8	10.0	10.3	10.6	10.3	10.4	11.3	10.7	9.9	9.6	8.2	8.8	7.9	-6.7%
<b>Total</b>	<b>264.9</b>	<b>282.6</b>	<b>288.8</b>	<b>288.3</b>	<b>320.7</b>	<b>307.5</b>	<b>325.1</b>	<b>326.1</b>	<b>330.5</b>	<b>332.9</b>	<b>337.3</b>	<b>328.0</b>	<b>335.5</b>	<b>330.5</b>	<b>-1.6%</b>

/1 Average annual rate of growth of funding, 1994 to 2001, adjusted for inflation.

Source: CGIAR Financial Reports, 1988-2001.

**Table E.9. Center Expenditures by Type of Investments, 1992-2001**  
(Agreed agenda funding only – called core funding before 1995)

\$ millions	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	1994-2001 /1	
											In real terms	In relative terms
Increasing productivity	127.4	123.5	124.3	134.4	129.1	133.1	124.3	117.3	119.7	123.3	-6.5%	-4.9%
Enhancing germplasm	61.3	59.8	61.9	64.0	58.8	63.7	60.0	61.2	61.8	64.1	-5.2%	-3.5%
Production systems	66.1	63.7	62.4	70.4	70.3	69.4	64.3	56.1	57.9	59.2	-7.8%	-6.2%
Fisheries	1.1	1.0	1.2	1.9	2.2	1.4	1.5	1.9	3.7	1.9	2.0%	3.7%
Forestry	3.9	4.9	3.9	8.9	9.2	14.2	10.4	9.3	8.3	7.9	-0.2%	1.5%
Livestock	21.1	20.3	15.7	21.1	18.4	18.7	19.7	15.6	13.8	16.7	-7.9%	-6.2%
Crops	40.0	37.5	41.6	38.5	40.5	35.1	32.7	29.3	32.1	32.7	-9.6%	-8.0%
Protecting environment	29.7	35.8	40.1	45.3	53.7	57.4	64.5	67.9	60.4	67.2	1.7%	3.3%
Saving biodiversity	19.9	14.7	22.6	28.5	34.6	35.3	37.2	36.2	34.8	34.2	-0.4%	1.2%
Improving policies	25.5	24.8	26.0	25.2	38.9	37.3	39.9	46.8	48.0	49.0	4.5%	6.2%
Strengthening NARS	56.1	55.3	51.7	52.6	68.8	70.2	70.9	78.6	74.6	81.1	1.0%	2.6%
Networks	8.0	6.0	8.1	9.1	13.7	13.7	13.3	15.4	14.7	17.2	4.2%	5.8%
Training	22.4	19.5	17.5	21.3	24.6	25.1	27.0	29.8	29.8	31.5	2.4%	4.0%
Org / Mgt	5.8	7.5	6.9	6.0	12.2	11.5	10.5	12.7	10.2	10.7	1.5%	3.2%
Doc / Pub / Info	19.9	22.3	19.2	16.2	18.3	19.9	20.1	20.7	19.9	21.7	-2.6%	-1.0%
<b>Total</b>	<b>258.6</b>	<b>254.1</b>	<b>264.7</b>	<b>286.0</b>	<b>325.1</b>	<b>333.3</b>	<b>336.8</b>	<b>346.8</b>	<b>337.5</b>	<b>354.8</b>	<b>-1.6%</b>	<b>0.0%</b>
<b>Percent of total</b>												
Increasing productivity	49.3%	48.6%	47.0%	47.0%	39.7%	39.9%	36.9%	33.8%	35.5%	34.8%		
Enhancing germplasm	23.7%	23.5%	23.4%	22.4%	18.1%	19.1%	17.8%	17.6%	18.3%	18.1%		
Production systems	25.6%	25.1%	23.6%	24.6%	21.6%	20.8%	19.1%	16.2%	17.2%	16.7%		
Fisheries	0.4%	0.4%	0.5%	0.7%	0.7%	0.4%	0.4%	0.5%	1.1%	0.5%		
Forestry	1.5%	1.9%	1.5%	3.1%	2.8%	4.3%	3.1%	2.7%	2.5%	2.2%		
Livestock	8.2%	8.0%	5.9%	7.4%	5.7%	5.6%	5.8%	4.5%	4.1%	4.7%		
Crops	15.5%	14.8%	15.7%	13.5%	12.5%	10.5%	9.7%	8.4%	9.5%	9.2%		
Protecting environment	11.5%	14.1%	15.1%	15.8%	16.5%	17.2%	19.2%	19.6%	17.9%	18.9%		
Saving biodiversity	7.7%	5.8%	8.5%	10.0%	10.6%	10.6%	11.0%	10.4%	10.3%	9.6%		
Improving policies	9.9%	9.8%	9.8%	8.8%	12.0%	11.2%	11.8%	13.5%	14.2%	13.8%		
Strengthening NARS	21.7%	21.8%	19.5%	18.4%	21.2%	21.1%	21.1%	22.7%	22.1%	22.9%		
Networks	3.1%	2.4%	3.1%	3.2%	4.2%	4.1%	3.9%	4.4%	4.4%	4.8%		
Training	8.7%	7.7%	6.6%	7.4%	7.6%	7.5%	8.0%	8.6%	8.8%	8.9%		
Org / Mgt	2.2%	3.0%	2.6%	2.1%	3.8%	3.5%	3.1%	3.7%	3.0%	3.0%		
Doc / Pub / Info	7.7%	8.8%	7.3%	5.7%	5.6%	6.0%	6.0%	6.0%	5.9%	6.1%		

/1 Average annual rate of growth of expenditures, 1994 to 2001. The "real" growth rate incorporates an adjustment both for inflation and for the redefinition of agreed agenda and non-agenda funding over this time period. This adjustment facilitates a ready comparison between the growth rates in the present table (which do not include non-agenda funding between 1994 and 1997) and those in the previous Table E.8 (which do include non-agenda funding). The "relative" growth rate is relative to the growth in total funding, in order to facilitate comparisons with the growth rates in the following Table E.10.

**Table E.10. Center Expenditures by Type of Investments, 1986-1991  
(Core funding only)**

\$ millions	1986	1987	1988	1989	1990	1991	1986-1991 /1	
							In real terms	In relative terms
Research	80.8	86.0	96.4	104.2	105.9	113.9	3.0%	-0.1%
Increasing productivity	65.6	69.2	79.8	86.0	87.0	92.9	3.2%	0.1%
Livestock	15.4	15.8	20.9	21.4	22.7	23.4	5.2%	2.1%
Crops	50.2	53.3	58.9	64.7	64.29	69.5	2.6%	-0.5%
Resource management	12.5	13.3	12.6	13.9	14.7	15.8	0.5%	-2.6%
Food policy	2.7	3.5	4.1	4.3	4.2	5.2	7.3%	4.2%
Strengthening NARS	31.1	34.7	38.0	40.5	42.8	44.9	3.3%	0.2%
Networks	3.8	4.3	5.1	6.6	9.3	9.0	15.6%	12.5%
Institution building	2.5	3.0	3.5	4.2	5.6	5.3	12.8%	9.7%
Info / Comm	10.3	10.8	11.3	13.1	12.1	15.2	2.9%	-0.2%
Training / Conf	14.5	16.6	18.0	16.6	15.8	15.4	-3.6%	-6.8%
Research support	20.0	21.2	18.8	22.2	22.1	23.7	-0.7%	-3.8%
Research management	43.3	46.3	50.5	57.0	61.1	65.9	4.8%	1.7%
<b>Total</b>	<b>175.2</b>	<b>188.2</b>	<b>203.6</b>	<b>223.8</b>	<b>232.0</b>	<b>248.4</b>	<b>3.1%</b>	<b>0.0%</b>
<b>Percent of total</b>								
Research	46%	46%	47%	47%	46%	46%		
Increasing productivity	37%	37%	39%	38%	38%	37%		
Livestock	9%	8%	10%	10%	10%	9%		
Crops	29%	28%	29%	29%	28%	28%		
Resource management	7%	7%	6%	6%	6%	6%		
Food policy	2%	2%	2%	2%	2%	2%		
Strengthening NARS	18%	18%	19%	18%	18%	18%		
Networks	2%	2%	3%	3%	4%	4%		
Institution Building	1%	2%	2%	2%	2%	2%		
Info / Comm	6%	6%	6%	6%	5%	6%		
Training / Conf	8%	9%	9%	7%	7%	6%		
Research support	11%	11%	9%	10%	10%	10%		
Research management	25%	25%	25%	25%	26%	27%		

/1 Average annual rate of growth of expenditures, 1986 to 1991. The "real" growth rate incorporates an adjustment for inflation and the "relative" growth rate is relative to the growth in total funding, in order to facilitate comparisons with the growth rates in the previous Table E.9. While the categories in the two tables are similar, the CGIAR changed the way in which it classified Center expenditures between 1991 and 1992.

**Table E.11. Center Expenditures by Region, 1986-2001**  
**(Agreed agenda funding only – called core funding before 1995)**

<b>\$ millions</b>	<b>1986</b>	<b>1987</b>	<b>1988</b>	<b>1989</b>	<b>1990</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>1992-2001 Total</b>
Sub-Saharan Africa	68.3	75.3	80.9	91.2	96.8	106.8	100.9	94.7	102.3	110.6	125.0	136.0	137.0	144.0	140.0	154.5	<b>3,096.6</b>
Asia	45.6	48.9	54.5	66.6	69.0	72.0	85.4	87.0	82.7	92.8	106.0	102.0	108.0	111.0	110.0	112.0	<b>1,245.0</b>
LAC	36.8	39.5	40.2	37.5	36.5	37.3	41.4	39.1	47.0	49.0	58.0	56.0	60.0	59.0	56.0	57.7	<b>996.8</b>
West Asia & North Africa	24.5	24.5	28.0	28.5	29.6	32.3	31.0	33.3	32.7	32.9	36.0	40.0	31.0	33.0	31.0	30.7	<b>523.2</b>
<b>Total</b>	<b>175.2</b>	<b>188.2</b>	<b>203.6</b>	<b>223.8</b>	<b>231.9</b>	<b>248.4</b>	<b>258.7</b>	<b>254.1</b>	<b>264.7</b>	<b>285.3</b>	<b>325.0</b>	<b>334.0</b>	<b>336.0</b>	<b>347.0</b>	<b>337.0</b>	<b>354.8</b>	<b>331.7</b>
<b>Percent of total</b>																	
Sub-Saharan Africa	39%	40%	40%	41%	42%	43%	39%	37%	39%	39%	38%	41%	41%	41%	42%	44%	<b>40.2%</b>
Asia	26%	26%	27%	30%	30%	29%	33%	34%	31%	33%	33%	31%	32%	32%	33%	32%	<b>32.2%</b>
LAC	21%	21%	20%	17%	16%	15%	16%	15%	18%	17%	18%	17%	18%	17%	17%	16%	<b>16.9%</b>
West Asia & North Africa	14%	13%	14%	13%	13%	13%	12%	13%	12%	12%	11%	12%	9%	10%	9%	9%	<b>10.7%</b>

Table E.12. Centers' Expenditures by Expenditure Type, 2000

	\$ Millions				Percent of total		
	Program-related	Management & general	Other	Total	Program-related	Management & general	Other
ICRAF	18.8	1.9	0.0	20.8	90.7%	9.3%	0.0%
ICARDA	20.2	3.1	0.3	23.7	85.3%	13.3%	1.5%
IFPRI	18.2	3.2	0.2	21.6	84.4%	14.7%	0.9%
CIFOR	10.8	2.0	0.0	12.8	84.4%	15.6%	0.0%
IITA	25.0	4.7	0.0	29.7	84.1%	15.9%	0.0%
CIMMYT	32.9	6.2	0.5	39.6	83.0%	15.6%	1.4%
IRRI	26.7	5.9	0.0	32.6	82.0%	18.0%	0.0%
IPGRI	17.6	4.0	0.0	21.6	81.3%	18.7%	0.0%
ISNAR	6.5	1.5	0.1	8.1	79.7%	18.6%	1.7%
CIP	16.4	4.2	0.0	20.6	79.7%	20.3%	0.0%
ICLARM	8.2	1.2	1.1	10.5	78.2%	11.7%	10.1%
ILRI	20.5	6.0	0.2	26.7	76.7%	22.6%	0.7%
CIAT	22.7	5.9	1.5	30.1	75.3%	19.7%	5.0%
IWMI	6.6	1.9	0.4	8.8	74.7%	21.3%	4.0%
ICRISAT	16.8	6.4	0.0	23.3	72.3%	27.7%	0.0%
WARDA	6.4	2.8	0.0	9.2	69.4%	30.6%	0.0%
<b>Average per Center</b>	<b>17.1</b>	<b>3.8</b>	<b>0.3</b>	<b>21.2</b>	<b>80.7%</b>	<b>18.0%</b>	<b>1.3%</b>
<b>Total</b>	<b>274.2</b>	<b>61.1</b>	<b>4.3</b>	<b>339.6</b>			
Unrestricted	99.0	54.4	4.3	157.7	62.7%	34.5%	2.7%
Restricted	175.2	6.6	0.0	181.9	96.4%	3.6%	0.0%
<b>Percent of total</b>							
Unrestricted	36.1%	89.1%	100.0%	46.4%			
Restricted	63.9%	10.9%	0.0%	53.6%			

Source: Center 2000 Audited Financial Statements.

Table E.13. Staffing Profiles by Center, 2000

	Number of Staff			Percent of Total		Personnel Expenditures (\$ millions)	Average Cost Per Person (\$ thousands)
	International	Support	Total	International	Support		
ISNAR	38.5	37.5	76.0	50.7%	49.3%	4.6	60.5
IFPRI	48.0	86.5	134.5	35.7%	64.3%	10	74.3
IPGRI	46.0	127.5	173.5	26.5%	73.5%	9.5	54.8
CIFOR	33.5	102.0	135.5	24.7%	75.3%	5.8	42.8
ICARDA	93.0	330.0	423.0	22.0%	78.0%	9	21.3
ICRAF	49.5	281.5	331.0	15.0%	85.0%	11.1	33.5
IWMI	25.5	218.5	244.0	10.5%	89.5%	5.5	22.5
CIMMYT	86.0	770.5	856.5	10.0%	90.0%	20.1	23.5
CIP	61.0	568.0	629.0	9.7%	90.3%	8.8	14.0
ICLARM	27.0	258.0	285.0	9.5%	90.5%	4.6	16.1
ILRI	71.5	735.5	807.0	8.9%	91.1%	13.3	16.5
CIAT	60.0	624.0	684.0	8.8%	91.2%	15.5	22.7
WARDA	32.5	349.5	382.0	8.5%	91.5%	4.3	11.3
IRRI	80.5	978.5	1059.0	7.6%	92.4%	14.9	14.1
IITA	81.0	1066.5	1147.5	7.1%	92.9%	13.9	12.1
ICRISAT	56.5	1137.5	1194.0	4.7%	95.3%	12.5	10.5
<b>Average per Center</b>	<b>55.6</b>	<b>479.5</b>	<b>535.1</b>	<b>10.4%</b>	<b>89.6%</b>	<b>10.2</b>	<b>19.1</b>
<b>Total</b>	<b>890.0</b>	<b>7671.5</b>	<b>8561.5</b>			<b>163.4</b>	

Source: Center 2000 Audited Financial Statements.

## Annex F: Classification of Projects in the CGIAR Research Portfolio

**Objective.** The CGIAR research agenda should ideally be assessed by the extent to which it provides global, regional, or national public goods, i.e., by whether it conducts research at the strategic level and in accordance with its comparative advantage. The meta-evaluation team has not found such an analysis among the CGIAR documents it reviewed for this study. This classification exercise provides an illustration of how and why the CGIAR might usefully review its portfolio in accordance with a global public goods agenda. However, given the very limited information on which this analysis is done, it is clearly not intended to be definitive. It therefore serves to set the stage for examining the likely impacts of the various types of GIAR research conducted by its Centers.

**Methodology and data.** In order to classify the CGIAR's research agenda in terms of the public goods nature of its research, the meta-evaluation conducted a desk review of the CGIAR's 284 ongoing projects as of 2000. The CGIAR project portfolio descriptions used for this review were provided to the CGIAR Secretariat and TAC. Project descriptions ranged from one to three pages in length and typically included the project's rationale/objectives, outputs, gains, duration, users, collaborators, System linkages, and budget.

Using these project descriptions, the 284 projects were classified according to the nature of both the *project activities* and *project outputs*. Using this information, the meta-evaluation team was able to determine whether the project produced global public goods (GPGs), national public goods with regional spillovers (NRS), national public goods (NPGs), or merit goods (MGs), and categorize the projects accordingly.

Project activities were classified as global, regional, or national in scope by examining the project's objectives, milestones, collaborators, and System linkages. Activities were considered global in scope if research was conducted in countries in two or more regions, with regions defined by conventions used within the Bank. Activities were considered regional if research activities were designed to support regional research systems, including, for example, regional planning workshops and training. Activities were deemed national where the activities were designed to strengthen national institutions and programs such as capacity building and training or *ex situ* national germplasm collections.

Project outputs were classified as either global, regional, or national in scope by examining the project's outputs/results, gains/impact, milestones, and the list of intended users/beneficiaries. Outputs were considered global if the project developed methodologies adaptable to specific environments in two regions or more, if global information systems (such as on forest genetic resources) were strengthened, or if research results were expected to be used by agricultural research policymakers across countries in two or more regions or by the donor community and other actors in the international research community. Outputs were considered regional if modeling tools for resource management were developed that assist with priority setting at the regional level, if the project focus was associated with *users* in a single region, or if the project contributed to networking among national programs in a single region. Output was deemed national if the project aimed to increase local institutional or professional capacity by, for example, improving collaboration between the formal sector and local-level institutions, or if the users were decision makers and national program staff from the technical to upper managerial levels.

This classification of activities and outputs was then used to categorize each project as a GPG, NRS, NPG, or MG, a process requiring further examination of the data. If, for example, the project's output

was national in scope, the meta-evaluation team analyzed whether the output had potential regional spillovers. If output was country-specific, and the project description provided no indication of results-sharing across countries, then the project was considered an NPG. If the project provided for regional linkages, the project was classified a NRS. If the project's output was global, the project was given an overall classification of a GPG.

To illustrate the methodology, consider an analysis of IFPRI's Public Policies for Rural Institutions, Markets and Infrastructure Development Project. Examination of the project description revealed that the project's activities are clearly conducted on a global level, as its design provided for studies to be conducted across two regions, Africa and Asia. Although the activity is global in scope, the output of the project is oriented toward the national level, since it is designed to "facilitate locally based public policies and strategies." Overall, the project was determined to be producing national public goods with regional spillover effects (NRS) as the findings and lessons from the completed studies were synthesized and disseminated at the regional level.

**Findings.** The meta-evaluation team found that only 3 percent of projects across the 16 Centers were providing NPGs, while no projects were producing merit goods. A total of 61 percent of CGIAR projects were producing global public goods, while 37 percent were producing national public goods with regional spillover effects. The detailed results of this exercise are given in Table F.1.

**Table F.1. Classification of Research Programs by Center Categories and Centers**

	Number of Programs				Total	Percent of Total			
	GPG	NRS	NPG	MG		GPG	NRS	NPG	MG
<b>Commodity-oriented Centers</b>	<b>62</b>	<b>40</b>	-	-	<b>102</b>	<b>61%</b>	<b>39%</b>	<b>0%</b>	<b>0%</b>
CIP	15	2	-	-	17	88%	12%	0%	0%
ILRI	14	5	-	-	19	74%	26%	0%	0%
CIMMYT	14	6	-	-	20	70%	30%	0%	0%
IRRI	15	12	-	-	27	56%	44%	0%	0%
WARDA	4	15	-	-	19	21%	79%	0%	0%
<b>Ecoregional Centers</b>	<b>37</b>	<b>28</b>	<b>2</b>	-	<b>67</b>	<b>55%</b>	<b>42%</b>	<b>3%</b>	<b>0%</b>
IITA	12	5	-	-	17	71%	29%	0%	0%
CIAT	9	6	2	-	17	53%	35%	12%	0%
ICRISAT	7	7	-	-	14	50%	50%	0%	0%
ICARDA	9	10	-	-	19	47%	53%	0%	0%
<b>NRM Centers</b>	<b>32</b>	<b>22</b>	<b>3</b>	-	<b>57</b>	<b>56%</b>	<b>39%</b>	<b>5%</b>	<b>0%</b>
CIFOR	7	1	-	-	8	88%	13%	0%	0%
ICRAF	12	4	3	-	19	63%	21%	16%	0%
ICLARM	10	7	-	-	17	59%	41%	0%	0%
IWMI	3	10	-	-	13	23%	77%	0%	0%
<b>Policy Centers</b>	<b>41</b>	<b>16</b>	<b>1</b>	-	<b>58</b>	<b>71%</b>	<b>28%</b>	<b>2%</b>	<b>0%</b>
ISNAR	15	3	-	-	18	83%	17%	0%	0%
IFPRI	13	7	-	-	20	65%	35%	0%	0%
IPGRI	13	6	1	-	20	65%	30%	5%	0%
<b>Total</b>	<b>282</b>	<b>172</b>	<b>12</b>	-	<b>466</b>	<b>61%</b>	<b>37%</b>	<b>3%</b>	<b>0%</b>

Key: GPG = global public goods, NRS = national public goods with regional spillovers, NPG = national public goods without regional spillovers, MG = merit goods.

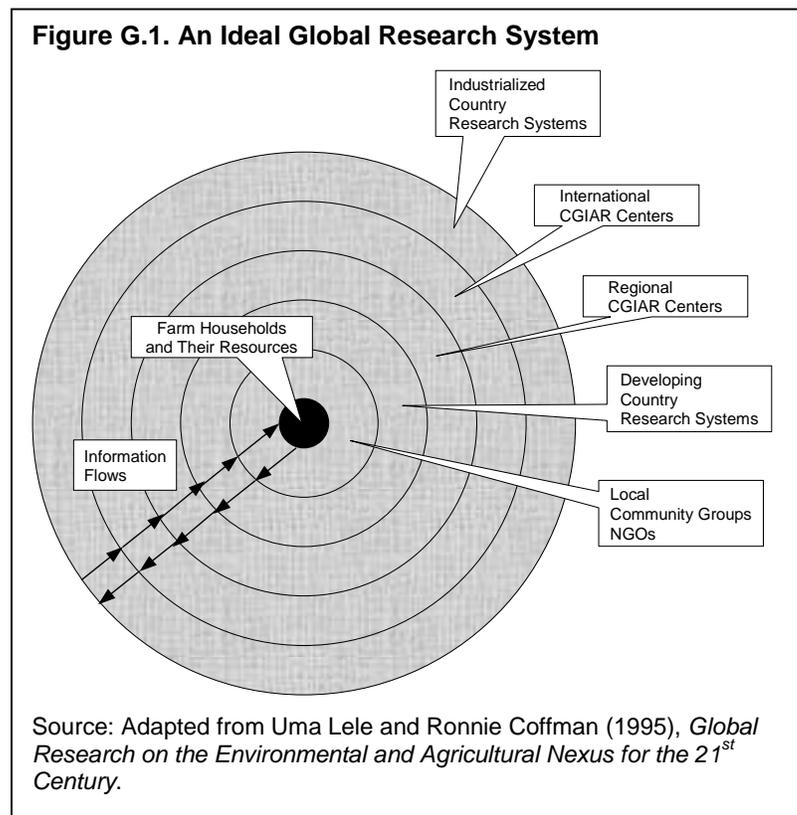
## Annex G: The Global Agricultural Research System

The global agricultural research system is characterized by various institutions and organizations functioning at the local, national, regional, and global level, as described in Chapter 2. (See Figures G.1-3.) Significant institutional change at the regional and sub-regional level has recently occurred in response to the advance of technology, deepening of markets, growth in trade, and changes in economic policy in the agricultural sectors of many developing countries. We examine here emerging institutions that contribute to global, regional, and sub-regional research collaborations and priority setting between and among developing countries, international organizations, and other actors in the agricultural research and development continuum. Note, however, that the description set forth below is far from exhaustive.

### 1. THE GLOBAL FORUM ON AGRICULTURAL RESEARCH

Apart from the CGIAR, there are a number of emerging institutions that will play an increasingly important role in the area of agricultural research and poverty alleviation in developing countries, potentially complementing the objectives and mission of the CGIAR and its stakeholders. The most significant of these institutions is the Global Forum on Agricultural Research (GFAR), an outgrowth of a meeting organized by IFAD in 1994 to, for the first time, identify NARS' concerns collectively as to how the CGIAR might be more responsive to their needs. GFAR was established in Washington, D.C., on October 31, 1996, through facilitation by the FAO, IFAD, ISNAR, and the World Bank.<sup>1</sup> Stakeholders represented at the founding of GFAR include developing country NARS, ARIs and universities, regional and sub-regional organizations (ROs and SROs), NGOs, farmer's organizations, the private sector, IARCs, and the donor community.

GFAR's mission is to mobilize the world scientific community in its efforts to alleviate poverty, increase food security, and promote the sustainable use of natural resources. Relying on cost-effective partnerships and strategic alliances, GFAR aims to promote a Global System for Agricultural Research to reduce poverty, achieve food security, and conserve and manage biodiversity and natural resources. The basic premises behind GFAR's work are:



1. E-GFAR - About Us, accessed at <http://www.egfar.org/action/about/masterpage.shtml>, July 10, 2002.

1. Science and knowledge are essential to the future of agricultural development in contemporary societies.
2. Today more than ever, the systematic creation of knowledge and its practical use depend on transnational research systems and networks.
3. Differences in the capacity to access and use improved technologies can lead to inequities between and within countries that can, and should, be avoided.

GFAR's goals are to:

- Facilitate the exchange of information and knowledge;
- Foster cost-effective, collaborative partnerships among the stakeholders of agricultural research and sustainable development;
- Promote the integration of NARS and enhance their capacity to produce and transfer technology that responds to users' needs;
- Facilitate the participation of all stakeholders in formulating a truly global framework for development-oriented agricultural research;
- Increase awareness among policymakers and donors of the need for long-term commitment to, and investment in, agricultural research.

GFAR concentrates on five high-priority areas: information and communication technologies; support to regional forums and NARS sub-regional groupings; genetic resource management; biotechnology and intellectual property rights; natural resource management and agro-ecology; and international cooperation for agricultural research on commodities outside the CGIAR mandate. The first two priorities are more institutional in nature, as they are crucial to ensuring the full and equal participation of all GFAR stakeholders. The other three areas, unanimously recognized as critical, urgently require specific action programs based on new partnerships and strategic alliances.

In addition to these priorities, GFAR operates in accordance with certain guiding principles:

*Subsidiarity.* Programs and projects are planned and managed at the lowest level at which they can be effectively executed.

*Complementarity.* GFAR strives to develop a global agricultural research system by drawing on the complementary strengths of the stakeholders.

*Additionality.* GFAR supports programs and projects that aim specifically to add value to what each stakeholder can do on its own.

*Involvement of all stakeholders.* GFAR operates through its stakeholders and mobilizes all stakeholders in planning and executing its programs and activities.

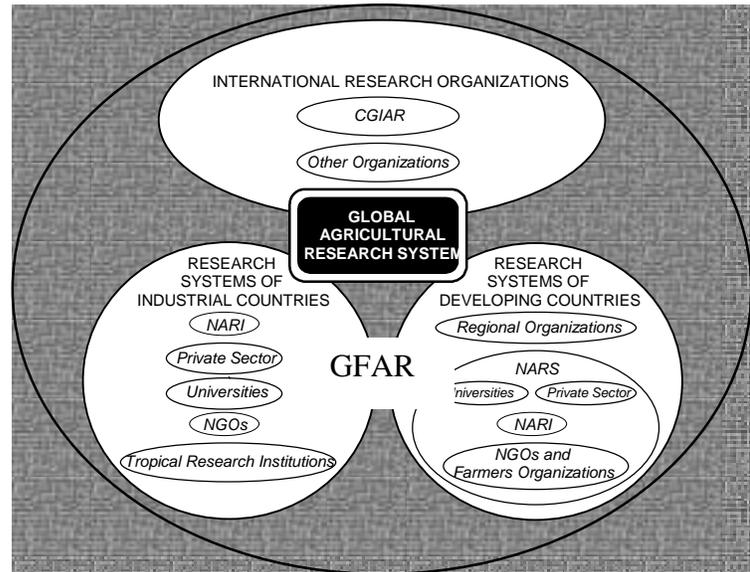
*Partnership.* GFAR's work program supports the evolution of the development-aid concept toward that of full partners with common interests collaborating for mutual benefit. The NARS of the developing countries, along with their regional and sub-regional forums, are the cornerstones of the global agricultural research system that GFAR aims to create.

GFAR operates through the GFAR Steering Committee, working together with the GFAR Donor Support Group. It also coordinates activities related to NARS through the NARS sub-committee. The Steering Committee has 13 members representing the seven categories of stakeholders: regional forums of the NARS from the South (five seats); ARIs and universities involved in co-operation with NARS (three seats):

International Agricultural Research Centers (IARCs) (one seat); the NGO community (one seat); farmers' organizations (one seat); the private sector (one seat); and the donor community (one seat). The GFAR Secretariat is hosted by FAO in Rome.

The GFAR Donor Support Group (GFAR-DSG), under the leadership of IFAD, mobilizes the international community in support of the GFAR initiative. A GFAR plenary meeting is convened once every three years. The two steering committees and the donor support group meet twice annually, in conjunction with the meetings of the CGIAR.

**Figure 2.11. The Global Agricultural Research System**



Source: Adapted from Uma Lele and Ronnie Coffman (1995), *Global Research on the Environmental and Agricultural Nexus for the 21<sup>st</sup> Century*.

The GFAR Secretariat provides support to the GFAR and NARS Steering Committees and to all stakeholders in their active involvement in the Global Forum. It assists in the convening of the various types of meetings of the GFAR, in formulation of the GFAR Mid-Term Plan and its implementation through an annual Program of Work, and in preparation and organization of the triennial plenary meetings of the Global Forum.

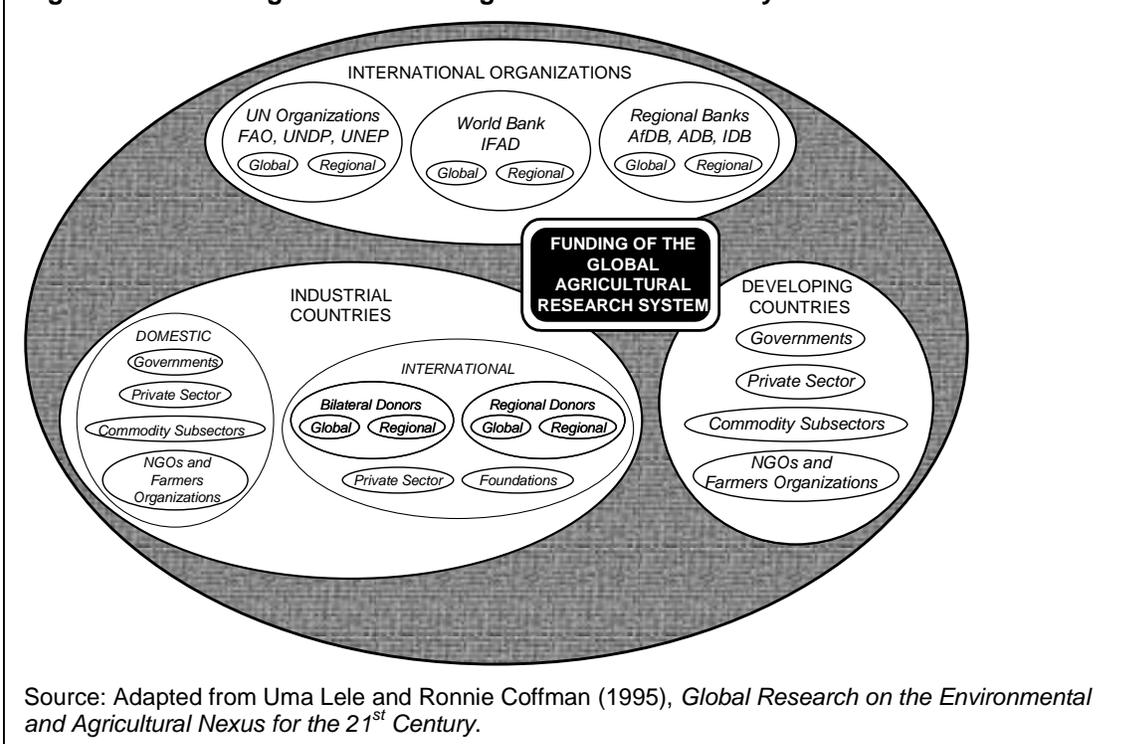
## 2. SUB-SAHARAN AFRICA

Sub-regional organizations in Africa play an increasingly important role in voicing the region's concerns in various forums on issues of agricultural research. An important element of this growing institutional complexity is the effort to address the problems of the "80/20 paradigm" discussed in Chapter 8. Key emerging institutions in sub-Saharan Africa include regional organizations and sub-regional organizations in Southern, Eastern and Central, and West Africa dedicated to strengthening agricultural and natural resource research activities, as well as a larger sub-Saharan Africa forum on related issues. We examine each of these organizations in detail below.

**The Special Program for African Agricultural Research (SPAAR).**<sup>2</sup> SPAAR was established in 1985 by a group of donors that had come to realize that the approach to supporting African agricultural research was not effective in developing sustainable local capacity. In view of the pressures to account for resources and demonstrate impact, donors tended to design free-standing projects that they could control. SPAAR was established to persuade donors to coordinate their projects, avoid duplication, and invest more in building local capacity.

The membership of SPAAR was enlarged in 1994 to include all NARS in Africa, their SROs, and research and development partners. An Executive Committee was established in the same year, and in 1998, the Executive Committee was expanded from 5 to 11 to include representatives of the SROs, NGOs, private sector, international agricultural research community, as well as one other donor. In collaboration with NARS, SPAAR has been the prime facilitator in spearheading and crafting institutional developments and reforms to render national research institutions in sub-Saharan Africa more effective, participatory, and demand-driven. Through the Frameworks for Action (FFAs) and in

**Figure 2.12. Funding of the Global Agricultural Research System**



cooperation with the NARS and SROs, SPAAR has been instrumental in the development of a common vision and agenda to strengthen NARS in a regional context. This has been done in order to promote institutional innovations within national public institutions as well as to promote their linkage to all relevant stakeholders at national and sub-regional levels. The substance of the agenda is explicit in the following six principles of the FFAs:

- Institutionalize a strategic planning process that is participatory and responsive,
- Develop sustainable funding plans and mechanisms;
- Improve institutional and management capacity, transparency and accountability;

2. The World Bank, SPAAR, accessed at <http://www.worldbank.org/afr/aftsr/definede.htm>, July 10, 2002. See also Eicher and Rukuni, 2002.

- Build country coalition and support groups involving those who produce, process, market, fund, and consume;
- Strengthen researcher, extensionists, NGO, farmer, and market agent linkages through refocused research agenda pertaining to on- and off-farm constraints; and
- Promote regional and international collaboration (augment cost-effectiveness spillover effects).

**The Forum on Agricultural Research in Africa (FARA).** In 1997, SPAAR helped to establish FARA as an apex organization for the three SROs (SACCAR, COREF, and ASARECA, discussed below) and as a complement to the promotion of GFAR by the CGIAR. FARA is a mechanism through which the African agricultural research community, through their SROs, can meet to discuss and harmonize their positions for presentation at the GFAR. FARA is in the process of taking over the functions of SPAAR and setting up its Secretariat in Accra, Ghana.

FARA, which has been, together with SPAAR, instrumental in the formulation of the Vision for African Agricultural Research, held its first formal General Assembly meeting in Gaborone, Botswana, during the African Agricultural Research Week 1999.<sup>3</sup> The *ad hoc* post-Gaborone Plenary meeting, involving the outgoing (Dr. Lucas Gakale) and incoming (Prof. Joseph Mukiibi) FARA Chairmen, SRO Executive Secretaries, and Director, recommended that the SPAAR Secretariat be asked to act as FARA's Secretariat until its new constitution and structure are developed and a new team is in place.

During the African Agricultural Research Week 2000 in Conakry, Guinea – in a joint SPAAR/FARA Plenary Session – a consensus on the transition process was reached among the stakeholders of African agricultural research (donors and the scientific community) and a completion deadline for the process set for 2001. It was agreed in Conakry that:

- FARA should be transformed into a mechanism serving the interests of the three SROs and their NARS stakeholders, with a permanent secretariat located in Africa.
- SPAAR Secretariat, under the superintendence of an Interim Executive Committee, should manage the transition process, including searching for and recruiting a transitional manager, backstopping him/her, engaging in negotiations with institutions willing to host the FARA secretariat, and carrying out fund-raising.
- Also, it was requested – and FAO has agreed – to host the Forum's secretariat at regional office in Accra, Ghana.

The Interim Committee of FARA, meeting in Dresden, Germany, during the CGIAR's MTM00 and GFAR 2000 meetings, decided that instead of hiring a Transitional Manager, ISNAR should be commissioned to develop the constitution and structure of the new FARA, as well as other administrative and operational matters such as the protocols and work program. ISNAR has accepted and plans are well under way to make this dream a reality. In parallel, the SROs would carry out broad consultations with their constituents to review and endorse the steps taken up to then. The entire process, including the final selection of the Executive Secretary and the staff, would be ratified by the General Assembly of FARA, scheduled to meet in Addis Ababa during the SPAAR/FARA Plenary of April 2001. The General Assembly of FARA would endorse the work program at that time and interact with donors and scientific partners and discuss with them the funding and partnership arrangements needed to facilitate implementation of the work program.

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3. The World Bank, *SPAAR Transition*, accessed at URL: <http://www.worldbank.org/afr/aftsr/spa2fara.htm>, July 20, 2002.

**Southern African Centre for Cooperation in Agricultural and Natural Resources Research and Training (SACCAR).**<sup>4</sup> SACCAR was created in 1984 by an initiative undertaken by the Southern African Development Community (SADC). SACCAR was established in recognition of the need to establish an institutional framework for mobilizing and coordinating limited human and financial resources (both national and donor) to address the issues of agricultural productivity and agricultural resources management to enhance food security and economic development in the region.

SACCAR has several objectives to strengthen NARS in member countries: the generation, dissemination, and promotion of new technology through inter-country liaison and regional collaborative projects. Other objectives relate to information: to promote the dissemination of scientific information and, in training, to promote human resources development and strengthen the capacity of research and training institutions. The following countries constitute its membership: Angola, Botswana, Lesotho, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia, and Zimbabwe.

SACCAR was charged with coordinating agricultural research, training, and promoting cooperation among member states in the region and quickly garnered donor support, adding staff and programs in the decade following inception. The majority of SACCAR's first generation projects concentrated on food staple crops such as sorghum, millets, beans, cowpeas, maize, etc., as the issue of food security was and still is of paramount concern in the region. It soon became clear, however, that for SACCAR to succeed in its mission, it should also address the issue of human resources development to strengthen the capacities of NARS in the region. SACCAR's mandate was therefore expanded to include training.

Considerable achievements have been made in the following areas:

1. Release of improved crop varieties and hybrids developed through the regional commodity programs by different member states for crops, such as sorghums, millets, maize, beans, cassava, wheat, vegetables, groundnuts, and sweet potato, that are important food and cash crops in the region;
2. Training of more than 100 scientists in the region at B.Sc., M.Sc., and Ph.D. levels through regional projects, most of whom have assumed positions of research responsibilities in the region;
3. Provision of short-term training for thousands of technicians and researchers to improve technical skills in agricultural research management research station development, genetic resources management and conservation, gender, crop improvement, crop management, and agricultural information management;
4. Establishment of a regional plant genetic resources center with affiliated national centers that are continuously being strengthened through staff training, technical backstopping, and provision of equipment by the regional center;
5. Strengthening of faculties of agriculture, forestry, and veterinary medicine and promotion of cooperation between these faculties by creating and supporting a formal deans forum to discuss areas of cooperation in training; and
6. Promotion of rapid information exchange by providing resources for e-mail linkages between the NARS in the region.

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4. The World Bank, *Sub-Regional Organizations*, accessed at URL: <http://www.worldbank.org/afr/aftsr/sros.htm>, July 20, 2002; SACCAR, accessed at URL: <http://www.saccar.org/>, June 1, 2002; SACCAR, *Long-Term Strategy and Five-Year Plan 2000 - 2004*, Accessed at URL: [http://www.egfar.org/documents/Regional\\_Priority\\_Setting/FARA/SACCARstr.pdf](http://www.egfar.org/documents/Regional_Priority_Setting/FARA/SACCARstr.pdf), July 20, 2002.

**Conférence des Responsables de Recherche Agronomique en Afrique de l'Ouest et du Centre (CORAF).**<sup>5</sup> In 1987, CORAF was launched by French research institutions (ORSTOM, CIRAD, and INRA) with the aim of forging research cooperation among French and African scientists. Directors from 16 Francophone countries of sub-Saharan Africa and France comprised its founding body. In 1990, CORAF moved its Secretariat to Senegal and appointed the first African Executive Secretary. In the 1990s, the membership was opened to Anglophone and Lusophone countries. Currently, CORAF is composed of the directors of NARS in 21 countries in West and Central Africa.

CORAF has evolved to become the SRO for West and Central Africa. Its mission is to coordinate sub-regional agricultural research, maximize efficiency in the sustainable exploitation of agricultural resources to alleviate hunger and poverty through provision of a mechanism for sub-regional cooperation and a forum for consultation in agricultural research, and exchange of information and experiences, thereby strengthening member national agricultural research systems. To do this, CORAF is coordinating a strategic planning exercise for agricultural research in West and Central Africa, a process that should lead to the definition of regional priorities and develop mechanisms for regional cooperation.

CORAF manages an array of research networks including rice, maize, cassava, vegetables, and cotton. CORAF also has the largest mandate in terms of size (West and Central Africa) and the largest number of countries (21) of the three SROs in Africa, although it is functioning in the most politically unstable part of the continent.

The 21 member countries paid 2 percent and donors 98 percent of the cost of the 1.9 million Euro budget for CORAF's Secretariat in 2001. In 1999, a Strategic Plan was adopted which, among other things, recommends that CORAF cease to be a "club of Directors of Research Institutes" by opening it up to other members of NARS; initiate a competitive research fund; and recommend that member states should increase their contributions to the funding of the organization.

#### **Association for Strengthening Agricultural Research in Eastern & Central Africa**

**(ASARECA).**<sup>6</sup> ASARECA is the SRO for the Eastern and Central Africa region. It was established in September 1994 after the Framework for Action for Eastern Africa was approved at a consultative meeting convened by SPAAR and the Intergovernmental Authority on Development (IGAD) in Kampala, Uganda. ASARECA was set up in 1994 by the 10 Directors General of agricultural research in East and Central Africa. The secretariat for ASARECA is located in Entebbe, Uganda.

Currently, 19 research networks are being generously supported by a large number of donors. In 1999, the European Union approved a grant of 29.3 million Euro over the 2001-2004 period. Other donor commitments include U.S. \$15 million from USAID, U.S. \$4 million from SIDA, and U.S. \$7 million from several other donors. These collective pledges bring the total commitments by various donors to ASARECA's regional research program to over U.S. \$50 million from 1999 to 2005.

ASARECA's mission is to strengthen and increase the efficiency of agricultural research in the East and Central Africa region and facilitate the achievement of economic growth, food security, and export competitiveness through productive and sustainable agriculture. The activities of ASARECA are implemented through a number of regional agricultural research networks, programs, and projects. These include the first generation regional networks (on agroforestry, beans, root crops, and potatoes) that were established in the 1980s and brought under the umbrella of ASARECA in 1994; and second

5. *CORAF/WECARD*, accessed at URL: <http://www.coraf.org/>, June 30, 2002.

6. *About ASARECA*, accessed at URL: <http://www.asareca.org/about/about.htm>, June 30, 2002.

generation networks and programs that were established between 1994 and 1998. These include regional agricultural research networks for bananas; cassava, maize, and wheat; sorghum and millet; and livestock, they also include regional collaborative programs/projects on agricultural policy analysis; technology transfer; natural resources management; and electronic connectivity. New networks and programs under planning include networks for research on coffee; post harvest processing; soil and water management; rice; and information and communication. Also included are projects on strengthening the management capacity of NARS institutions in the region.

In 1997, ASARECA completed the process of developing a long-term strategic plan for regional collaboration in agricultural research in the East and Central Africa region. The strategic plan was formally approved at a meeting of stakeholders held in Nairobi, Kenya, in July 1997. The plan includes recommendations on management, financing, and coordination of regional research networks and programs, including the roles of different partners; priorities for regional research; a focus on market-oriented research; and maintenance of the long-term sustainability of the agricultural resource base. Implementation of the strategic plan commenced after its approval, with rationalization of the regional networks and programs as well as establishment of new ones.

**The Eastern and Central African Programme for Agricultural Policy Analysis (ECAPAPA).**<sup>7</sup> In 1997, the directors of agricultural research in the East and Central Africa (ECA) region created ECAPAPA to address the need to improve agricultural policy in the region and to bring the NARS into the process. This program was developed in close collaboration with agricultural researchers and social scientists; agricultural policy analysts from public, quasi-public, and private sectors; NGOs; academics from both regional and overseas universities; IARCs; commodity-based networks; and interested donors.

The goal of ECAPAPA is to expand the economic growth of the region's agricultural sector and to alleviate poverty in the ECA countries. The mission of the program is to create an inclusive policy network in the ECA region that can serve as a basis for improved agricultural policy and formulation. In order to fulfill this mission, ECAPAPA has three major tasks: to undertake training and capacity building, policy analysis and research, and information exchange.

**Other organizations: non-CGIAR research centers and advanced research institutes.** There are other international research institutes that are not supported by the CGIAR but that have been actively involved in agricultural research in sub-Saharan Africa. These include the International Centre of Insect Physiology and Ecology (ICIPE), the International Centre for Soil Research and Management (IBSRAM), the Asian Vegetable Research and Development Center (AVRDC), The International Fertilizer Development Center (IFDC), and others.

Several ARIs are involved in collaborative agricultural research activities with NARS, SROs, and CGIAR Centers in Africa. These include CIRAD, CABI institutes, NRI, ORSTOM, Inter CRSP, and several North American and European universities. The ARIs operate independently, sometimes overlapping programs and projects with donors and international centers. Their overall contribution to targeted research has, however, been considerable.

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7. ECAPAPA, accessed at URL: [http://www.cgiar.org/foodnet/workshop/ecapapa/Ecapapa/a\\_ecapapa.htm](http://www.cgiar.org/foodnet/workshop/ecapapa/Ecapapa/a_ecapapa.htm), June 30, 2002.

### 3. LATIN AMERICA AND THE CARIBBEAN<sup>8</sup>

The Latin American and Caribbean region is well known for its wealth of experiences, structures, and mechanisms of agricultural research. The visionaries of the fifties and sixties understood that an agricultural sector that did not incorporate technology could not survive in the new paradigm of “industrial production for the domestic market.” Thus, existing experimental stations were transformed into semi-autonomous agricultural research institutes – NARIs – to adopt and generate technologies that would increase agricultural productivity and improve the welfare of the producers, many of whom have become involved in transferring this technology.

The NARIs, currently operating in most countries of the region, have played a vital role in research development and technology transfer. In their early stages, in addition to generating new technologies, they also adapted those used in more developed countries – hence the concept of “technology converter.” Despite cutbacks in public resources and an outmoded notion of a public research model, the NARIs are undergoing major transformations in several countries. The concept of the NARIs, long regarded as the only source of technological innovation, is gradually changing. As new R&D actors emerge, the model of a single institution is gradually being replaced and enriched by another of National Agricultural Research Systems (NARS). Some countries are going even further toward the configuration of national systems of technology innovation, in some cases with a growing participation by the private sector.

Recognition of common problems and opportunities for developing agricultural technology at regional and sub-regional level on the one hand, and the inability of smaller countries to develop comprehensive agricultural research programs on the other, gave rise to the first initiatives for the exchange of knowledge, information, and cooperative research. The oldest of these is IICA (40 years, see below), in Turrialba, which later evolved into the Tropical Agriculture Research and Training Center (CATIE), and the other sub-regional Center, the Caribbean Agricultural Research and Development Institute (CARDI), which operated as a network among Caribbean countries, including Belize and Guyana, during the 1970s. PCCMCA, PROMECAFE, and PROCISUR, the oldest mechanisms for reciprocal cooperation, date from the end of the seventies and the beginning of the eighties, and focus on the exchange of information, development of regional research projects, and informal training, among other activities. Regional and sub-regional reciprocal cooperation programs on agricultural research, involving mainly the NARIs and in some cases private sector institutions, have grown notably, both in terms of the number and the scope of topics covered. Recently, research initiatives in natural resources, institutional development, and agroindustry – ranging from exchange of information to joint research programs – have been incorporated.

The examples of PROMECAFE and PROCISUR were followed by other similar programs in the region, known generically as PROCIs. These included: PROCIANDINO for the countries of the Andean region from Bolivia to Venezuela; PROCITROPICOS for Brazil and the countries of the Amazon basin; PROCICARIBE for countries associated with CARDI in the Caribbean, including the Dominican Republic, Suriname, and Belize; PROCINORTE for Mexico, the U.S., and Canada, currently in the process of being formalized; and SICTA (Central American Integration System for Agricultural Technology) for the Central American countries and Panama.

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8. GFAR 2000, *Latin America and the Caribbean (LAC) Regional Forum*, document prepared on the occasion of the Meeting of the Global Forum for Agricultural Research, in Dresden, Germany, May 20-23, 2000, by the Presidency FORAGRO and its Technical Secretariat at the Directorate of Science, Technology and Natural Resources, IICA, San Jose, Costa Rica, accessed at URL: [http://www.egfar.org/documents/Regional\\_Priority\\_Setting/FORAGRO/nars0096.PDF](http://www.egfar.org/documents/Regional_Priority_Setting/FORAGRO/nars0096.PDF), July 20, 2002.

The economic impact of the PROCIs has been measured. The rate of return of investments has been very high, varying from 23 to 110 percent. Nearly all these initiatives have received support from IICA and the IDB during their process of institutional development. Other consortia and specialized networks also deserve mention, such as CONDESAN (Consortium for the Sustainable Development of the Andean Ecoregion), RIMISP, PRECODEPA, PROFRIJOL, RELACO, the Regional Maize Program coordinated by CIMMYT, various networks sponsored by FAO such as REDBIO and International Centers, other product networks, such as the CRISPs (Collaborative Programs to Support Agricultural Research), administered by U.S. universities with funding from USAID, and PRIAG (Research Program on Basic Grains) in Central America, which recently concluded.

Four components are usually mentioned when describing the region's institutional architecture. The three were described previously: NARIs, the Regional Centers (CATIE and CARDI), and sub-regional programs such as the PROCIs and specialized networks. The fourth component consists of the International Research Centers of the CGIAR. Four of these Centers are based in the Americas (CIMMYT, CIAT, CIP, and IFPRI), and form part of the main worldwide agricultural research network. They undertake important technological development work alongside scientists working on national programs. Other Centers, for example ISNAR, IPGRI, ILRI, CIFOR, and ICRAF, have offices or direct activities in LAC. The main focus of research has been the genetic improvement of food crops such as wheat, maize, rice, beans, potatoes, and cassava. More recently these establishments have carried out research on natural resources, conservation of genetic resources, and agricultural policy and institutional strengthening. This institutional panorama was enriched at the end of the nineties with the implementation of additional regional mechanisms, FORAGRO and FONTAGRO, which attempt to fill two gaps observed in the operation of the four components described previously.

#### **Foro Regional de Investigación y Desarrollo Tecnológico Agropecuario (FORAGRO).<sup>9</sup>**

FORAGRO was conceived in 1998 as an independent mechanism to facilitate discussion and work toward the definition of a regional agricultural research and technology agenda that responds to members' needs and to the phenomenon of globalization. One of the Forum's key roles is to influence policies that promote agricultural development from the perspective of technology. This conception of the Forum takes account of the fact that its members – and the Forum itself – act within the context of political and economic integration in the Americas and globalization, where it is increasingly necessary to operate through information networks. FORAGRO therefore promotes efforts to strengthen and develop integrated actions of hemispheric scope with sub-regional mechanisms, such as PROCIANDINO, PROCICARIBE, PROCISUR, PROCINORTE, PROCITROPICOS, SICTA, and equivalent networks.

In addition, it complements institutional innovation actions with FONTAGRO, a fund created to support financing of agricultural research in the region. The NARIs FORAGRO, PROCIs, and FONTAGRO, among others, are an essential component of the Regional System of Research and Technological Development of the Americas, or SIRIDET.

FORAGRO works to facilitate dialogue, coordination, and strategic alliances among the different actors comprising national and regional agricultural research and technology development systems, and between these systems and the international system of agricultural research. The idea is to develop a technical agenda with political influence, in the most positive sense of the word, aimed at:

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9. GFAR 2000, *Latin America and the Caribbean (LAC) Regional Forum*, document prepared on the occasion of the Meeting of the Global Forum for Agricultural Research, in Dresden, Germany, May 20-23, 2000, by the Presidency FORAGRO and its Technical Secretariat at the Directorate of Science, Technology and Natural Resources, IICA, San Jose, Costa Rica, accessed at URL: [http://www.egfar.org/documents/Regional\\_Priority\\_Setting/FORAGRO/nars0096.PDF](http://www.egfar.org/documents/Regional_Priority_Setting/FORAGRO/nars0096.PDF), July 20, 2002.

- Reassessing agriculture in LAC, adopting a renewed vision of the sector as a central component of economic development in the region.
- Repositioning of R&D on the political and economic agendas of the countries and of the region, to influence the design and instrumentation of policies.
- Supporting the definition of a regional R&D agenda (regional priorities, strategies for collaborative action, information, actors) based on a shared prospective vision of agriculture.
- Establishing a hemispheric presence, adding value to national and sub-regional action, participating in the definition of policies at regional and international level.
- Supporting development of an organic vision of the regional research system (FONTAGRO, PROCIs, SICTA, and other networks and regional Centers, such as CARDI and CATIE, and university research networks).
- Facilitating homogeneous access by countries to new knowledge and technologies developed in the region and worldwide.
- Facilitating an organic participation by LAC in the research systems of other regions of the world and in international systems; serving as an indicator and a vehicle to express the region's demands; influencing, in a positive sense of the word, the priorities and actions of the international research system in response to the region's needs.
- Supporting the consolidation of an inter-American technological innovation system to facilitate the interaction of institutional actors involved in R&D and promote joint action on common problems.

**The Regional Fund for Agricultural Technology (FONTAGRO).**<sup>10</sup> FONTAGRO is a consortium that fosters strategic agricultural research with a regional focus and direct participation by the Latin American and Caribbean countries in identifying priorities and financing research projects. Its mission is to increase agricultural sector competitiveness while protecting natural resources and reducing poverty in the region through the generation of agricultural technologies with international public goods characteristics and by facilitating the exchange of scientific knowledge among research organizations within the region, as well as with other regions. FONTAGRO's objectives are to create a sustainable financing facility and a forum in which the LAC countries can discuss priority topics relate to technological innovation, thereby strengthening the role these countries play in defining the regional research agenda. In addition, FONTAGRO:

1. Helps expand the research base to ensure success in meeting the regional challenges of technological development that call for multidisciplinary approaches, which implies efforts that many countries are not in a position to carry out individually;
2. Ensures increased availability and continuity of resources for research activities aimed at producing public goods that are useful for more than one country, thus complementing the applied research conducted at the national level;
3. Strengthens the participation and decision-making power of LAC countries in regional agricultural research activities; and
4. Encourages cooperation among diverse research organizations to conduct research projects.

FONTAGRO's financial resources are based on contributions of the member countries to an endowment fund with a target of U.S. \$200 million, whose income finances regional and strategic research projects on a non-reimbursable basis. As of December 2000, FONTAGRO's membership was comprised of Argentina, Bolivia, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador,

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<sup>10</sup> FONTAGRO, accessed at URL: <http://www.fontagro.org/>, June 30, 2002.

Nicaragua, Panama, Paraguay, Peru, Uruguay, Venezuela, and the International Development Research Centre (IDRC).

Countries and organizations (public as well as private) contributing to FONTAGRO are members of the Fund's Board of Directors, with responsibilities for setting research priorities, and establishing policies and procedures for the approval of research proposals. A Secretariat provides the Board with technical, legal, financial, and administrative support. The Secretariat's headquarters is temporarily located at the Inter-American Development Bank in Washington, D.C.

**Instituto Interamericano de Cooperación Para La Agricultura (IICA).** IICA is the specialized agency for agriculture of the inter-American system of the Organization of the American States established to promote food security and prosperity of the rural sector of the Americas.<sup>11</sup> Specifically, its mission is to support the member states of the OAS in their pursuit of progress and prosperity in the hemisphere through the modernization of the rural sector, promotion of food security, and development of an agricultural sector that is competitive, technologically prepared, environmentally managed, and socially equitable for the peoples of the Americas.

The Institute's objectives are:

1. To support the countries of the hemisphere in their efforts at integration, cooperation, and participation in the global economy.
2. To support the member states in ensuring the safety of food supplies and removing sanitary and phytosanitary barriers to trade.
3. To support agro-industrial and agri-business development of the sector by promoting the incorporation of new technology and business principles into the enterprises of the sector to promote competitiveness and the development of a global agri-business environment.
4. To promote sustainable rural development and sustainable use of natural resources for present and future generations.
5. To support the Ministries of Agriculture in the process of transforming their role, structure, and functions to face the new realities of globalization and modernization of the State.
6. To support the process of agricultural educational transformation, so as to produce scientists, technicians, and entrepreneurs that can effectively develop/reposition agriculture.

The Institute's cooperation services are grouped into six Strategic Areas that, in turn, are divided into two complementary groups that strengthen and enrich each other's action. The first includes the four areas of thematic concentration: policies and trade; science, technology, and natural resources; agricultural health; and rural development. The second comprises two strategic areas that, in addition to being thematic, articulate the Institute's cooperation actions as a result of their cross-cutting nature: training and education, and information and communications.

IICA's highest governing body is the Inter-American Board of Agriculture (IABA), composed of the Ministers of Agriculture of the 34 member states. Its role is to direct inter-American dialogue on agriculture, with a view to achieving greater consensus and developing a more articulated policy in this sphere. It also approves the Institute's strategic plans related to policies and actions. The second-highest governing body is the Executive Committee (EC), made up of representatives of 12 member countries, selected on a rotating basis. IICA's executive organ is the General Directorate, whose mission is provide technical support to the IABA and serve as the technical secretariat of the inter-American working groups and commissions created by the Ministers of Agriculture of the region. It

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11. Instituto Interamericano de Cooperación Para La Agricultura, Accessed at: <http://iicanet.org/info/iica.asp>, June 17, 2002.

also provides follow-up to the commitments assumed by the governments with regard to agriculture and rural development.

#### 4. ASIA AND THE PACIFIC

**Asia-Pacific Association of Agricultural Research Institutions (APAARI).**<sup>12</sup> APAARI was established in December 1990 with the aim to promote the development of national agricultural research systems (NARS) in the Asia-Pacific region through intra-regional and inter-institutional cooperation. APAARI is an important regional forum whose policies, plans, strategies, and programs focus on resolving regional concerns on food security, poverty, and agricultural sustainability.

The overall objectives of the Association are to foster the development of agricultural research in the Asia-Pacific region so as to: promote the exchange of scientific and technical information; encourage collaborative research; promote human resource development; build up organizational and management capabilities of member institutions; and strengthen cross-linkages and networking among diverse stakeholders. To meet these needs, the Association: i) convenes General Assembly once every two years, holds regular Executive Committee meetings yearly, and organizes consultations, workshops, trainings, etc.; ii) collects, collates, and disseminates research findings; iii) maintains links with other forums in the region and outside through meetings/participation and information exchange; and iv) promotes need-based collaboration in research projects among member institutions, analyzing priorities and focusing on regional agricultural development.

To achieve the objectives of the APAARI, the following strategies and action plans have been identified: regional collaboration network on priority programs; information network of centers of excellence; developing human resources; policy advocacy; promoting technology transfer; resource generation; and publication enhancement

Presently, 18 NARS are members of APAARI and several CGIAR Centers; other international and regional organizations are its associate members. APAARI Secretariat is located in the premises of FAO Regional Office for Asia and the Pacific in Bangkok, Thailand.

#### 5. NEAR EAST AND NORTH AFRICA

**The Association of Agricultural Research Institutions in the Near East and North Africa (AARINENA).**<sup>13</sup> AARINENA was established in 1985 to strengthen cooperation among national, regional, and international research institutions and centers through the dissemination and exchange of information, experiences, and research results.

The mission of AARINENA is to contribute to the enhancement of agricultural and rural development in the region through fostering agricultural research and technology development and by strengthening collaboration in this regard within and outside the region to achieve a greater degree of self-reliance in food and agriculture and improve the nutritional well-being and overall welfare of the people of the region, while at the same time sustaining and further improving the productive capacity of the natural resources base.

AARINENA's objectives are to

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12. APAARI, Accessed at URL: <http://apaari.org/>, June 30, 2002.

13. AARINENA – *General Information*, accessed at URL: <http://www.ari.gov.cy/general.html>, July 20, 2002.

- Foster the development of agricultural research in the Near East and North Africa region;
- Promote the exchange of agricultural scientific and technical experience and information;
- Strengthen national agricultural research capacities for providing timely and necessary data and information to policy-makers;
- Encourage the establishment of appropriate cooperative research and training programs in accordance with identified regional, bilateral, or national needs and priorities;
- Advise members on issues pertinent to research organization and management;
- Strengthen cross-linkages between national, regional, and international research centers and organizations, including universities, through involvement in jointly planned research and training programs; and
- Assist in the mobilization of financial and other forms of support to all efforts aiming at strengthening agricultural research and technology development in the region.

AARINENA has an Executive Committee that consists of five members, including the President and Vice-President, elected at each biennial session of the Conference from among representatives of the full members on the basis of their administrative positions, as delegated representing the five sub-regions. The Association has its seat at the Agricultural Research Institute in Cyprus, which currently also provides the Executive Secretary.

AARINENA's activities are financially supported by annual membership subscriptions from full and associate members as well as by grants and donations from individuals, governments, national, regional, or international organizations, development banks, and others, which may be accepted on behalf of the Association by the Executive Committee.

## Annex H: System-Level Priority Setting and Resource Allocation

### Introduction

Since a public agricultural system has limited resources and potentially a vast agenda, establishing priorities is essential. Whereas research may be thought of simply in economic efficiency terms, the range of other objectives, e.g. poverty alleviation and sustainable management of natural resources, add complexity to evaluating priorities. Poverty alleviation may be considered in terms of making judgments about distributional impacts, and sustainability may be translated either in terms of the more efficient use of natural resources (by reflecting the scarcity value of the resources in their pricing) or in terms of intergenerational distribution of the resource use.

The economic surplus model, the net present value of changes in economic surplus as a result of research-induced shifts in product supply, will then have to be modified to reflect these other objectives, making it possible to assess the efficiency costs of achieving equity and security objectives.<sup>1</sup> In reality, though, estimating net research benefits is difficult due to the uncertainty of research outcomes, imperfect factor and product markets, externalities, and the problems of valuation of many research inputs, particularly natural resources.

Sustainability outcomes may be thought in terms of stability of income.

Not only are there difficulties in valuation, but research is a blunt instrument to achieve equity objectives. Often short-cut methods of precedence, congruence, scoring, rules of thumb, and guidelines are used that do not take into account, among other things, probabilities of research success or likely rates of adoption.

### Background

Owing in part to the founding principles of the CGIAR, including sovereignty of donors to make their own decisions regarding resource allocation, the legal autonomy and independent nature of the 16 research Centers, and the role of independent scientific advice, the CGIAR's priority setting and resource allocation processes are quite complex. They have become increasingly complex over the years (Ferrar 2001), as they have evolved in efforts both to improve the system and to reinforce commitment to the CGIAR in a time of financial crisis.

Historically, the Technical Advisory Committee (TAC) was responsible for assessing and outlining priorities and strategies for the CGIAR on a periodic basis. The first such report was prepared in 1973, with subsequent versions in 1976, 1979, 1986, 1992, and 1996. These System priorities have been translated into work plans for the Centers through the Medium-Term Planning (MTP) process, with annual resource allocations derived as a result.<sup>2</sup>

In 1992, TAC finalized a review of CGIAR priorities and strategies and presented it to the Group. Compared to TAC's previous reviews, the approach had been modified to take into account the current goals of the CGIAR and its expanded mandate, emerging trends in world agriculture, including the greater emphasis on sustainability and resource management issues and the evolution of

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1. Julian M. Alston, George W. Norton and Philip G. Pardey, *Science Under Scarcity: Principles and Practice for Agricultural Research Evaluation and Priority Setting*, Cornell University Press, Ithaca, New York, 1995.

2. The 1996 priorities and strategies report represented an early rebalancing of priorities, given the mid-1990s renewal process. While this remains the "active" version of the System's priorities, annual mid-term planning processes now also take into account the CGIAR's new vision, which was presented by TAC and endorsed by the Group at MTM00.

scientific capacity in developing countries. TAC also attempted to achieve meaningful interactions with stakeholders and transparency in decision making; it also sought to develop mechanisms to facilitate CGIAR priority setting as a continuing activity and enable the monitoring of the implementation of agreed CGIAR priorities.

In formulating priorities and strategies for the System, TAC used an analytical framework with three dimensions: an activity dimension, including the five categories of CGIAR research and research-related activities;<sup>3</sup> a spatial dimension with nine agroecological zones and four geographic regions; and a product dimension, with four main production sectors and their respective commodities. Quantitative tools, such as poverty-weighted congruence, scoring, and economic surplus models, were used in addition to informed judgment to assist in the formulation of recommendations. The 1994 TAC publication *CGIAR Medium-Term Resource Allocation 1994-98: Analysis and Recommendations* provides a detailed description of how the priorities were translated into specific resource allocation recommendations through the MTP process.

Initially, Centers' programs and budgets were prepared annually, complemented with multi-year projections or requirements, and reviewed by TAC and endorsed by the Group. The programs and budgets were based on Centers' long-term plans. Beginning in 1987, Centers prepared five-year medium-term plans, based both on CGIAR priorities and strategies, as proposed by TAC and endorsed by the Group, and on their own long-term plans. At ICW90, the Group endorsed the recommendations of a report examining the experience of the five-year allocation process and called for a more transparent linkage between System priorities and Centers' operational programs and the consideration of constrained resource supply in a so far largely demand-driven resource allocation process. According to TAC, its 1992 Review of CGIAR Priorities and Strategies, including its implications for resource allocation, improved the linkages between System priorities and resource allocation in the framework of new Medium-Term Plans by Centers.<sup>4</sup>

Until 1995, the World Bank's contribution to the CGIAR was used to fill gaps between the TAC-recommended and Group-endorsed priorities on the one hand and actual financial allocations by CGIAR Members on the other. From 1972-1993, the Secretariat was responsible for allocating the resources based on this gap-filling – or “donor of last resort” – procedure. After the 1993 establishment of the Finance Committee, that committee played a large role in the allocation. In both cases, the Bank's funds were used to cover shortfalls in Center funding based on TAC-recommended budgets.<sup>5</sup>

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3. These were: Germplasm Enhancement and Breeding; Saving Biodiversity; Production Systems and Protecting the Environment; Improving Policies; and Strengthening NARS.

4. TAC Secretariat 1994. *CGIAR Medium-Term Resource Allocation 1994-98: Analysis and Recommendations*.

5. Anderson and Dalrymple 1999.

### Box H.1. Concepts and Terminology

**The Research Agenda:** Comprises the bulk of CGIAR center projects and activities. Components may be executed by one or more Centers, and/or jointly with national agricultural research systems (NARS), advanced research organizations (AROs), and non-governmental organizations (NGOs). The Technical Advisory Committee (TAC) would develop the Agenda in collaboration with Centers and recommends appropriate work programs for CGIAR financing. Projects included in the Agenda must meet four criteria.

They must:

- Be aimed at producing research or research-related (including training) international public goods;
- Be of high priority in terms of accomplishing the CGIAR's goals and objectives;
- Have acceptable probabilities of success; and,
- Have no alternative producers or sources of supply with suitable costs or reliability.

**Non-Agenda** is activity a center is qualified to undertake because of experience, location, size, or other factors, but which does not meet all of the criteria for inclusion in the Agenda.

**CGIAR Agenda matrix:** The distribution of financial resources is presented as the CGIAR Agenda matrix, with centers comprising the rows and CGIAR activities the columns. Activities are aggregated into groups – the five CGIAR undertakings. The matrix is constructed by fully allocating center projects, the basic center unit of activity with objectives, outcomes, and milestones, to the CGIAR activities. (In 2000, the CGIAR project portfolio comprised some 300 programs, which are aggregations of the 1,600-odd projects undertaken by the Centers.) The CGIAR has identified several thematic areas as systemwide programs to respond to specific challenges and to foster collaboration among centers and deepen it with other partners. Center participation in these, included in the agenda matrix, is also presented in a supplementary matrix.

**Financing modalities:** Centers are primarily financed through annual support from CGIAR Members. Modest amounts are also available from Centers' annual miscellaneous income, including ad hoc contributions from organizations that are not CGIAR Members. Member financing may be **unrestricted** and directed to the CGIAR with flexibility regarding allocation based on CGIAR priorities; or it may be directed to Centers or to programs. Alternatively, funding may be **restricted** and directed to a specific Center program, project, subproject, or activity. There are two types of restricted support: by attribution (which refers to funds directed to a program or region, but are otherwise unconstrained; Centers must document their allocation, however); or by contract (which refers to funds that must be expended in accordance with a contract between a Member and Center, with specified line items in the budget).

Source: CGIAR Secretariat 2001, *CGIAR Annual Report 2000*.

### Renewal Brings Critical Changes in Resource Allocation

During the mid-1990s financial crisis, “the challenge for the chairman was to increase funding for the research agenda.”<sup>6</sup> Indeed, in an interview with OED, Ismail Serageldin confirmed that his desire was for the CGIAR's programs to drive its budget and not the other way around, which would require a redoubled financial commitment to the CGIAR on the part of traditional and new contributors.<sup>7</sup>

As part of the mid-1990s Renewal process, three important, inter-related changes were made in resource allocation. First, the CGIAR instituted a resource allocation matrix as a tool to increase budgetary transparency, accountability, and predictability. At the 1994 Mid-Term Meeting, the Group reached consensus that financial arrangements should be reformed and adopted a matrix approach to enhance budgetary predictability, accountability, and transparency. The matrix approach, by plotting system programs in relation to Centers, explicitly recognizes the ability of each donor to provide its

6. Anderson and Dalrymple, 1999.

7. Interview with Ismail Serageldin, 2002.

support to an individual Center (with freedom to reallocate between activities within a Center's work program), or to individual programs (with freedom to reallocate between Centers active in the implementation of that program), or to a specific cell in the matrix (an individual activity in a particular Center), or contribute to the system. The idea was that the transparency provided by this approach would enable the Group to ensure that no part of the overall Research Agenda and work program adopted in the matrix remains under-funded and that no individual cell of the matrix is oversubscribed.<sup>8</sup> The matrix also fully incorporated variable overhead costs in the cells of the research program columns. It was hoped that this would ensure appropriate payment of overhead costs by donors<sup>9</sup> and reverse a situation that had become problematic for the Centers. The aggregate of the cells in the matrix constitute the CGIAR's Research Agenda.

**Redefinition of the Research Agenda** is the second policy change of the renewal period. Previously, Centers' research had been termed either "core" or "complementary." A 1995 audit of the CGIAR by the World Bank's Internal Audit Unit indicates that core activities had become equated with the highest priority activities within the CGIAR's mandate, as limited by the individual "core" budget envelopes of the Centers in the System's medium-term priorities and strategies document. "Complementary" activities captured all other Center research undertakings. Within the complementary category, there was no formal distinction made between (1) activities outside the CGIAR's mandate, and (2) those activities that were still within the mandate but did not fall within the core funding envelope. In 1995, the Agreed Agenda was broadened to include the second of the two types of activities that had been classified as "complementary."<sup>10</sup> As a result of this policy change, the Centers' research projects were classified as "Agreed Agenda" or "Non-Agenda."

Per the CGIAR's financial guidelines,<sup>11</sup> to be included in the Agreed Agenda, projects must meet the four criteria:

- Aim to produce research or research-related international public goods (including training);
- Be of high priority with regard to accomplishment of the CGIAR's goals and objectives;
- Have acceptable probabilities of success; and
- Have no alternative producers or sources of supply with suitable costs or reliability.

The third change in resource allocation arising from Renewal, which is related to the creation of the Agreed Agenda, is that the mechanism for **allocating the World Bank's annual contribution** was transformed from a "donor of last resort" model to a matching grant formula. Anderson and Dalrymple (1999) provide a detailed discussion of the two models. This matching grant mechanism is still in place as of the time of the writing of this report. Only those projects deemed by TAC to meet the criteria of the Agreed Agenda qualify for World Bank matching funds.

These policy changes were inter-related. In more clearly distinguishing those activities beyond the CGIAR's mandate through creation of the Non-Agenda category, it was hoped that financial reporting of research undertakings would become less ambiguous. When coupled with the shift to a matching formula for allocation of the Bank grant, broadening the Agreed Agenda also provided a basis for an increase in Bank support to the CGIAR, as well as an incentive for other donors to increase their contributions. In his Opening Address to the 1994 Mid-Term Meeting, the Chairman

8. CGIAR Secretariat, 1994, Mid-Term Meeting 1994, Summary of Proceedings and Decisions.

9. IAD 1995, Report on an Audit of CGIAR Reporting Arrangements.

10. IAD 1995, *Report on an Audit of CGIAR Reporting Arrangements*.

11. CGIAR Secretariat 2002. *Financial Guideline Series Number 4: CGIAR Resource Allocation – Developing and Financing the CGIAR Research Agenda*.

outlined a program “to stabilize the financial situation and halt erosion of the system’s scientific capacity.” This included:

“an effort to mobilize additional resources for the system’s approved core program so that, through a matching formula, the CGIAR can fully utilize the World Bank’s offer of a one-time special grant of \$20 million (additional to the customary annual grant) for 1994/1995. The Bank’s package is linked to a two pillar strategy: adoption of a reform plan by the Group and availability of sufficient funds from other donors to be matched by the Bank in a ratio of 1:2. Donor contributions could either be “new” funding, or funds re-directed from activities not included in the core program approved at ICW93; and a revision of funding strategies to focus future donor contributions on the agreed research agenda. This would require greater discipline by both centers and donors.”<sup>12</sup>

Thus, the offer of the additional \$20 million on a matching basis served as incentive to other donors to increase their contributions. Beyond additional contributions by other donors, the Bank’s special grant could be attained by reclassifying “complementary” activities within the newly broadened Agenda.<sup>13</sup>

Indeed, analysis by the meta-evaluation team of data presented in the CGIAR’s 1994-1995 Annual Report clearly indicates that almost 60 percent of the \$49 million in stabilization financing in response to the financial crisis derived from redirected or re-labeled non-Agenda funding (see Table

**Table H.1. Sources of Stabilization Financing**

<i>\$ in millions</i>	1994 Financial Stabilization Program	As % of Total Stabilization
Agreed Agenda Requirements	270.0	
Actual Estimated Funding	219.0	
Funding Gap	51.0	
<u>Stabilization Program:</u>		
Redirected or Relabelled Non-Agenda Funding	28.0	57.1%
World Bank	10.0	20.4%
Member Support	11.0	22.4%
Total	49.0	
Revised Agreed Agenda Support	268.0	

Source: CGIAR Annual Report 1994-1995.

H.1.).

Once these reforms were in place, this agreed “Research Agenda” was reviewed by TAC in accordance with the Centers’ Medium-Term Plans. This was then presented to the CGIAR Members at the Mid-Term Meeting. The Centers used the Agreed Agenda to mobilize resources from donors. Later in the year, the Centers prepared their Financing Plans based on what the donors are willing to

12. CGIAR Secretariat, 1994, *Mid-Term Meeting 1994, Summary of Proceedings and Decisions*.

13. CGIAR Secretariat, 1994, *Mid-Term Meeting 1994, Summary of Proceedings and Decisions*.

fund. The Group would then approve Financing Plans in October so the Agreed Agenda would be implemented starting from the following January.

Each year, in its evaluation of the Centers' MTP programmatic submissions (in March) and in the Center Financing Plan submissions (in August), TAC assessed the degree to which there was congruence between what Centers are proposing and the Group-endorsed agenda, and made its recommendations accordingly. Where there was not, it described the nature and extent and trend of the discrepancy observed.

Until the 2000 Financing Plan, TAC scrutinized the MTP projects proposed by the Centers to see whether they qualified as "CGIAR Agreed Agenda." If they were deemed as such, and in most cases they were, they were entitled to World Bank matching funds. Occasionally, there were some examples where TAC rejected projects because they did not meet the established criteria (congruence with CGIAR goals, international public goods, etc.).

### Post-Renewal Reforms

The resource allocation process has continued to be modified. Beginning in 1998, the CGIAR adopted a three-year forward planning horizon, based on the MTPs. The MTPs are now rolling three-year plans, in which the annual research agenda is reviewed each year not only in the context of current developments and strategies, but also in the context of future requirements and opportunities.<sup>14</sup>

At ICW98, the CGIAR adopted the logical framework ("logframe") as the conceptual tool in resource allocation. This was intended to bring about a shift from an input/activity to an output/project approach in research planning, financing, monitoring, and evaluation. Under the new approach, the logframe provides the conceptual framework for describing the CGIAR's research effort at each level – project, center and system – and for linking outputs to the CGIAR's mission and *raison d'être*. The logframes at each level share common definitions (indicators, outputs, purposes, and goals). Under the logframe structure, distribution of financial resources is presented as the CGIAR research agenda matrix, in which 16 Centers comprise the rows and five columns represent the principal outputs of the CGIAR (replacing the five CGIAR undertakings under the input/activity structure). These are:

- Germplasm improvement
- Germplasm collection
- Sustainable production
- Policy
- Enhancing NARS

There have been a number of more recent reforms as part of the current Change Design and Management process. First, the Finance Committee was disbanded at MTM01. As a result, the Chair and the CGIAR Director have taken over responsibility for allocating the Bank's contribution to the CGIAR. This is an important change, since it is the first time that the Bank itself has directly controlled the allocation of its grant to the CGIAR. While a new Finance Committee of ExCo to be chaired by the ARD Director is in the process of being formed, it has not yet begun to function, and it is not expected to have responsibility, like the former Finance Committee, for allocating the Bank's resources. Who allocates the Bank's contribution to the CGIAR and by what criteria remains a debated issue.

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14. CGIAR Secretariat 2002. *Financial Guideline Series Number 4: CGIAR Resource Allocation – Developing and Financing the CGIAR Research Agenda*.

Secondly, at AGM01, with the decision to discontinue the Mid-Term Meeting, the Group agreed that the two-step financial planning calendar (approval of MTPs at MTM, followed by approval of financing plans at ICW) should be replaced by simultaneous approval of the medium-term work plans and financial plans at each AGM, with major revision of an MTP requiring review and recommendation by the Science Council.<sup>15</sup>

Third, and perhaps most importantly, the Group agreed at AGM01 to transform TAC into a Science Council. The extent of the Science Council's involvement in priority setting and resource allocation is not yet fully determined. But it is expected to play a more limited role, relative to TAC, in medium-term planning and no role in the annual financial planning process.<sup>16</sup> According to OED's survey of stakeholder views, there is no agreement as to whether the SC should have the lead in priority setting, a huge change from the initial years of the CGIAR (see Box 6). In general, the Centers and OECD members were less in favor of a lead role for the SC than were TAC, the Third System Review team, and NARS.

Relative to TAC, there is no consensus among CGIAR stakeholders as to who should manage the process of developing a strategic vision for the CGIAR or how large a role the Science Council should play in priority setting (see Annex O). The Chairman has expressed to OED that his vision is one in which the System Office, in consultation with the Centers, prepares an annual business plan. The business plan would be reviewed by TAC and presented to the Group.<sup>17</sup>

### OED Assessment

The various reforms in resource allocation processes and policies of the last decade may have been undertaken with the best of intentions in terms of improving financial stability, accountability, and transparency. However, the net effect has been an erosion of the role of independent scientific advice in the CGIAR, resulting in a loss of strategic direction for the System. This has been reinforced by the ever-increasing proportion of donors' contributions that are restricted in their use. Moreover, without painstaking examination of Centers' and Secretariat financial records, it is difficult to determine exactly what is happening in a strategic sense at the aggregate level, as the many changes and inconsistencies in financial reporting have created less, rather than more, clarity.

**TAC's lost influence.** Sixty-seven percent of respondents to a survey of stakeholder views believe that TAC's role in priority setting declined over the past decade (see Annex O). When examining the declining role of TAC, one must look at three facets of the issue: the quality of the committee itself; the intellectual basis for TAC's priority setting; and TAC's influence vis-à-vis resource allocation policies and practices. The first of these issues is taken up in Annex J.

Where priority setting methodology is concerned, others have questioned the intellectual underpinnings of TAC's priority setting practices.<sup>18</sup> The CGIAR developed a framework for priority setting that took into account a combination of distributional and security objectives. However, they

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15. CGIAR Secretariat, 2001. *AGM01 Summary Record of Proceedings and Decisions*.

16. The newly formed Executive Council has taken on some of the responsibilities previously assigned to TAC, such as review of the centers' MTPs. CGIAR Secretariat 2002. *Financial Guideline Series Number 4: CGIAR Resource Allocation – Developing and Financing the CGIAR Research Agenda*.

17. Interview with Ian Johnson, 2001. The use of the term "business plan" for the management of a global research system is not clear. See Annex E for details.

18. Julian M. Alston, George W. Norman, and Philip G. Pardey, 1995. *Science Under Scarcity: Principles and Practice for Agricultural Research Evaluation and Priority Setting*, Ithaca NY: Cornell University Press.

were criticized for crudeness and misleading proxies for the corresponding economic surplus measures. Critics have argued that few scoring studies have attempted to approximate economic surplus measures of the distributional effects corresponding to the non-efficiency objectives, and that inaccurate and overlapping criteria and double counting of benefits has been the problem with the scoring models. Thus, even though TAC had a model for the establishment of priorities and allocation of research results, in reality the model did not have broad acceptability.

The meta-evaluation team believes that the overwhelming factor behind TAC's declining influence is the changes in resource allocation practices during the 1990s. First, increasingly restricted contributions from CGIAR Members limited Centers' ability to utilize funds in support of the TAC-recommended priorities. Secondly, the adoption of the matrix and concomitant broadening of the research agenda exacerbated divergences from TAC's resource allocation recommendations. Thirdly, the change in allocation of the Bank's contribution eliminated a critical mechanism to enforce TAC's recommendations.

In fact, these resource allocation changes unwittingly resulted in both an undermining of the role of science in the CGIAR and a reinforcing of donor influence in driving the CGIAR's agenda. Despite regular appeals to donors to reverse the trend in restricted funding (including in the Third System Review), donor sovereignty has allowed this practice to persist and even increase. Thus, funding is becoming increasingly tied to donors' individual preferences, which are often short term in nature. Finally, as the Bank's contribution has, until recently, been allocated by matching contributions from others, these donor preferences are being indiscriminately reinforced with Bank funds. It is proposed that the Bank funds be allocated to Challenge Programs. Some donors have expressed concern, therefore, that the Bank is beginning to behave like other bilateral donors by tying its funds to specific

**Table H.2. 2000E Direction of the Restricted Versus Unrestricted Agenda**

	2000E Allocation / Variance Between Restricted & Unrestricted Program Agenda					
	Germplasm		Sustainable	Policy	Strengthen NARS	
	Improvement	Collection	Production		Training	Other
CIAT	2%	-8%	10%	-1%	0%	-1%
CIFOR	0%	-5%	-1%	-3%	1%	7%
CIMMYT	6%	-7%	8%	2%	-10%	2%
CIP	6%	-5%	0%	2%	-3%	0%
ICARDA	-6%	-1%	7%	2%	0%	-3%
ICLARM	-8%	0%	8%	5%	2%	-7%
ICRAF	-3%	2%	3%	2%	-4%	0%
ICRISAT	-1%	12%	-9%	5%	0%	-7%
IFPRI	0%	0%	1%	2%	2%	-5%
IITA	-4%	-1%	-1%	0%	1%	4%
ILRI	2%	1%	6%	3%	-3%	-9%
IPGRI	5%	5%	4%	-5%	0%	-9%
IRRI	-5%	-3%	8%	0%	3%	-2%
ISNAR	0%	0%	-3%	1%	-6%	7%
IWMI	0%	0%	-5%	1%	0%	4%
WARDA	11%	3%	-2%	0%	-10%	-2%
Total	0%	-1%	3%	2%	-1%	-2%
Direction of Rest. Prog. Agenda	Less	Less	More	More	Less	Less

Source: 2000 Center MTPs.

programs.

Table H.2 indicates that, in 2000, restricted funding showed a slight preference in financing sustainable production and policy research. Policy research, in particular, is an area which is generally “over-funded” from the perspective of TAC recommendations. In addition, the meta-evaluation’s observations about the need for rebalancing the composition of IFPRI’s policy research are outlined in Chapter 5 of the Technical Report. A component of sustainable production unrelated to the issues of productivity growth (protecting the environment) also often has been over-funded.

Restricted funding has also led to a more fragmented approach to research, in that Centers must increasingly piece together project-based restricted funding in an attempt to craft coherent research programs. In the year 2000, for example, expenditures were made on nearly 1,600 donor-named restricted projects totaling \$182 million. For these projects, the average 2000 expenditure was \$115,000, while nearly 20 percent of the projects had expenditures of less than \$10,000. Only 3 percent of the donor-named restricted projects exceeded \$500,000, and nearly 70 percent fell below \$100,000 (see table H.3).<sup>19</sup> This also causes an administrative burden for Centers.

**Table H.3. 2000 Restricted Expenditures on Donor-Named Projects, Further Detail on Project Size**

	2000 Restricted Expenditures on Donor-Named Projects					
	< \$10K	\$10K - \$50K	\$50K - \$100K	\$100K - \$500K	\$500K +	Total
CIAT	42	55	23	51	3	174
CIFOR	17	21	12	15	2	67
CIMMYT	13	51	31	67	7	169
CIP	3	21	24	26	3	77
ICARDA	12	32	11	31	5	91
ICLARM	18	14	8	10	2	52
ICRAF	37	39	13	34	5	128
ICRISAT	26	35	15	19	4	99
IFPRI	28	30	17	37	3	115
IITA	27	35	10	30	7	109
ILRI	27	41	18	33	4	123
IPGRI	28	41	18	36	2	125
IRRI	19	45	18	36	7	125
ISNAR	5	19	12	12	-	48
IWMI	5	21	10	15	1	52
WARDA	5	14	5	14	-	38
Total	312	514	245	466	55	1,592
% of Total	20%	32%	15%	29%	3%	100%

Source: Center 2000 Audited Financial Statements.

The expansion of the Agreed Agenda to include Non-Agenda projects also had important implications for the direction of research. Data on the Non-Agenda resource allocation by undertaking is only available in the CGIAR Financial Reports for 1992, 1993 and 1994. Table H.4 shows the apparent divergence between the Agreed Agenda and Non-Agenda. For reference, TAC’s 1992 recommendations are also presented.

There were, in fact, drastic differences between the Agreed Agenda and Non-Agenda research profiles. Disparities in resource allocation to germplasm enhancement and breeding, strengthening NARS, crops, and livestock are particularly notable. These four activities were of particular concern to TAC in later years.

19. It is important to note that this reflects project-related expenditures in a given year. Some of these projects may be multi-year in nature, with a larger total budget than what was expended in 2000.

**Table H.4. Comparison of Non-Agenda to Agreed Agenda Research 1992-1994**

	Agenda			Non-Agenda			Apparent Divergence			TAC
	1992	1993	1994	1992	1993	1994	1992	1993	1994	1992
<b>Resource Allocation by Activity:</b>										
1. Increasing Productivity	49%	49%	47%	34%	34%	30%	-15%	-14%	-17%	51%
1.1 Gemplasm Enhancement & Breeding	24%	23%	23%	16%	16%	14%	-8%	-8%	-10%	22%
1.2 Production Systems	26%	25%	24%	19%	19%	16%	-7%	-6%	-7%	29%
2. Protecting the Environment	11%	14%	15%	12%	12%	19%	0%	-2%	4%	10%
3. Saving Biodiversity	8%	6%	9%	4%	4%	5%	-4%	-2%	-4%	8%
4. Improving Policies	10%	10%	10%	11%	11%	14%	1%	1%	5%	11%
5. Strengthening NARS	22%	22%	20%	39%	39%	32%	17%	17%	12%	20%
< Training	9%	8%	7%	13%	13%	8%	4%	5%	2%	7%
< Doc/ Pub/ Info	8%	9%	7%	4%	4%	2%	-4%	-5%	-5%	6%
< Institution Building/ NARS	2%	3%	3%	15%	15%	13%	13%	12%	11%	2%
< Networks	3%	2%	3%	7%	7%	8%	4%	5%	5%	4%
TOTAL	100%	100%	100%	100%	100%	100%				100%
<b>Sectoral Composition:</b>										
Crops	60.3%	59.0%	66.7%	88.0%	87.4%	79.8%	27.6%	28.4%	13.1%	66%
Fish	1.7%	1.7%	1.9%	6.0%	6.3%	4.3%	4.3%	4.6%	2.4%	2%
Forest	6.0%	7.6%	6.3%	4.5%	4.9%	10.6%	-1.5%	-2.7%	4.3%	9%
Livestock	31.9%	31.7%	25.1%	1.5%	1.4%	5.3%	-30.4%	-30.3%	-19.8%	23%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				100%

Source: CGIAR 1994 Financial Report, CGIAR Medium-Term Resource Allocation, 1994-1998.

The shift away from using the Bank's allocation as a "donor of last resort" was perhaps the critical blow to TAC's influence. The policy change was made to address real issues that arose as a result of the "donor of last resort" model. Among the downsides of the DLR model, Anderson and Dalrymple point out the following:

- An incentive for Centers to classify activities as "complementary," so as to maximize Bank funds for budgetary shortfalls in their "core" budget<sup>20</sup>;
- A stifling of Center initiatives in raising funds;
- An insulation of some Centers from economic realities;
- An over-reliance on Bank funds by some Centers, making "internal exit" by the Bank from some Centers or programs difficult.<sup>21</sup>

But in changing the allocation formula to address these concerns, three significant consequences arose.

- First, it is widely acknowledged by CGIAR stakeholders that the shift away from the donor of last resort model effectively eliminated the only mechanism that existed to ensure that TAC's priorities and resource allocation recommendations were adhered to. As a result, TAC's influence – and, subsequently, the role of independent scientific advice – in the System has been minimalized.
- Second, the distribution of Bank funds is now largely determined by the pattern of funding of other donors, which is not necessarily supporting the long-term, strategic elements of the System.<sup>22</sup> Because the matching formula indiscriminately matches all contributions falling within the Agreed Agenda, the Bank's funds are not being put to strategic use in supporting global public goods. Not only do the Bank funds now match many contributions to the

20. This concern is underscored in the 1995 audit of CGIAR reporting arrangements (IAD 1995).

21. In 1993, the Bank's Special Grants Oversight Committee (SGO) expressed concerns in this area and considered whether the Bank allocation should continue to be treated as a balancing contribution (Anderson and Dalrymple 1999).

22. Anderson and Dalrymple 1999.

**Table H.5. Summary of TAC's Observations on Center Financing Plans**

	Center Financing Plans					Group Approved
	1998	1999	2000	2001	2002	
<b>Resource Allocation by Activity:</b>						
1. Increasing Productivity	38%	36%	35%	34%		39%
1.1 Germplasm Enhance. & Breeding	18%	18%	17%	17%	19%	20%
1.2 Production Systems	20%	19%	18%	17%	35%	19%
2. Protecting the Environment	18%	19%	20%	19%		18%
3. Saving Biodiversity	10%	11%	11%	10%	10%	11%
4. Improving Policies	12%	12%	13%	13%	15%	12%
5. Strengthening NARS	22%	22%	21%	24%	21%	20%
< Training	9%	0%	8%	9%		9%
< Doc/ Pub/ Info	5%	0%	6%	7%		5%
< Institution Building/ NARS	4%	0%	3%	4%		3%
< Networks	4%	0%	4%	5%		3%
TOTAL	100%	100%	100%	100%	100%	100%
<b>Sectoral Composition:</b>						
Crops	70%	69%	70%	69%		66%
Fish	5%	5%	5%	5%		5%
Forest	11%	12%	11%	14%		12%
Livestock	15%	15%	14%	12%		17%
TOTAL	100%	100%	100%	100%		100%
<b>Commodity Profile (of 19 Total):</b>						
On Trend	6	6	8	8	2	19
Below Trend (Under-Funded)	8	9	5	6	8	-
Above Trend (Over-Funded)	6	5	6	5	9	-

Source: Reports from TAC on its Review of the Center Financing Plans, ICWs 1997-2001.

production of regional and even national public goods, but they are no longer supporting the international public goods that, by definition, were not being funded by others.<sup>23</sup>

- Third, there has been consistent under-investment in increasing productivity (due largely to under-investment in germplasm enhancement and breeding), with over-investment in protecting the environment (particularly early on), improving policies, and strengthening NARS (See Table H.5 and Annex E, Table E.9.). With regard to specific sectors, there is consistent under-investment in livestock and over-investment in crops.

When looking at how the change in allocation of the Bank's contribution has affected individual Centers, it appears that ICLARM, IPGRI, and IRRI "won" in garnering more Bank funds, while ILRI, CIAT, and WARDA "lost" (see Table H.6). ILRI's case is noteworthy given TAC's repeated concerns about under-investment in livestock.

While it is difficult to document whether TAC's overall priorities were less adhered to than before the shift in Bank funding, there is no longer a mechanism that exists to ensure that the long-term priorities of the System are met. Since 1995, the System has had to rely much more heavily on individual donors to scale back or beef up their funding to individual Centers to bring the System's overall investment portfolio more in line with the agreed agenda. In theory, since the shift to matching funds, CGIAR Members act to collectively fill any financial gaps that might rise in the course of the year.<sup>24</sup> According

23. See for example Bertram and Dalrymple 2000. It should also be noted that Ian Johnson, the current chairman, has decided to decrease Bank funding to Centers through matching grants in 2003, and to allocate up to \$20 million of the Bank's \$50 million contribution to fund the Challenge Programs being supported by new incoming donor funding.

24. CGIAR Secretariat, Financial Guideline Series No. 4.

to OED consultations with TAC, however, this did not seem to work, despite donors' recognition of the problem. Centers, too, have been unable to respond and adjust their research portfolio due to the increasing share of their resources coming from special project (restricted) funding, thereby effectively reducing their degree of freedom. Based on the Center MTP and Financing Plan analyses done by TAC, a number of deviations from the 1997 Group-endorsed research agenda and planned resource allocation were not being effectively responded to by the Group, as highlighted in several of TAC's Financing Plan commentaries.

Even TAC's responsibility for screening projects for their conformity with the agreed agenda criteria, which has now been taken over by the newly established Executive Council,<sup>25</sup> had been undercut in recent years, as the Finance Committee has approved Bank matching funds for some projects that TAC stated should not receive them. There are examples in 1997 and 1998, for example, of TAC rejecting certain projects on the grounds of failing to meet the established criteria. TAC looked carefully at each project and applied specific criteria to judge whether projects qualified as "Agreed Agenda." In the last several years, there has been less of this, partly because the CGIAR agenda itself has broadened and all that used to be "complementary" or "non-core" has been included under the Agreed Agenda. To what extent the "heartland" agenda has been compromised as a result is an interesting question. There was a case more recently when, in reviewing one of the Centers' MTPs, TAC recommended against inclusion of three specific projects in the Agreed Agenda because they failed to meet the established criteria. Nonetheless, perhaps in an effort to bring all Center activities under the Agreed Agenda, the Finance Committee approved the three projects, thus making them eligible for World Bank matching funds.

**What voice for developing countries?** What voice do developing countries have in the CGIAR's priority setting? In a stakeholder questionnaire, 45 percent of respondents indicated that developing countries have the greatest influence in driving the Centers' research agendas? Thirty-four percent responded that developing countries do, and 35 percent felt that scientific considerations play the largest role (see Annex O).

**Table H.6. World Bank Funding by Center, 1991-2000**

	World Bank Funding by Center 1991-2000 as % of Total Center Funding (Agreed Agenda)									
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
CIAT	17.2%	23.4%	22.9%	20.8%	18.3%	15.8%	14.5%	9.7%	11.8%	14.8%
CIFOR	nmf	18.8%	0.0%	19.0%	27.3%	6.9%	8.5%	10.6%	12.2%	13.7%
CIMMYT	14.7%	18.8%	16.0%	22.8%	21.6%	16.1%	12.9%	11.0%	11.2%	12.1%
CIP	10.5%	6.5%	6.8%	13.8%	8.0%	7.0%	8.0%	10.4%	14.5%	16.1%
ICARDA	20.5%	20.7%	19.8%	27.9%	23.5%	15.6%	13.0%	21.4%	10.8%	18.1%
ICLARM	nmf	11.1%	13.2%	8.3%	15.8%	15.6%	14.4%	10.4%	28.9%	18.7%
ICRAF	nmf	6.3%	6.3%	6.5%	8.0%	8.6%	8.7%	10.3%	12.1%	14.4%
ICRISAT	9.5%	14.3%	19.6%	20.7%	21.9%	19.0%	24.9%	21.5%	11.3%	15.5%
IFPRI	16.9%	9.6%	14.8%	11.8%	9.3%	8.1%	8.8%	10.0%	11.5%	14.9%
IITA	15.2%	17.1%	20.2%	24.1%	23.4%	17.0%	13.8%	10.3%	8.8%	12.9%
ILRI	88.9%	62.0%	46.2%	50.0%	49.2%	38.4%	27.7%	22.2%	19.4%	14.0%
IPGRI	0.0%	3.2%	3.6%	4.0%	4.5%	6.5%	7.9%	8.5%	10.9%	16.5%
IRRI	9.7%	8.7%	3.8%	12.4%	12.1%	16.7%	15.7%	8.9%	11.4%	11.5%
ISNAR	13.2%	18.6%	24.6%	29.7%	25.0%	14.0%	13.1%	15.6%	12.2%	20.5%
IWMI	nmf	9.4%	16.4%	23.3%	20.8%	16.7%	12.6%	10.6%	26.1%	18.2%
WARDA	23.9%	25.9%	25.9%	0.0%	9.9%	6.9%	10.5%	11.0%	20.4%	15.3%

Source: CGIAR Financial Reports, 1991-2000

During the past several years, TAC indeed attempted to better incorporate developing countries' priorities into its own work. Building on the development of the regional fora of NARS and the then-newly evolving Global Forum, TAC sought to bring NARS into its 1996 priority setting document,

25. CGIAR Secretariat 2002. *CGIAR Resource Allocation: Developing and Financing the CGIAR Research Agenda*, Financial Guideline Series No. 4.

including through a short paper, questionnaires, and consultations at the regional fora, TAC sought the opinions of developing countries concerning CGIAR commodity and activity priorities.<sup>26</sup> To varying degrees, each of the Centers also engages in consultation with its NARS counterparts as part of its own Center-level priority-setting process. But there are no System-level, or indeed regional-level, consultations by groups of Centers with developing countries.

More significantly, Plank 4 of the new vision and strategy TAC outlined in 2000 was built on a shift to regional priority setting. According to TAC, this meant “seeking complementary gains that it could not achieve exclusively through a global or ecoregional approach.” This would be carried out through “a regional approach to research planning, priority setting, and implementation.” As a result of the newly adopted vision, TAC noted that since ICW00, “all regional and sub-regional organizations and CGIAR Centres have taken action to facilitate regional consultation processes that could eventually lead to establishing a regional approach to research for the CGIAR and NARS.”<sup>27</sup> But the current regional approach that was proposed by TAC is unfocused and likely to be far too demanding of developing countries’ limited capacity.

**Bank funds not being used strategically.** The Bank currently matches all contributions to the Agreed Agenda, regardless of the nature (restricted or unrestricted) or the global public goods value of the contributions. Bertram and Dalrymple (2000) assert that

“[U]nder this “market”-oriented approach, use of World Bank funding is largely reactive, reflecting a set of uncoordinated decisions by other donors. From the centers’ point of view, the current system may offer a greater sense of autonomy (TAC recommendations were the chief factor influencing allocations in the past) and, to the extent centers can accurately foresee future funding, greater predictability of World Bank funding. The matching strategy has also given full license to the entrepreneurial spirit of the centers, especially as the “agreed agenda” activities eligible for matching have expanded to encompass almost all center programs. The upshot of the allocation system now in use is that roughly 75-80% of the World Bank’s funding goes toward reinforcing the panoply of funding and activities supported by donors... As the proportion of funding that is unrestricted declines, the potential for market-failures increases, with the risk that some of the most important work of the system may have to be sacrificed in favor of shorter-term, technical assistance types of activities.”

Bertram and Dalrymple (2000) propose a “progressive match approach” to improve the strategic use of the Bank’s contribution. This would entail using Bank funds to match other contributions in a weighted fashion, with greater weight being attributed to unrestricted contributions that support international public goods. A smaller weight would be applied to restricted funds financing international public goods; the least weight would be attached to restricted funds supporting regional or national public goods. The authors suggest that such a formula would reinstate the strategic nature of the Bank’s allocation and create an incentive for other donors to provide unrestricted funds, while at the same time not causing a great disruption to the System.

OED believes that the allocation of World Bank funds should encourage reintroduction of a mechanism whereby the system’s financial resources are less restricted than they are currently and are directly linked to its long-term priorities and strategies as established by the new Science Council, which should be based on the provision of global and regional public goods in which the CGIAR has a strong comparative advantage. In this way, the World Bank can assure itself that its resources are

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26. TAC Secretariat 1997. *CGIAR Priorities and Strategies for Resource Allocation During 1998-2000*.

27. TAC Secretariat 2001, *Regional Approach to Research for the CGIAR*.

leveraging other resources in support of global and regional public goods to maximize impact on poverty.

### **Conclusion**

The main report has illustrated the range of factors that must enter into assessing research priorities including total factor productivity, efficiency of natural resource use, and the probability of success, not just in research but in translating research into technologies likely to be relevant for the poor. These factors include, but are not limited to, the probable impacts on the poor, the most appropriate location for conducting research in terms of the kinds of scientific or local knowledge that needs to be brought to bear, likely scale of economies in terms of the size and spread of impacts, opportunity cost of resources, and, of course, the appropriate rates of discounts to be used. The CGIAR is in an unusual position to make methodological contributions to research priority setting that could also be useful to the NARS.

## Annex I: Previous Proposals for Reconfiguration

Extensive effort and resources have been directed in the CGIAR to studying the System's options available for System restructuring and reorganization. This annex provides a thematic review of the recommendations and options presented to the CGIAR for restructuring and reorganization in the following studies on System policy, research, governance, and management:

1. TAC Restructuring Review (1994)
2. Third System Review (1998)
3. EIARD Working Group Report (2000)
4. Herdt Paper (2000)
5. CBC/CDC Report (2000)
6. TAC Views on New CGIAR Vision and Strategy (2000)
7. A Food Secure World for All: Toward a New Vision and Strategy for the CGIAR (2000)
8. Structure and Governance Implications of the New CGIAR Vision and Strategy (2000)
9. Synthesis Group Report (2000)
10. Views of Leaders of African NARS Report (2000)
11. Change Design and Management: Issues Paper for Steering Group Guidance (2001)
12. Change Design and Management Team Report (2001)

This annex also reviews the following studies on specific Systemwide research topics:

1. Report of the Study on CGIAR Commitments in West Africa (1995)
2. Report on the Inter-Center Review of Root and Tuber Crops in the CGIAR (1997)
3. The Future Role of the CGIAR in Development of National Agricultural Research Systems: A Strategic Study of Institution Strengthening Research and Service (1996)
4. Policy and Management and Institution Strengthening: Research and Service in the CGIAR (1997)
5. Report of the First External Review of the Systemwide Genetic Resources Programme (1999)
6. First Review of Systemwide Programs with an Ecoregional Approach (1999)
7. Systemwide Review of Plant Breeding Methodologies in the CGIAR (2001)
8. External Review of the Systemwide Livestock Programme (2001)

In an attempt to organize the findings presented by these various studies, the recommendations and options from each study are categorized and presented as follows:

- Restructuring Center organization;
- Restructuring Center governance and management;
- Reorganizing Center research;
- Restructuring System governance and management; and
- Diversifying System funding.

### 1. Options for Restructuring Center Organization

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Options for Center-level restructuring include (a) reorganizing Centers along programmatic lines; (b) reorganizing Centers along regional lines; (c) reducing and consolidating Centers; and (d) phasing in mergers.

#### 1.a. Reorganize Centers Along Programmatic Lines

*TAC Restructuring Review (1994)*: Integrate selected aspects of CGIAR research on all cereals except rice into a single program; create a Systemwide program on rice; explore alternative institutional mechanisms for root and tuber research; explore integration of both forestry and agroforestry institutions; organize policy and management work on the basis of similar research issues; create a global mechanism for research on natural resources management;

*Views of Leaders of African NARS Report (2000)*: Create or enhance certain Centers to address global mandates.

*Change Design and Management: Issues Paper for Steering Group Guidance (2001)*: Fit Centers into strategic clusters in terms of mission, business, and market served.

### **1.b. Reorganize Centers Along Regional Lines**

*EIARD Working Group Report (2000)*: Create four regional CGIAR programs (South, Southeast, and East Asia; Central and West Asia and North Africa; sub-Saharan Africa; Latin America and Caribbean).

*TAC Views on New CGIAR Vision and Strategy (2000)*: Undertake an experimental and incremental approach to initiating regional programs, starting with Western sub-Saharan Africa and Central America.

*Views of Leaders of African NARS Report (2000)*: Create integrated regional Centers to address regional needs; reorganize the Centers in Africa into one for West/Central Africa and one for South/East Africa; address structural needs to maintain long-term sustainability of regional and sub-regional Centers

### **1.c. Reduce and Consolidate Centers**

*EIARD Working Group Report (2000)*: Create one centrally managed CGIAR research facility responsible for (a) germplasm activities and (b) strategic research of global relevance.

*Herdt Paper (2000)*: Merge Centers' functions into a single entity to create a Unified Center.

*Systemwide Review of Plant Breeding Methodologies in the CGIAR (2001)*: Conduct analysis of possible options for centralization/consolidation of operations or technologies.

*Change Design and Management: Issues Paper for Steering Group Guidance (2001)*: Mergers of Centers.

## **2. Options for Reorganizing Center Governance and Management.**

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Options for reorganizing governance and management include recommendations for (a) reducing and consolidating Center governance bodies; (b) creating a single Systemwide governance body; and (c) creating a Federation of Centers.

### 2.a. Reduce and consolidate Center governance bodies

*TAC Restructuring Review (1994)*: Reduction in size of Center boards and use of boards for more than one Center where appropriate.

*Report of the Study on CGIAR Commitments in West Africa (1995)*: Create a common Board of Trustees for IITA and WARDA, with ex-officio representation of ICRISAT, ICRAF, and IRRI as a means of improving the integration of research among those four Centers.

*Synthesis Group Report (2000)*: Short-term restructuring, including reduction in the size of boards.

*Systemwide Review of Plant Breeding Methodologies in the CGIAR (2001)*: Centralization of some kind or consolidation of operations or technologies should be seriously considered whenever three conditions exist: (a) the operation/technology has broad utility for all Centers; (b) it is so expensive that individual Centers cannot afford it; and (c) information transfer is synergistic.

*Change Design and Management: Issues Paper for Steering Group Guidance (2001)*: Merge Centers through the formation of a single legal entity governing the operations of the merged Centers. Pros: reduce overlap in responsibilities and unattended gaps; enhance the CGIAR's capacity to implement large programs composed of several projects that are inter-disciplinary, inter-regional, and encompassing several Center mandates; create a large critical mass in new areas of science; enhance likelihood of impact through consolidation of effort; minimize operational inefficiencies merging from current Center organization; reduce overburdening of relations with NARS; reduce administrative, overhead, and transaction costs for shareholders, Centers, and partners; change the CGIAR's image to a leaner organization; reduce shareholder frustration with slow or no change in structure. Cons: potential disruption of host country relations where Centers are considered "national assets"; increased uncertainty for Center staff and low morale during transition; lack of enthusiasm in the Centers for taking on the task.

### 2.b. Consolidate into a single Center governing body

- *Third System Review (1998)*: Create of a central CGIAR body governed by Members, a Board of Directors and Executive Committee, the CGIAR Chair, a Financial Committee, and a CEO.
- *EIARD Working Group Report (2000)*: Create one centrally managed CGIAR research facility with a single Board, responsible for (a) germplasm conservation and maintenance activities including issues of biosafety, IPRs, private sector negotiations, etc., and (b) strategic research of global relevance including germplasm improvement and other research of crops, livestock, fish, trees, etc.
- *Herdt Paper (2000)*: Create a Unified Center by merging the Centers' functions into a single entity with one Board having responsibility for management of all functions (budget, staffing, intellectual property, relations with national authorities, etc.). (Or, create a Federation of Centers, discussed below.)
- *Synthesis Group Report (2000)*: Long-term transformation to establish a Federation with a board.

### *2.c. Create a Federation of Centers*

*Herdt Paper (2000)*: Create a Federation of Centers in which each Board gives up certain powers and responsibilities to a Federated Board (e.g., germplasm collections, IPRs, Future Harvest, public education, fund raising, and staffing). (Or, create a single Center, discussed above.)

*CBC/CDC Report (2000)*: Creation of a Federation of Centers, as a legal entity, that would be comprised of the Centers; a Federation Office, funded by the Centers and willing donors; a Board for the Federation, comprised of eminent individuals that are selected and appointed and required to report annually to the full meeting of the CBC and CDC as well as to CGIAR plenary meetings; and a small support staff.

*TAC Views on New CGIAR Vision and Strategy (2000)*: For purposes of inter-Center coordination of programs, for the provision of common services, for resource mobilization and servicing the needs of the Centers, the Chair and the investors, and the Federation and its secretariat could very likely fulfill these requirements. However, the System governance functions of strategy and priority setting, resource allocation, assessment of science quality, and impact cannot be delegated exclusively to the Federation because of self-interest. The interests of the investors, the ultimate beneficiaries, and of the Centers themselves will be best served by the CGIAR receiving technical and scientific advice from an independent organ.

## **3. Options for Reorganizing Research**

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Both the Systemwide program reviews and the System reviews themselves provide extensive feedback on reorganizing Center research. Issues presented in these studies include

- Improving management of CGIAR's genetic resources;
- Strengthening socioeconomic, policy and management research;
- Improving NARS-CGIAR linkages and training/capacity building services to NARS;
- Re-examining natural resource management programs and ecoregional research approaches;
- Prioritizing emphasis on sub-Saharan Africa;
- Creating strategic research initiatives, programs, and task forces;
- Increasing inter-Center collaboration;
- Increasing other collaborations and partnerships;
- Facilitating inter-Center and global information sharing;
- Establishing research priorities in biosafety and environmental impacts;
- Prioritizing intellectual property rights issues; and
- Integrating participatory approaches to research.

### *3.a. Improve management of CGIAR's genetic resources*

*Report of the First External Review of the Systemwide Genetic Resources Programme (1998)*: SRGP and the Centers should continue to give high priority to off-site safety duplications of their GR collections; SGRP should prepare a strategic plan with prioritized objectives and areas of research/activity and develop new structure to achieve greater functional effectiveness and efficiency in Systemwide cooperation in GR activities; ICWG-GRM should improve further the process of selecting activities/projects to which it will allocate funds; locate a specialist in animal GR at the

SGRP Secretariat; ensure the SGRP allocates resources and efforts in a balanced fashion to accommodate the various commodity groups so as to meet the requirements of comprehensive coverage of GR in the context of the Convention on Biodiversity.

*Third System Review (1998):* Pursue an integrated gene management approach based on: patenting processes and new varieties and entrusting their use under free licensing; a legal entity that 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 CBD and national government regulations; a central coordinating and servicing unit for advising both Centers and appropriate NARS; a widened food security basket through inclusion of minor and underused millets, 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, with total transparency and accountability in relation to work in the field of biotechnology; and a Systemwide review of plant breeding efforts, with the aim of freeing up resources for new priorities while accelerating the introduction of modern marker-assisted breeding and bioengineering technologies.

*A Food Secure World for All: Toward a New Vision and Strategy for the CGIAR (2000):* The future priorities for the CGIAR System in relation to germplasm collection, conservation, and characterization are in the areas of: (a) technical and policy advice to governments on the role of multilateral systems of germplasm exchange for agriculturally important species; (b) conservation and characterization of *ex situ* genetic resources collections of plants and micro-organisms; (c) development of methodologies for *in situ* conservation and characterization of other agriculturally important species of crops, livestock, fish, and trees; (d) molecular characterization of the genomes of agriculturally important species.

*Systemwide Review of Plant Breeding Methodologies in the CGIAR (2001):* Centers should: assort themselves into collaboration groups on biotechnology to share their knowledge, equipment, and personnel; support and use a database system to enable Systemwide integration and utilization of data; develop a Systemwide program for CGIAR involvement in genomics, particularly functional genomics; develop a mechanism for evaluation of the potential efficiencies of MAS; develop a policy of collaborative research with for-profit organizations, particularly those headquartered in the more developed economies and in regard to biotechnological methodologies; develop a transparent communication system to inform all stakeholders, especially NARS, of the specifics of agreements with the private and public sectors for accessing proprietary materials; provide Systemwide information on best methods for product delivery and technology transfer; coordinate and/or inform of actions in initial deployment of transgenic materials, and explain to the public the biological and social consequences of any new technologies that Centers propose to implement; involve client NARS in priority setting for transgenics; follow common general policy guidelines (Systemwide) for IPRs and hold workshops with NARS to explain new technologies, their IPR status, and options for availability of its materials, tools, and technologies; and create a System-level body or mechanism with responsibility to consider, implement, and monitor improvement of inter-Center collaborations, as well as any types of consolidation that may be needed.

### *3.b. Strengthen socioeconomic, policy and management research*

*Policy and Management and Institution Strengthening Research and Service in the CGIAR (1997):* Need for greater inter-Center collaboration in policy and public management research through decentralization and informal mechanisms and for Centers to work with more than one NARS where

possible to strengthen institutional research and service. Priority should be assigned to (a) policy research in: public private interfaces; common property resources; generic, as compared to country-specific, policy studies; and political economy of policy and management decisions; and (b) institutional strengthening and development, including research on the role and management problems of NGOs and other non-profit organizations of civil society. Need for: diversification of disciplinary base beyond economics to heterogeneous disciplines underlying management research; increased Center collaboration with institutes beyond IFPRI; and increase guidance to Centers on future policy and management research priorities for use in preparation of Center medium-term plans; increased data sharing through, e.g., GIS.

*Report of the First External Review of the Systemwide Genetic Resources Programme (1998):* Through the SGRP, continue to monitor policy decisions (and their consequences for developing countries) at national, regional, and global levels, as well as identify needs and opportunities arising from such decisions, so that appropriate actions can be taken by the CGIAR in a Systemwide fashion; and devote more SGRP resources to funding activities in the areas of genetic resources policy research and capacity strengthening.

*Third System Review (1998):* Place greater emphasis on social and management sciences in order to address 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 Systemwide Dialogues for Policymakers at regular intervals; in collaboration with ISNAR and other appropriate Centers, NARS, and relevant bilateral and multilateral development institutions, IFPRI launch a special program to strengthen capacity in collaborative policy research and formulation in countries where inadequate public policy support is the major cause of a wide gap between potential and actual yields in farmers' fields; and capacity building in policy research related to economic policy as well as environmental, science, and technology research policies.

*TAC Views on New CGIAR Vision and Strategy (2000):* Increase the amount of policy research undertaken at the regional level.

*A Food Secure World for All: Toward a New Vision and Strategy for the CGIAR (2000):* A highly selective socioeconomic and policy research agenda is needed to focus on the Centers' new responsibilities in addressing both poverty reduction and sustainable food security.

### *3.c. Improve NARS-CGIAR linkages and training/capacity building services to NARS*

*TAC Restructuring Review (1994):* Build a regional mechanism to strengthen the CGIAR efforts to benefit particular regions and eco-regions, streamline NARS relations, strengthen partnerships, and eliminate overlap of responsibilities.

*Report of the Study on CGIAR Commitments in West Africa (1995):* Center activities in institution building, with the exception of ISNAR, should be limited to training and information because the Centers lack comparative advantage in institution building as such. Centers should restrict their activities in capacity building of national programs to a strict minimum, with the obvious general exception of training.

*Report on the Inter-Center Review of Root and Tuber Crops Research in the CGIAR (1996):* Continuously explore opportunities for different types of partnerships and collaborations in both the developed and developing world on root and tuber crops research. Sanction a working group on post-

harvest technology and markets to explore with ARIs, NARS, and the private sector research on characterization of starch and flour, food processing technology, and market research.

*The Future Role of the CGIAR in Development of NARS (1996):* Conduct more research on institutional development, particularly as it concerns agricultural research in developing countries; develop indicators for assessing institutional development requirements, evaluating the types of interventions that have achieved the best results, and identifying the political, cultural and institutional factors that have led to failure, and how to overcome such constraints; include universities and other institutions that have expertise in the field of political, social, and management science to conduct such analyses and linkages, with ISNAR playing the key role; continue and accelerate ISNAR's shift from services to R&D; continue to develop and disseminate generic, methodological tools for research organization and management from ISNAR and other collaborating Centers to NARS; facilitate and strengthen regional NARS groupings to make them truly effective; develop at each Center a monitorable policy regarding the effects of its overall activities on the institutional development of NARS research capabilities; and expand CGIAR linkages to other institutions involved in related activities. Its abilities to forge such linkages, as well as linkages with and among NARS, will be facilitated by the dynamic developments in international information and communication facilities.

*Third System Review (1998):* Increase emphasis and broaden range of NARS capacity building efforts, including: a special collaborative program to strengthen the capacity of NARS for policy research and formulation; capacity building in policy research covering economic, environmental, science, and technology research policy; interactive distance education, training courses, and national- and regional-level consultative processes for research and development for and with NARS; and, where exceptionally strong NARS have emerged, Centers should pursue partnerships in the areas of strategic research and encourage their internationalization and engagement in South-South collaborations.

*Review of Systemwide Programmes with an Ecoregional Approach (1999):* Attention should be given to filling gaps among NARS partners in the special skills needed for conducting research on NRM.

*TAC Views on New CGIAR Vision and Strategy (2000):* Strengthening and instituting mechanisms for sustainability continues to be a major challenge as well as ensuring the supportive policy and institutional environment for technology adoption.

*A Food Secure World for All: Toward a New Vision and Strategy for the CGIAR (2000):* The CGIAR has a continuing important role to play in capacity building but will also need to contribute to the sustainability of NARS.

*Views of Leaders of African NARS Report (2000):* Reorganize the Centers to ensure that their role in sub-Saharan Africa is clearly defined and the Centers and NARS complement each other, without overloading the NARS with competing partnerships and, if possible, allowing NARS to deal with fewer Centers than the current 16; create an integrated regional Center that helps the NARS and farmers in the sub-region/region to identify and exploit technical and economic opportunities for increased agricultural production, where said Center would provide specialist and technical services in areas in which it is uneconomical to establish such facilities at national level, for a fee or gratis; utilize nationally and internationally accepted public Centers to facilitate private sector collaborations and linkages with the NARS; consider the long-term needs of the NARS in sub-Saharan Africa by putting a structure in place wherein the sub-regional/regional Centers evolve into permanent, not-for-profit, non-political research Centers that will be ultimately responsible for activities that cannot be undertaken at the national level.

*Change Design and Management Team Report (2001)*: Enhance NARS, through full “mobilization” of their capacities in design and implementation of the Global Challenge Programs and through an initiative to promote financial support to NARS.

*Systemwide Review of Plant Breeding Methodologies in the CGIAR (2001)*: Development of a transparent communication system to inform all stakeholders, especially NARS, of the specifics of agreements with the private and public sectors for accessing proprietary materials. Specific assistance from the Central Advisory Service on Intellectual Property and Proprietary Science (CAS) at ISNAR, and particular attention to any bilateral agreements that include restrictions in use (e.g., germplasm and technology).

### *3.d. Reexamine natural resource management programs and ecoregional approaches to research*

*Report of the Study on CGIAR Commitments in West Africa (1995)*: Decentralized networks based on the ecoregional and alternative organizations approach would be inefficient because (a) it would not reduce information costs so as to impose accountability and scientific performance; (b) it would create too much uncertainty about resource availability and accountability; and (c) the suggested benefits of the decentralized network approach have already been realized in the Centers or in related efforts, notably that of SPAAR.

*Third System Review (1998)*: 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 INRM 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 Centers; and development of more bottom-up, demand-driven projects.

*Review of Systemwide Programmes with an Ecoregional Approach (1999)*: Future reviews of the non-ecoregional Systemwide programs should examine the extent of their interaction with pertinent ecoregional Systemwide programs; the CGIAR should reaffirm research on the sustainable improvement of productivity as being a high-priority activity, which should include providing leadership on selected aspects of research on major NRM problems; the CGIAR and its Members adopt a revised framework for NRM research comprising three elements: (a) research should be organized around major problems (or opportunities) of sustainable NRM that are of international relevance, (b) it should use holistic systems approaches that combine human and technical elements to address problems on multiple scales, and (c) it should provide for its progress to be measured against specific performance indicators; the principles underlying the revised framework be applied by all Centers involved in NRM research for the sustainable improvement of productivity; external review processes should explicitly focus in future on how well the revised approach has been mainstreamed into the work of Centers; and System-level activities should be subject to special external reviews and in-depth “sunset” reviews.

*TAC Views on New CGIAR Vision and Strategy (2000)*: Neither a stand-alone global Center for INRM nor a new stand-alone social science unit is necessary for the CGIAR. The capacity for poor-farmer related social science research should be closely articulated with INRM and germplasm work.

*A Food Secure World for All: Toward a New Vision and Strategy for the CGIAR (2000)*: Research priorities for conservation and enhancement of natural resources and protection of the environment can be determined on the basis of five principles: (a) the CGIAR should concentrate on NRM research that contributes to productivity enhancement and sustainability of natural resources for production of crop, livestock, forest, and fish outputs that have impacts on poverty reduction and food security, giving appropriate consideration to the inter-generational equity of benefits; (b) the Centers should use an integrated NRM *focus* in their planning to define problems in NRM that require research; (c) international integrated NRM research should be process oriented to ensure maximum contribution to producing international public goods; (d) the CGIAR should give much greater attention to research to resolve water issues; (e) NRM research should focus its efforts around common reference locations or benchmark sites, essential for integration of the many dimensions of integrated NRM; and (f) priorities for specific NRM research themes should be determined in the context of the sustainability issues affecting productivity increases, regional priorities, and comparative advantages of the CGIAR.

### *3.e. Prioritize emphasis on sub-Saharan Africa*

*Third System Review (1998)*: Prioritize sub-Saharan Africa with: establishment of an Inter-Center African Capacity Building Initiative for Sustainable Food Security and appointment of a coordinating director; promotion of national sub-regional consultative processes for agricultural R&D; emphasis on capacity strengthening through cooperative projects with African scientists and policymakers; two-way learning between scientists and agricultural communities; recognition of the importance of urban and peri-urban agriculture in addressing Africa's food needs; prioritization of relevant staple food crops; and cooperation among African NARS and stronger NARS from other regions. These initiatives must be complementary to and, where relevant, take place in collaboration with, the efforts of sub-regional organizations and bilateral and other multilateral institutions.

*Views of Leaders of African NARS Report (2000)*: Create integrated regional Centers to address regional needs; reorganize the Centers in Africa into one for West/Central Africa and one for South/East Africa; and address structural needs to maintain long-term sustainability of regional and sub-regional Centers.

### *3.f. Create strategic research initiatives, programs, and task forces*

*Review of Systemwide Programmes with an Ecoregional Approach (1999)*: Three criteria should be adopted for the selection of programs to be supported at the System level: (a) the problem (or opportunity) is of major importance in relation to CGIAR goals, (b) no single Center has a natural advantage in terms of its mandate, and (c) there is a high potential for efficiency gains from the combined efforts of two or more Centers.

*EIARD Working Group Report (2000)*. Increase the use of groups of member/partner organizations to form flexible and time limited task forces to address specific research issues, requiring the CGIAR to create appropriate technical/management committees and other mechanisms by which the themes for task forces could be identified and the task forces formed.

*TAC Views on New CGIAR Vision and Strategy (2000)*: Task forces as proposed by TAC are *specific composite teams*, which will be mobilized to address high-priority problems cutting across Center mandates, which need greater focus and additional expertise and resources. Task forces should have clear purpose, time frame, and sunset clauses as well as sustained finance and agreed outputs, and should be flexible in terms of developing appropriate financing, implementation, and accountability

arrangements. Areas to address include genomics, bioinformatics; GIS, agroecological characterization, and knowledge management; regional approaches to research planning for poverty alleviation; and control of tick- and tsetse fly-borne livestock diseases.

*Change Design and Management Team Report (2001):* Creation of Global Challenge Programs, focused on specific outputs, based on an inclusive approach to priority setting, drawing on research competencies of the Centers and other partners, and funded largely by additional resources.

*Systemwide Review of Plant Breeding Methodologies in the CGIAR (2001):* The Centers systematically should: assort themselves into “Collaboration Groups in Biotechnology,” based on whatever categories (crop, geography, methodology) seem most useful, with the intent of sharing knowledge, equipment, and personnel in ways that will increase each Center’s scientific competence and improve the efficiency and power of its use of specific biotechnology tools in service of plant breeding; and develop a Systemwide program for CGIAR involvement in genomics, particularly functional genomics.

### *3.g. Increase inter-Center collaboration*

*Report on the Inter-Center Review of Root and Tuber Crops Research in the CGIAR (1996):* Establish an inter-Center consultative committee on root and tuber crops research for Systemwide planning, coordination, and operation. Create a task force to: prepare a vision for research employing inter-Center collaborations and institutional partnerships; develop a Systemwide strategy for root and tuber crops research, possibilities for rationalizing international phytosanitary regulations, and recommendations for biotechnology research collaborations. Continuously explore opportunities for different types of partnerships and collaborations in both the developed and developing world.

*The Future Role of the CGIAR in Development of NARS (1996):* Strengthen collaboration among Centers, particularly between the other Centers and ISNAR, in NARS institution-strengthening activities.

*Third System Review (1998):* Increase inter-Center collaboration; pursue new methods of increasing System synergy; create new and expanded partnerships; and act as neutral conveners 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.

*Review of Systemwide Programmes with an Ecoregional Approach (1999):* Regular workshops should be arranged under the aegis of the CDC for the exchange of information, experiences, and lessons learned in NRM research, especially that conducted within collaborative research consortia.

*Systemwide Review of Plant Breeding Methodologies in the CGIAR (2001):* Inter-Center workshops to discuss the genetics, physiology, and agronomy of traits associated with new ideotypes (e.g., for rice, wheat, and apomixis), with the goal of identifying experiences and data from one Center that might be used by other Centers to advance breeding progress or avoid breeding pitfalls.

### *3.h. Increase other collaborations and partnerships*

*Report on the Inter-Center Review of Root and Tuber Crops Research in the CGIAR (1996):* Continuously explore opportunities for different types of partnerships and collaborations in both the developed and developing world on root and tuber crops research. Seek ways to consolidate research investments through a comprehensive plant that would build the capacity of ARIs as alternative suppliers of relevant knowledge. Sanction a working group on post-harvest technology and markets to

explore with ARIs, NARS, and the private sector research on characterization of starch and flour, food processing technology, and market research. Encourage more private sector research partnerships

*Report of the First External Review of the Systemwide Genetic Resources Programme (1998):* Assess the scope and effectiveness of genetic resources conservation networks in which the Centers participate.

*Third System Review (1998):* Centers should enhance their symbiotic scientific links with NARS, ARIs, the private sector, and NGOs in industrialized and developing countries; pursue new methods of increasing System synergy; create new and expanded partnerships; and act as neutral conveners 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.

*Review of Systemwide Programmes with an Ecoregional Approach (1999):* Special effort is required to strengthen collaboration with strong partners in strategic research on biophysical, social science and policy aspects of NRM. The frequently observed imbalance between biophysical and social-science research must be redressed.

*TAC Views on New CGIAR Vision and Strategy (2000):* In addition to its direct research supplier role, the CGIAR has a vital role to play as catalyst, convener, and mobilizer. The future research needs of developing countries will have to be met by a global agricultural research system involving NARS, the universities, NGOs, the private sector, the regional research networks and consortia, and research organizations in developed countries. The establishment of GFAR was a major step in this direction.

*Systemwide Review of Plant Breeding Methodologies in the CGIAR (2001):* Discuss and elaborate a policy of collaborative research with for-profit organizations, particularly those headquartered in the more developed economies and in regard to biotechnological methodologies; and provide Systemwide information on best methods for product delivery and technology transfer to enhance efficiencies and increase effectiveness of product introduction, with particular attention paid to use of networks and other collaborations with NGOs and private industry in addition to traditional government institutions.

### *3.i. Foster inter-Center and global information sharing*

*TAC Restructuring Review (1994):* Create global information and training/service Center.

*Report of the First External Review of the Systemwide Genetic Resources Programme (1998):* Make SINGER more user-friendly and -responsive for a wider range of stakeholders; and arrange adequate control on information in SINGER, supplied by indigenous people, to better protect their interests.

*Third System Review (1998):* The Panel recommends that, 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 Center alumni; promote cooperative activities through a geographically indexed Web database containing projects of all organizations performing agricultural research and development in each region; and take account of existing relevant databases.

*TAC Views on New CGIAR Vision and Strategy (2000)*: Establishment of task force to address development and management of databases in the CGIAR.

*A Food Secure World for All: Toward a New Vision and Strategy for the CGIAR (2000)*: New modalities of information technologies, including establishing virtual entities, should be experimented with, in collaboration with others, to mobilize and make available the knowledge needed to solve the problems associated with poverty and food security.

*Systemwide Review of Plant Breeding Methodologies in the CGIAR (2001)*: Collective support for and use of database systems (e.g., ICIS or a superior system and GIS to enable Systemwide integration and utilization of agronomic, ecological, molecular, and other data).

### *3.j. Establish research priorities in biosafety and environmental impacts*

*Report on the Inter-Center Review of Root and Tuber Crops Research in the CGIAR (1996)*: Remain vigilant of the environmental impacts of root and tuber crops production.

*Third System Review (1998)*: Launch a global initiative for integrated gene management that will conserve genetic resources, provide for the sustainable and equitable use of genetic resources, and ensure adherence with the equity and biosafety provisions of the CBD, with the CGIAR collection as the centerpiece of this initiative; and establish a coordinating and servicing unit for biosafety, bioethics, and biosurveillance (along with a public information program) to apply latest biotechnology developments in ways that are pro-poor and pro-environment.

*Systemwide Review of Plant Breeding Methodologies in the CGIAR (2001)*: Centers should coordinate and/or inform each other of their actions in initial deployment of transgenic materials, taking into consideration country-specific regulations. The Centers, individually and collectively, should evaluate and explain to the public the biological and social consequences of any new technologies (e.g., transgenics) that they propose to implement. The Centers individually and collectively should involve client NARS in priority setting for transgenics.

### *3.k. Prioritize intellectual property rights issues*

*Report on the Inter-Center Review of Root and Tuber Crops Research in the CGIAR (1996)*: Develop strategies and resolve policies regarding technology transfer activities.

*Third System Review (1998)*: Create a legal entity for the CGIAR that could hold patents, and the development of “rules of engagement” (involving both the public and private sector).

*Systemwide Review of Plant Breeding Methodologies in the CGIAR (2001)*: Centers should follow common general policy guidelines (Systemwide) for IPRs, using CAS services to the fullest extent possible. Guidelines should be designed to ensure access, security, and convenience in regard to Center dealings with protected or potentially protected materials, tools, and technologies. Each Center, assisted by CAS, should hold workshops with NARS to explain the IPR status of its materials, tools, and technologies and discuss options for making them and their derivatives available to client countries.

### *3.l. Integrate participatory approaches to research*

*Report of the First External Review of the Systemwide Genetic Resources Programme (1998)*: Include diagnostic and participatory research in the field of gender and biodiversity in the SGRP program agenda; and include support to research and methodology development in on-farm crop improvement and participatory breeding and gender.

*Systemwide Review of Plant Breeding Methodologies in the CGIAR (2001)*: Centers should evaluate the use of participatory plant breeding (PPB) as an organic part of each Center's entire breeding program rather than an isolated endeavor; convene a Systemwide workshop on PPB to devise ways to systematically evaluate the utility of different kinds of PPB as an integral part of conventional plant breeding. Include "formal" breeders not part of present PPB teams and selected NARS and NGOs and representatives from the Systemwide Program on Participatory Research and Gender Analysis for Technology Development and Institutional Innovation (PRGA).

### *3.m. Other/general recommendations*

*TAC Restructuring Review (1994)*: Limit CGIAR-supported fisheries research to inland aquatic management programs.

*Report of the Study on CGIAR Commitments in West Africa (1995)*: Shift more Center (specifically, IITA and ICRISAT) effort to basic and strategic natural resource research, conservation, and management and germplasm enhancement and breeding; devolve production systems and management research to NARS.

*Synthesis Group Report (2000)*: Clarify and strengthen agenda setting at regional levels.

*TAC Views on New CGIAR Vision and Strategy (2000)*: Opportunities exist for reorganizing work to achieve greater efficiency and effectiveness through such measures as reformatting from brick-and-mortar to virtual mode, mergers, task forces, devolution to NARS, outsourcing, redistribution of assignments, etc. TAC has considered some of these options, but they require further detailed studies.

## **4. Options for Restructuring System Governance and Management**

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Governance and management restructuring at the System level are examined in a wide variety of studies. The most detailed recommendations on System-level governance and management are found in the *Third System Review (1998)*, *Synthesis Group Report (2000)*, and *Change Design and Management Team Report (2001)*. Included in each study are recommendations addressing the key issues of (a) management systems and processes; (b) scientific advisory bodies; and (c) monitoring and evaluation systems.

### *4.a. Restructure governance and management systems and processes*

*TAC Restructuring Review (1994)*: Centralization of Center-related Systemwide functions; rationalization of central services such as reviews, assessments, and evaluations.

*Third System Review (1998)*: Modify the CGIAR's non-partisan/non-ideological nature, consensus decision-making, and informal status to enable the System to more effectively address the current and anticipated needs of the CGIAR and its stakeholders. Formalize the CGIAR governance structure through the creation of a legal entity as the new "central body," governed by the Members, a Board of

Directors and Executive Committee, the CGIAR Chair, a Finance Committee, and a chief executive officer; recognize the Cosponsors by according the four cosponsoring institutions permanent seats on the proposed CGIAR central body Board and its Executive Committee.

*Synthesis Group Report (2000):* Short-term restructuring, including pooling support services across the System; spacing and adjusting the style of meetings; reducing committee numbers; streamlining the secretariats; clarify the distinction between inclusive, participatory processes and tasks manageable by a smaller group; improve trust, accountability, and responsibilities; and clarify decision making. Long-term transformation, including strengthening the separation between consultative, participatory activities and activities requiring only executive action; merge the secretariats; and introduce changes in funding modes.

*Views of Leaders of African NARS Report (2000):* Retain central, coordinating apex institutions within the System; maintain the international institutional and organizational character of the CGIAR and Centers.

*Change Design and Management in the CGIAR: Issues Paper for Steering Group Guidance (2001):* Create an executive body either in the form of an Executive Council of shareholders, a professional management board, conversion of the Secretariat into an Executive Secretariat, and joining a Federation Offices with an Executive Secretariat; establish three independent support units for the Members, TAC/SC and Centers, or a single consolidated System Office; and streamline meetings.

*Change Design and Management Team Report (2001):* Reduce annual meetings of the Group to one, with an Executive Council appointed by the Group to carry out delegated functions between the annual general meeting; create a CGIAR System Office to enhance efficiencies in System-level management and serve the CGIAR Chair, members, committees, and System at large, as well as offer services to the Centers.

*Systemwide Review of Plant Breeding Methodologies in the CGIAR (2001):* A System-level body or mechanism (such as Center Boards, or a specific council or officer) should be given responsibility to consider, implement, and monitor improvement of inter-Center collaborations, as well as any types of consolidation that may be needed. Funding mechanisms that hinder inter-Center collaboration could be identified and modified as needed.

#### *4.b. Streamline committee structure*

*Third System Review (1998):* Streamline the committee structure to improve effectiveness and efficiency, and to ensure compatibility with other proposed changes in System-level governance.

*Synthesis Group Report (2000):* Short-term restructuring, including a reduction in the number of committees; clarify between inclusive, participatory processes and tasks manageable by a smaller group; improve trust, accountability, and responsibilities; and clarify decision making.

#### *4.c. Restructure scientific advisory bodies*

*Report of the First External Review of the Systemwide Genetic Resources Programme (1998):* Clarify GR conservation objectives; acquire capacity to make accessions more available; prioritize off-site duplication; and prioritize the sustainable genebank project.

*TAC Views on New CGIAR Vision and Strategy (2000)*: The size, composition, qualifications, manner of selection, terms of reference, and modalities of operation of that independent organ, currently constituted as TAC, should be reviewed.

*Synthesis Group Report (2000)*: Review mandate, scope, competencies, and *modus operandi* of the TAC.

*Change Design and Management in the CGIAR: Issues Paper for Steering Group Guidance (2001)*: Options include (a) leaving TAC/SC as is; (b) transform TAC/SC into a truly external research council advising the CGIAR on current and emerging science, quality, and research strategies and priorities. Further, the TAC/SC governance arrangement might be changed so that the CGIAR contracts with FAO for full or logistical service to TAC/SC. Any change requires reallocation of responsibilities for strategy and policy formulation, work programs and budgets, and planning and supporting reviews from TAC/SC to other parts of the System, with TAC/SC contributing through consultative and advisory processes.

*Change Design and Management Team Report (2001)*: Enhance science output through transformation of TAC into a Science Council.

#### *4.d. Improve monitoring and evaluation systems*

*Third System Review (1998)*: Establish a special task force, including TAC and Center directors, for improving the efficiency of the evaluation processes; the EPMPR 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 reduce the time and effort required for EPMPRs and CCERs; Centers be financially compensated by donors that wish to conduct their own reviews of Center projects; EPMPRs give greater attention to Board governance; and the present IAEG be replaced with a more pragmatic unit, possibly located within TAC.

*Change Design and Management in the CGIAR: Issues Paper for Steering Group Guidance (2001)*: Reduce TAC/SC's role in managing the entire process of planning and supporting evaluations and reviews; and establish an independent evaluation unit in the System Office.

#### *4.e. Other options/recommendations*

*Third System Review (1998)*: Support the convening of a Global Forum every three years, confined to a general meeting on future global agricultural research issues and involving all major stakeholders. Further, the CGIAR should monitor GFAR's development and viability, as well as the implications of GFAR with respect to the work of CGIAR Centers, particularly ISNAR; broaden membership over time by including more governments and other representative stakeholders.

*Change Design and Management Team Report (2001)*: Adopt an evolutionary restructuring approach that is to flow from implementation of the change proposals.

## **5. Options for Diversifying Financial Resources**

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### *5.a. Increase contributions from main beneficiaries of CGIAR research*

*TAC Restructuring Review (1994)*: Increasing contributions from the main beneficiaries of the CGIAR effort on cereals, through cash contributions and/or in-kind inputs.

*Views of Leaders of African NARS Report (2000)*: Design financing systems that enable countries in the region to contribute to core budgets/endowments for Centers.

*5.b. Increasing the role of competitive grants*

*TAC Views on New CGIAR Vision and Strategy (2000)*: There is a place for competitive grant funding in the CGIAR as a potential additional source of support as well as a supplement to the existing instruments to enhance quality of science, to improve inter-Center coordination, to bring in new expertise, and for other purposes. In order to be effective and considering the circumstances of the CGIAR Centers, TAC proposes that: (a) the individual Centers be assured of stable core support; (b) the competitive grant funds be consolidated into a common pool to reduce transactions costs and support equity and transparency; (c) the purposes and the priorities of the grant funds be determined by the investors with independent technical advice; (d) peer evaluation and actual resource allocation be made by expert panels (organized into a formal Research Council should the grant fund become substantial); and (e) grant administration be carried out by the CGIAR Secretariat and/or the proposed Federation.

*5.c. Restructure donor contributions*

*Third System Review (1998)*: Recommendation that the international development community reverse the decline in funding for agriculture and agricultural research, tap other non-ODA public sector resources, and seek the commitment of all parties (all governments, international organizations, national research organizations, civil society, and private sector) to coordinate their resources and efforts to combat the risk and threat of pervasive poverty, food insecurity, and environmental degradation in developing countries.

*TAC Views on New CGIAR Vision and Strategy (2000)*: In order to continue to operate effectively as a system, the financing of the System must be amended. The continuing decline of unrestricted funding is distorting individual Center and System priorities, increasing transaction costs, diminishing flexibility to operate, and undermining confidence in the long-term viability of the Centers. TAC submitted the following for consideration by the investors: (a) that share of unrestricted contributions should be at least 75 percent; (b) that the need for Task Forces, fund for competitive grants, and other specific purposes be met by restricted contributions, which should not exceed 20 percent of the total; and (c) that all members share in the costs of System governance and administration.

*5.d. Explore private sector sources*

*Third System Review (1998)*: Develop an overall policy for CGIAR collaboration with the for-profit sector at the System level under conditions that contribute to and do not compromise the basic public interests and objectives of the CGIAR. Financial contributions from the for-profit sector should be accepted for research activities of mutual interest, in line with the CGIAR's mission statement, and directed towards the agreed research agenda.

*5.e. Other/general recommendations*

*Report of the First External Review of the Systemwide Genetic Resources Programme (1998)*: SGRP and each crop commodity Center should give high priority to objectively quantifying costs of maintenance of accessions of different crops; guaranteeing the long-term security of Center genebanks; adhering to appropriate standards; and identifying sources of sustainable funding.

*Review of Systemwide Programmes with an Eco-regional Approach (1999)*: The CGIAR Secretariat, in consultation with TAC and Center directors, should provide clear rules to Centers for accounting for all financial and other resources committed by Centers and their partners in collaborative programs, and for the allocation of costs between coordination and R&D activities; financial estimates for selected Systemwide natural resource management activities should be included as additional columns in the budget matrices of the CGIAR, as part of a coordinated approach to donors.

*Change Design and Management Team Report (2001)*: Engage in specific efforts to assure longer-term financing of the System.

*Systemwide Review of Plant Breeding Methodologies in the CGIAR (2001)*: Centers should further develop their budget presentation within the current logframe. The goal should be to facilitate analytical comparisons of Centers, or crops, or technologies, as well as to enable preparation of a coherent summary of CGIAR plant breeding expenditures. Existing core breeding programs must be maintained at present capacity or in some cases strengthened, with particular consideration to the interests of the large number of weak NARS. Centers should include in their budgets the provision of funds for database creation and maintenance and cost associated with IP protection. Centers should perform *ex ante* cost-benefit analysis before initiating extensive new projects in germplasm improvement, in particular those that use the new technologies, to help breeders as they set research priorities.

### Detailed Citations of Systemwide Studies

#### Studies on CGIAR Policy, Research, Governance, and Management Containing Specific References to Restructuring and Reorganization Options (1994-2001)<sup>1</sup>

*TAC Restructuring Review* (May 1994), Alexander F. McCalla; Ismail Serageldin, CGIAR Chair.

*Report of the Study on CGIAR Commitments in West Africa* (September 1995), John McIntire; Donald L. Winkelmann, TAC Chair.

*Report on the Inter-Center Review of Root and Tuber Crops Research in the CGIAR* (April 1996), David R. MacKenzie; Donald L. Winkelmann, TAC Chair.

*The Future Role of the CGIAR in Development of National Agricultural Research Systems: A Strategic Study of Institution Strengthening Research and Service* (April 1996), John L. Nickel; Donald L. Winkelmann, TAC Chair.

*Policy and Management and Institution Strengthening Research and Service in the CGIAR* (June 1997), Guido Gryseels, Alain de Janvry, John L. Nickel; Donald L. Winkelmann, TAC Chair.

*Report of the First External Review of the Systemwide Genetic Resources Programme* (August 1998), Jaap Hardon; Donald L. Winkelmann, TAC Chair.

*Third System Review* (October 1998), Maurice Strong; Ismail Serageldin, CGIAR Chair.

*Review of Systemwide Programmes with an Ecoregional Approach* (August 1999), Ted Henzell; Donald L. Winkelmann, TAC Chair.

*Contribution of the EIARD Working Group on Restructuring of the CGIAR* (March 2000). Ian Johnson, CGIAR Chair.

*Thoughts on the CGIAR* (May 2000, revised October 2000), R.W. Herdt; Ian Johnson, CGIAR Chair.

*Background Paper: CBC/CDC Retreat: 2-3 September 2000 and Report of the CBC/CDC Retreat* (September 2000); Ian Johnson, CGIAR Chair.

*TAC Views on New CGIAR Vision and Strategy.* Adapted from the following documents: *TAC's Views on Implications of The New CGIAR Vision and Strategy for Structure and Governance, Paper Prepared for the Synthesis Meeting Organized by the CGIAR Oversight Committee, Sonning, England, 4-8 October, 2000* (October 2000), Emil Q. Javier; Emil Q. Javier, TAC Chair; *Structure and Governance Implications of the New CGIAR Vision and Strategy, Presentation at Synthesis Group Meeting Organized by the CGIAR Oversight Committee, Sonning, England, 4-8 October, 2000* (October 2000), Emil Q. Javier; Emil Q. Javier, TAC Chair

*A Food Secure World for All: Toward a New Vision and Strategy for the CGIAR* (October 2000); Emil Q. Javier; Emil Q. Javier, TAC Chair.

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1. (Listed below chronologically as: *Study* (Date), Author(s) or Chair(s); TAC or CGIAR Chair).

*CGIAR 2010 Vision and Strategy: Governance, Organization and Structure. Report of the Synthesis Group* (October 2000), Andrew Bennett; Ian Johnson, CGIAR Chair.

*CGIAR 2010 Vision and Strategy: Governance, Organization and Structure. Views of Leaders of African NARS* (October 2000), Joseph K. Mukiibi; Ian Johnson, CGIAR Chair.

*Change Design and Management in the CGIAR: Issues Paper for Steering Group Guidance* (February 2001). Margaret Catley-Carlson; Ian Johnson, CGIAR Chair.

*Designing and Managing Change in the CGIAR Report to the Mid-Term Meeting 2001* (May 2001). Margaret Catley-Carlson; Ian Johnson, CGIAR Chair.

*Systemwide Review of Plant Breeding Methodologies in the CGIAR* (September 2001), Donald N. Duvick, Chair; Emil Q. Javier, TAC Chair.

## Annex J: Change Design and Management

The formal follow-up to the Third System Review officially ended at the Mid-Term Meeting in May 1999. The CGIAR then embarked on a more internal exercise to determine how to position itself in the future. At ICW99, TAC was requested to outline a new vision and strategy that would carry the CGIAR through 2005-2010. At MTM 2000, the Group outlined a process by which it would continue the reform program. TAC was charged with completing its vision document, including an analysis of the structural implications of its seven planks, and with facilitating an electronic conference on organizational structure and governance of the System. The Center Directors' Committee (CDC) assumed responsibility for analyzing the System's structure, including the possibilities of mergers, while the Committee of Board Chairs (CBC) would examine System governance issues, including the "hub" of the system. Finally, the Oversight Committee was to establish a Synthesis Group to integrate these various inputs and outline options for action. The various reports were issued at ICW00.

At ICW00, the Group's next step in the reform process was establishment of a Change Design and Management Team (CDMT), which was to have concrete proposals ready by MTM 01. The CDMT was comprised of both CGIAR stakeholders and professionals from outside the System and was chaired by Margaret Catley-Carlson, former president of CIDA. The CDMT was guided by an *ad hoc* steering group, led by the CGIAR Chair.

Learning from the failure of the Third System Review to generate reforms, among other reasons, due to its alleged lack of ownership, the Chairman undertook widespread consultations. Some members and observers whom the meta-evaluation team interviewed concurred that there has been a greater sense of ownership among CGIAR members of both the CDMT process and its outcomes.

The team's work, as agreed by the Group, was to focus on:

- A restructuring action plan for the entire System with a clear rationale for program integration and/or consolidation of Centers (including analysis of options).
- A governance plan that streamlines CGIAR decision-making and clarifies the roles of all components and brings net efficiency gains.
- A business plan for increasing efficiency in the provision of common services; coordinating Systemwide programmatic activities; and reducing overheads in order to transfer more resources to research.

<b>Box J.1. Change Design and Management Team and Steering Group</b>	
<b>Team Members<sup>1</sup></b>	<b>Institution</b>
Margaret Catley-Carlsson, Chair	Chair, Global Water Partnership; Chair, CABI
Stein Bie	Director General, ISNAR
Fred Miller	Director, McKinsey & Co.
Fred Nunes	Lead Management Consultant, Institutional Change Group, World Bank
Selcuk Ozgediz	Management Adviser, CGIAR Secretariat
Samuel Paul	Chairman, Public Affairs Centre, Bangalore
Martin Pineiro	Director, CEO Group
Timothy Reeves	Director General, CIMMYT
Mandivamba Rukuni	Program Director for Africa, Kellogg Foundation
<b>Steering Group</b>	<b>CGIAR Membership</b>
Ian Johnson	Chair
Francisco Reifschneider	Director
Hank Fitzhugh	Director General, ILRI; Chair, CDC
Robert Havener	Chair, ICARDA Board of Trustees
Kurt Peters	Chair, ICLARM Board of Trustees; Chair, CBC
Per Pinstrup-Andersen	Director General, IFPRI
Jacques Ekebil	FAO
Robert Thompson	World Bank
Saad Nassar	Egypt
Bongiwe Njobe-Mbuli	South Africa
Eliseo Ponce	Philippines
Alberto Duque Portugal	Brazil
Juan Lucas Restrepo	Colombia
Zhao Longyue	China
Tetshushi Kondo	Japan
Emmy Simmons	United States
Andrew Bennett	United Kingdom
Hans-Jochen de Haas	Germany
Christine Grieder	Switzerland
Ruth Haug	Norway
Gilles St. Martin	France
Robert Herdt	Rockefeller Foundation
Sam Dryden	Chair, Private Sector Committee
Ann Waters-Bayer	Co-Chair, NGO Committee

Within its broader terms of reference, the Steering Group also asked the CDMT to respond to several specific issues:

- ... An urgent need for the CGIAR to “elevate the game” – to demonstrate the salience of its work in relation to key interests and concerns of the international community. Systemwide synergies better harnessed and used to create a sum of activity that would be greater than the parts working separately if the System’s research agenda is based on a programmatic concept... [G]reater emphasis on strategic opportunities (e.g. climate change and sustainable agricultural development in Sub-Saharan Africa and South Asia), while reducing its emphasis on providing services to individual clients...

1. A number of people on both the CDMT and the Steering Group are no longer in the positions they held at the time the CDMT.

- ... A need to increase inclusiveness in agenda setting, at both the global and the regional level, particularly through strengthened regional priority setting.
- New arrangements required to deal with patents and intellectual property rights, thus sustaining the role of CGIAR-funded Centers as producers of international public goods.
- The NARS-CGIAR relationship has to be differently managed to reflect the changes in NARS. Full advantage must be taken of institutional forms such as networks/partnerships over brick-and-mortar institutions, reinforced, in part, by the advances in information and communications technology (ICT).
- There is a need to increase inclusiveness in agenda setting, at both the global and regional level... a need to interact effectively with GFAR, regional organizations, and civil society institutions/NGOs.
- There is a need to increase interaction with the private sector, so that new synergies might be created.
- The CGIAR should clarify its role in institution building and strengthening.
- New ways must be found to appeal to traditional donors, given increased pressure on Official Development Assistance (ODA) and lower priority to agriculture and agricultural research. The System needs new donors.
- ... A need to resolve difficulties experienced by components of the CGIAR System to come together and function as a System.
- Solutions should be suggested for problems of internal inefficiency (overlap, transaction costs, etc.)
- Decision making processes must be specifically addressed.
- Alignment or congruence must be assured among strategy, structure, financing, management systems, organizational structure, etc.<sup>2</sup>

The CDMT began its exercise by reviewing earlier evaluative material, including the Third System Review, to learn what lessons it could about substance and process. The team then went on to pose a series of diagnostic questions and built most of its governance recommendations upon conclusions relating to them:<sup>3</sup>

- What are the strengths and weaknesses of the current system?
- What are the overlaps, redundancies, and inefficiencies at the System level?
- What are the weakest links in the chain of governance?
- What strategic areas of decision making lend themselves to delegation?
- What functions should be left to the general body of stakeholders?
- If delegation is feasible, what are its implications for representation?
- What are the component functions and processes that need rationalization?

The CDMT issued its report in April 2001, which contained seven recommendations:

- Creation of **Global Challenge Programs**, focused on specific outputs, based on an inclusive approach to priority setting, drawing on research competencies of the Centers and other partners, and funded largely by additional resources.
- **Enhancing NARS**, through full “mobilization” of their capacities in design and implementation of the Global Challenge Programs, and through an initiative to promote financial support to NARS.

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2. CDMT 2001.

3. Paul 2002.

- Enhancing science output through the transformation of TAC into a **Science Council**.
- Engaging in specific efforts to assure **longer-term financing** of the System.
- Reducing annual meetings of the Group to one, with an **Executive Council** appointed by the Group to carry out delegated functions between the annual general meetings.
- Creation of a CGIAR **System Office**, to enhance efficiencies in System-level management and to serve the CGIAR Chair, members, committees, and the System at large, as well as offer some services to the Centers.
- Adopting an **“evolutionary restructuring approach,”** which is to “flow from the implementation of the change proposals.”<sup>4</sup>

At MTM01, the CGIAR endorsed the CDMT’s recommendations for reform and transformed them into four actionable areas, which have become the pillars of the current reform effort: (1) establishment of an Executive Council; (2) transformation of TAC into a Science Council; (3) a programmatic approach to research through Challenge Programs; and (4) creation of a virtual System Office.

As a first step, the Group set up an Interim Executive Council (iExCo), which was charged with fleshing out implementation of the four reforms and reporting to the Group at Annual General Meeting (AGM) in October 2001. Under the iExCo four task forces were established to address each of the reforms. The task forces prepared papers with specific recommendations on each of the topics for deliberation and synthesis by the Interim Executive Council. The iExCo then made recommendations to the Group at AGM01 concerning each of the four areas of reform.

#### OED Assessment

CDMT’s terms of reference, including the issues posed by the Steering Group, were broadly in keeping with findings of the Third System Review, in terms of, *inter alia*, the need to streamline and improve effectiveness of governance mechanisms, to consolidate the System’s structure and programs based on an in-depth management review, to improve intra-System synergies and efficiencies, to enhance partnerships with other actors outside the CGIAR, to strengthen CGIAR-NARS interactions, to better position the CGIAR to deal with patents and intellectual property rights, and to broaden its financial base.<sup>5</sup>

Partly through its examination of the experience of the TSR, the CDMT recognized the difficulties in achieving reform in the CGIAR. In its Issues Paper for the February 2001 Steering Group meeting, the team noted that “although there is general agreement on the goals of change, some of these nevertheless are characterized by unresolved issues, and matters known to be contentious. The CDMT therefore needs guidance on the acceptability of the concepts it is developing, and on the tolerance of the System to absorb the proposed changes.”<sup>6</sup> One important outcome of that Steering Group meeting was the decision not to directly address the issue of consolidation of programs and Centers.

Chairman Johnson viewed the four pillars of the reform program as the “essential building blocks of transformation, on the evolutionary path to reform. Decisions in these four areas are an indispensable

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4. CDMT 2001 – Designing and Managing Change in the CGIAR: A Report to the Mid-Term Meeting 2001.

5. Strong et al 1998.

6. CDMT February 2001.

minimum, now, if we are to guarantee and enhance the future relevance, impact, and viability of the CGIAR.”<sup>7</sup> He saw these reforms to be “quick wins” that could set a stage for further reforms.<sup>8</sup>

Taken together, these are commendable changes in view of the difficulties in reaching a consensus among a diverse membership. The leadership of the CGIAR acknowledges that Change Design and Management is a work in progress. A variety of long-overdue management reforms are already under way in training, center governance, inter-center cooperation, resource mobilization, and private sector partnerships, demonstrating the benefits of increased powers vested in the CGIAR director.<sup>9</sup> But these reforms may not go far enough. The analysis that follows raises issues associated with the existing changes in the context of the need for broader reforms. OED concludes that the creation of an Executive Council and a consolidated System Office are clear improvements, while the Challenge Programs may need to be revisited, and additional authority will have to be vested in the Science Council to make it effective – restoring its role in setting Systemwide priorities, policies, and strategies, and in advising, monitoring, and reporting to the membership on the allocation of CGIAR resources toward fulfilling these priorities, policies, and strategies.

OED also concludes that the combination of seeking “internal tolerance” to proposed changes and the desire for “quick wins,” resulted in a set of reforms that still do not address some of the system’s most unresolved and contentious issues.<sup>10</sup> Indeed, one might think of the current reforms as representing “low-hanging fruit,” reached with a minimum level of strain. Given the historical difficulty of achieving change in the system, one can fully appreciate the constraints faced by the CDMT and thus the significance of the reforms that have resulted. Nevertheless, few CGIAR stakeholders believe that the recent changes go far enough.<sup>11</sup>

***Executive Council.*** A major thrust of the Third System Review was the finding that the CGIAR’s governance structure no longer allows it to make timely, responsive, and effective decisions. The TSR team made a seemingly radical recommendation to create a representative central Board as a voting body to act on behalf of the Group.<sup>12</sup> Following discussions at ICW98, the Group decided not to reform its governance based on a central board, as suggested by the Review.

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7. Johnson 2001, “Building Blocks of Change,” Chairman’s Opening Statement, Mid-Term Meeting 2001, Durban.

8. Interview with Ian Johnson, 2001.

9. The position of Executive Secretary was upgraded to CGIAR Director in 2000.

10. Some have suggested that the reform process is more appropriately termed “Change Management” than “Change Design and Management,” given the perceived lack of meaningful reform.

11. In the meta-evaluation team’s survey of stakeholder views, only 22 percent of respondents indicate that the reforms go far enough; another 53 believe they do not; and 25 percent are unsure (see Annex O).

12. At least as far back as 1994, some recognized a need for improving decision-making in the CGIAR and the merits of an executive body. The Oversight Committee suggested that “the CGIAR is cumbersome and slow in responding to change... [M]aintaining a consensus decision-making mode is becoming more difficult as the CGIAR’s membership grows and as it attempts to tackle an increasingly large decision agenda. The new committees appear to have helped some in terms of taking a first pass at issues before they are brought to the CGIAR, but they have no executive authority and cannot act for the CGIAR” (Oversight Committee, 1994, *CGIAR’s Governance and Organization: Is There a Need for Change?*). The committee then commissioned a study panel to assess alternatives for long-term governance and financing. The panel’s report outlined two options for enhanced decision-making: (1) an elected steering committee to conduct the CGIAR’s business between CGIAR meetings, with elimination of MTM; and (2) a scaled-back version of MTM with one or more standing committees formed among CGIAR members to facilitate handling of the CGIAR’s business (Winkel, Klaus, et al, 1994, *Report of the Study Panel on the CGIAR’s Long-Term Governance and Financing Structure*).

Despite the Group's aversion to an executive governing body as outlined by the Third System Review, establishment of an Executive Council was one of the main proposals of the CDMT.<sup>13</sup> In arriving at this recommendation, the CDMT concluded that:

“The informal small club of donors with common concern for agricultural research has evolved into large diverse assemblies which find it difficult to exercise selectivity between essential and procedural decisions. The expansion of the membership of the CGIAR, the consequent complexity and inefficiency of decision-making at large CGIAR meetings, and the proposal to eliminate the MTM, have made the delegation of certain functions by the general body to subordinate entities (or levels) unavoidable. At present, most decisions default to mechanisms (committees, TAC, and Secretariat) which either lack authority or comparative expertise. Multiple committees examine the same issues. Decisions are not strongly binding on either shareholders or the Centers and there is no mechanism for following up decisions taken and hence no clear accountability for success/failure... The overload and pressures on the current governance structure of the CGIAR System call for a moderation of the burden being placed on the general body and its Chair. A major burden is the lack of alignment of major factors that contribute to the System's performance (e.g. strategy, structure, programs, finance) for which no other System body has overview responsibility. Thus, a very basic managerial and structural issue is that there is no *executive body for the whole System*, i.e., an entity which has the authority to follow up on decisions, ensure alignment and congruence of recommendations, and act on decisions with a more urgent time frame than the next CGIAR meeting. This is a critical gap that needs to be removed at the earliest opportunity.”<sup>14</sup>

Thus, at MTM01, the Group agreed to the creation of an Executive Council (ExCo), whose membership formula was then decided at AGM01 (see Box J.2).<sup>15</sup>

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13. The CDMT assessed why the governance recommendations of the TSR were not accepted by the CGIAR. Its assessment can be summarized as follows:

- (1) A basic problem was that enough time and effort may not have been provided to get members to understand the implications of the reforms. Donor members may have reacted negatively because they were not sure how the changes would affect their role and influence in the CGIAR.
- (2) An impression was created (partly aided by the above) that a corporate model was being imposed on the CGIAR. The creation of a legal entity, transfer of key functions to a central board and executive committee, and specification of seats to different groups, etc., may have seemed arbitrary to some.
- (3) The case for legal structure for the CGIAR was weak. It conveyed the impression that centralization was being increased. There were other means to take care of the IPR and funding issues that do not seem to have been explored.
- (4) Any formula to allocate seats would seem arbitrary unless much time is given to understand people's concerns and to respond to them. This may have been difficult for the TSR given its other tasks and field visits.
- (5) A major threat was the denial of any role to the general body of membership except electing their representatives to the board. Cosponsors were also sidelined. Many donors wanted a more active role and opportunities to interact with other stakeholders, Centers, etc., as a way to keep themselves in touch with on-going CGIAR developments. Donors were bound to be lukewarm to this approach (Paul 2002).

14. CDMT 2001.

15. Actual ExCo members currently are: Ian Johnson (Chair), Jacques Ekebeil (FAO), Kevin Cleaver (World Bank), Rodney Cooke (IFAD), Meryl Williams (CDC), John Vercoe (CBC), Emil Javier (iSc), Raj Paroda (GFAR), Jonathan Conly (USA), Toshinori Mitsunaga (Japan), Gilles Saint-Martin (France), Ruth Haug (Norway), Klaus Winkel (Denmark), Alberto Portugal (Brazil), Bongwiwe Njobe (South Africa), Longyue Zhao (China), Issam El-Zaim (Syria), Mustafa Yaghi (AARINENA), Robert Herdt (Rockefeller Foundation), Ann Waters-Bayer (NGOC), Sam Dryden (PSC).

<b>Box J.2. Membership of ExCo</b>	
<b>Constituency</b>	<b>Seats</b>
CGIAR Chairman	1
Co-sponsors	3
Center Directors Committee	1
Committee of Board Chairs	1
Science Council Chair	1
GFAR	1
OECD/DAC	
Americas	1
Asia/Pacific	1
Europe	3
Developing Countries	
Americas	1
Sub-Saharan Africa	1
Asia-Pacific	1
CWANA	1
Regional fora	1
Foundations <sup>16</sup>	1
Partners	
Civil society	1
Private sector	1

In addition, the ExCo has a Program Committee (PC) and a Finance Committee (FC), each with eight members, up to three of which may be drawn from members not serving on ExCo. The overall purpose of the PC is to facilitate ExCo's business by providing specialized and focused attention to CGIAR's programs to ensure their effectiveness and relevance. The FC, to be chaired by the World Bank, will serve to facilitate ExCo's business by providing specialized and focused attention to CGIAR's financial matters, including advice and recommendations for managing the Group's finances efficiently.

### OED Assessment

Chairman Johnson gets high marks for establishing the long overdue ExCo with members from both developing and developed countries, while at the same time bringing the size down below that recommended by the Third System Review.<sup>17</sup> There is a fine balance to be struck in having a small enough body to be able to make decisions, but a large enough body so as not to cause a loss in ownership of the program.

ExCo does not go as far as the Third System Review recommended – creating a legal body with a central board. It can take decisions only in the areas delegated to it by the general membership. While the members conveyed to the meta-evaluation team during the AGM 2001 that they are reserving judgment until they see how ExCo operates, ExCo members and others interviewed by the meta-evaluation team are optimistic that the change is in the right direction.

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16. Including regional development banks.

17. The Third System Review recommended establishment of a Central Board, which would be comprised of up to 26 members. In addition to the Chair, the Board would have members from the South (up to 6), members from the North (up to 6), the private sector (up to 3), the NGO community (up to 3), institutions and foundations (up to 3), and Cosponsors (4). The Board would also have a 14-member executive committee to exercise the powers of the Board when not in session, subject to terms as agreed by the Board (Strong et al 1998).

But even under the current scenario, the representativeness and accountability of ExCo to the general membership could be increased. To the extent that its formation is intended to expedite decision making, addressing issues of membership representation and delegated authority will be important for ExCo to achieve its potential. The meta-evaluation concurs with the TSR that formally electing and holding members accountable to the particular membership they represent and monitoring accountability will increase the effectiveness of ExCo, minimizing some of the issues of quality, responsibility, and accountability that CGIAR's own reviews of Centers have detected in the self-nominating boards.

While council members are selected through caucuses of member groups, they are not formally accountable to those groups – for example, they are not obligated to solicit views of their “constituent groups” before decisions are made. In addition, while the number of members reported by the CGIAR has increased, only those members “in good standing” (whose membership dues are paid in full) are eligible for ExCo membership. Only 9 of the CGIAR's 22 developing country members met this criterion when the inaugural ExCo was established, thus seriously limiting the pool of potential developing country ExCo members from each region.

Membership from both developed and developing countries increases its legitimacy. But, perhaps the most important aspect of representation for the ExCo is ensuring the effective participation of developing countries. The CGIAR has provided for their seats on ExCo. Yet attendance by developing countries was quite low at ExCo's second meeting in April 2002, due largely to a last-minute change in venue.<sup>18</sup> To maximize ExCo's success, such a situation should not arise again.

In keeping with the TSR's recommended composition of a central board, civil society and the private sector are members of ExCo. As is the case with global programs in general, there are important issues involved in including these groups in such bodies. First, it is unclear whom they represent. This concern was raised by some members – notably developing countries – at AGM01. Ian Johnson made a persuasive case at AGM01 that perspective, rather than representation, is key where the CGIAR's partnership committees are concerned. The extent to which NGOs' priorities are congruent with those of developing countries varies across issues and global programs. Biotechnology is one important area of divergence. Further, once civil society organizations are involved in decision-making processes, there are implications for the credibility of such groups in criticizing the program. Secondly, conflict of interest concerns may arise, particularly in the absence of clear policies or guidelines in this area. Finally, there is a generic question of whether advisory bodies, such as the Science Council, NGO Committee, and Private Sector Committee, should be voting members of ExCo or simply function in an advisory capacity.

A second concern is that, as it currently operates, ExCo may not be equipped to make good decisions. In consultations with the meta-evaluation team, several stakeholders expressed concern that ExCo will make decisions without the benefit of substantive interaction with the centers, and that the committee itself lacks scientific capacity to make strategic decisions. Previously, the Mid-Term Meeting provided an important opportunity for centers and donors to exchange information and perspectives, enhancing the basis for sound decision-making by the Group and enabling negotiations on financing centers' research programs. Thus, there is concern among some that discussion of scientific issues will diminish. In fact, few current members of ExCo have support structures within their own agencies to provide the necessary analysis underlying decision making and the body itself lacks independent intellectual analysis on the pros and cons of complex issues. Other than the CGIAR Secretariat, it is not clear who might play this role. Reliance on the CGIAR Secretariat could create

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18. Of the five ExCo developing country representatives, only Brazil and South Africa attended, with China and Syria absent.

conflicts of interest and result in a concentration of power in that office, a concern some have raised to the meta-evaluation team. This would not be good for the long-term, broad-based ownership and sustainability of the system. Moreover, it is not the role of the CGIAR Secretariat, a management unit, to provide scientific assessment. Such apprehensions about the substantive analysis underlying ExCo decisions is perhaps compounded by the concern raised by some stakeholders that ExCo meetings are closed to other CGIAR members and stakeholders.

In a survey of stakeholder views, OED asked whether the new ExCo will speed up CGIAR decision making and implementation. Fifty-eight percent of respondents felt that the ExCo would speed up CGIAR decision making. An additional 33 percent were unsure.<sup>19</sup> Several people indicated that it is too early to know how effective the new body will be in expediting decisions. Further, some expressed that the ExCo, as it currently exists, lacks the scientific and substantive expertise necessary to make decisions. A number of others noted that its size is too large for effective executive decision making.

There is less agreement among stakeholders as to whether the ExCo will speed up implementation of decisions taken. Only 47 percent believe this will be the case, while 5 percent do not believe that implementation of decisions will be expedited, and 39 percent are unsure. Again, some take a wait-and-see approach. Others suggest that implementation of decisions relies on other actors in the System, and many comment that the ExCo will have to delegate implementation of actions to sub-committees or other groups, as the CGIAR has been doing (see Annex O).

The general membership is understandably reluctant to delegate decision-making authority to ExCo and is taking a wait-and-see attitude.<sup>20</sup> If ExCo is to address the TSR's concerns regarding the lack of timely and responsive decision-making in the CGIAR, ExCo itself must become a decision-making body. If it is only to implement decisions, then ExCo's representativeness and analytical capacity are less important – but the body's value added to the CGIAR will be far less.

**System Office.** The CDMT found that the establishment of an Executive Council and other support needs that would derive from the reform proposals would place new demands on the CGIAR Secretariat. Further, there is agreement among stakeholders as to the need for “a vigorous communications and public awareness campaign that could project a unified corporate image.” Third, the CDMT cited the need for greater efficiency and cohesion among Centers through provision of common services. Thus, the team recommended:

- Establishment of a CGIAR System Office, encompassing the CGIAR Secretariat functions and a single, integrated communications function, which would regroup Future Harvest and the Secretariat's Communications Unit<sup>21</sup>.
- Common management and delivery of support services needed by the Centers.<sup>22</sup>

At MTM01, the Group endorsed the formation of a System Office and integrated communication strategy, and a stakeholder working group suggested the following:

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19. Interestingly, in contrast to the figure for all respondents, 85 percent of Center Directors and 71 percent of Board Chairs who responded believe that the ExCo will speed up decision making and implementation.

20. At ExCo's creation, the CGIAR charged it with “the authority to act on behalf of the Group between AGMs on matters delegated to it by the Group” (CGIAR Secretariat 2001, *Summary Record of Proceedings and Decisions, AGM01*) and “to facilitate CGIAR decisions, carry out certain delegated functions and follow-up actions arising out of [the Group's] annual meeting” (CGIAR Secretariat 2001, *Draft IEC Recommendations on CGIAR Reform – An Integrated Proposal*).

21. Future Harvest Foundation is an independent, non-profit charitable organization established in 1998 by the CGIAR Centers as part of their collective public awareness and resource mobilization efforts.

22. CDMT 2001.

- It should be headquartered in Washington, D.C., using out-sourcing, decentralized operations, and virtual modes;
- It should aim for net cost savings;
- It should aim to ensure sound management and enhancement of all System assets (political, financial, intellectual, and local partners/investors);
- Stock should be taken of work in the System in terms of communications and information functions, to introduce greater synergy, cohesion, and integration;
- Future legal status of the System Office should be examined; and
- Cost of the System Office could be broadly shared.<sup>23</sup>

At AGM01, the Group took more specific decisions relating to the reform, including:

- Establishment of a System Office is but a first step in the direction of creating a more integrated, cohesive, and coherent System. The System Office should be composed of and integrate the activities carried out by the CGIAR Secretariat, Science Council Secretariat, entities providing common services to the Centers, and the Future Harvest Foundation. It should serve the entire System and help it function in an integrated and responsive manner, implementing a compelling vision, mission, and strategy. Its specific functions should be developed and integrated gradually.
- The System Office should operate in a “virtual” and decentralized mode with its components located where it makes the most business sense. The direct accountability of each System Office component, in a fiduciary sense, should be to its own governing authority, e.g., SC Secretariat to the SC, CGIAR Secretariat to the Chairman and CGIAR, units carrying out common services to Centers to the CDC/CBC, and Future Harvest to its Board, and, through it, to the CDC. At the same time, each component, as part of an integrated effort, should also be answerable in a larger sense to the ExCo through the CGIAR Director. Relations among the components, in particular formal commitments, should be defined through contracts or agreement memoranda.
- An integrated business plan should be prepared, covering all the activities of the System Office, by the various components under the overall direction of the CGIAR Director. The business plan should serve as the basis for approval of annual work plans and performance targets for each component. It should also serve as a mechanism for accountability reporting to the ExCo.<sup>24</sup>

As a first step in preparation of an integrated business plan, a two-day workshop was held in Washington, D.C., in March 2002. The workshop, with facilitation and input from two management consulting firms, brought together the main participants in the new System Office to develop a platform for collaboration. The group set out an action plan for continued preparations, aiming for further discussion at AGM02 and a target of January 1, 2003, for implementation.<sup>25</sup>

The System Office is to operate in a decentralized and virtual mode, with the direct accountability of each unit continuing to be to its own governing authority (e.g. the Science Council Secretariat to the Science Council). The System Office will operate under the overall direction of the CGIAR Director. The units currently proposed for inclusion in the System Office are outlined in Box J3.

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23. CGIAR Secretariat 2001, *Summary Record of Decisions and Proceedings, Mid-Term Meeting 2001*.

24. CGIAR Secretariat 2001, *Summary Record of Proceedings and Decisions, AGM01*.

25. Training Resources Group 2002, *Summary of Workshop Discussions and Agreed Action Plan*.

<b>Box J.3. Proposed Units of the System Office</b>			
<b>Unit</b>	<b>Primary Service To</b>	<b>Accountable To</b>	<b>Funded By</b>
<i>System Office</i>	<i>CGIAR Chair, members and Centers</i>	<i>Executive Council</i>	<i>Composite of funders of individual components</i>
CGIAR Secretariat	Chair and donors	Chairman and CGIAR	World Bank
Science Council Secretariat	Science Council	Science Council	FAO
Association of International Agricultural Research Centers (AIARC)	CGIAR Centers and non-associated centers	Its Board	Its members
Future Harvest Foundation	Centers	Its Board, and through it to the CDC	Centers, CGIAR, some private contributions
Internal Audit	Centers	Its Board, and through it to the CDC	Centers
Gender and Diversity Program	Centers	Its Board, and through it to the CDC	Centers
Central Advisory Service on Intellectual Property (CAS-IP)	Centers	Its Board, and through it to the CDC	Centers
CDC Executive Secretary	Centers	CDC	Centers

Source: Based on information presented in *CGIAR System Office – Business Case (Draft 3.0, May 8, 2002)*.

The creation of the System Office is still in progress, with a draft business case presented in May 2002. Currently, a Steering Committee, comprised of the CGIAR Chair, CGIAR Director, and CDC Chair and Interim Science Council Chair, is overseeing the process, which culminates in a January 2003 launch of the System Office.

In addition to striving to bring greater coherence, transparency, and performance to the various central support units of the CGIAR, the System Office will seek to further enhance the overall effectiveness and efficiency of the CGIAR and support efforts to enhance public awareness and funding.<sup>26</sup> In doing so, the business case proposes that the System Office could facilitate:

- Shared services
- Public awareness and fundraising
- Enhanced reporting
- Human resources services

26. CGIAR Secretariat 2002. CGIAR System Office – Business Case, Draft 3.0, May 8.

- Research collaboration
- Knowledge management

As establishment of the System Office proceeds, many important questions remain. Among the open issues raised in the draft business case are:

- Is the current membership right? Or, should some members or activities be excluded (e.g., AIARC, since it serves customers outside the System) while new ones are included (e.g., the GFAR Secretariat)?<sup>27</sup>
- Who should govern the System Office? Would a smaller board be more appropriate than the ExCo, which currently oversees it?
- What should the governing group do?
- How should the interests of the Centers and donors be appropriately channeled into the priority-setting of the System Office in a systematic way?
- How will SO member accountabilities be aligned?
- What is the exact role and authority of the SO Director?
- Who will do the work required to pursue opportunities for improvement? Who will fund it?
- What performance metrics should be in place?

#### OED Assessment

This reform is highly consistent with the findings and recommendations of the Third System Review, which focused considerable attention on the need to minimize inefficiencies and enhance synergies in the system as well as to create a much more effective public awareness program.<sup>28</sup> As with the other Change Design and Management reforms, it is far too early to judge whether the System Office will achieve its objectives. At the same time, stakeholders generally acknowledge that there is a need for enhanced efficiencies and synergies and that creation of a System Office is desirable. The meta-evaluation team commends the CGIAR for creating a virtual System Office. If successfully implemented, it is an important step in addressing the need for greater efficiencies and accountabilities in the CGIAR. The meta-evaluation team also appreciates the process by which this reform is being carried out, i.e., the use of outside management consultants and the effort to create ownership and buy-in of stakeholders. The effort to create a shared sense of ownership is being reinforced by other recent changes, such as the inclusion of the Centers in the selection process for senior positions in the CGIAR Secretariat. At the same time, some have expressed a concern to the meta-evaluation team that there is an increasing concentration of power in the hands of the CGIAR Secretariat/CGIAR Director. It will be therefore important to have proper checks and balances for allocation of resources and monitoring of resource use to ensure a global public goods agenda is pursued.

**Science Council.** The Change Design and Management Team found that the System's science output could be enhanced in three ways: 1) attracting and retaining top scientists; 2) improving knowledge sharing; and 3) strengthening scientific guardianship.

The team recommended transformation of TAC into a Science Council in order to achieve the last of the three objectives above. The team found that, the CGIAR “continues to need an independent, scientific panel for advice on major science strategy questions and on science quality and relevance, as well as an outside view on the scientific merits of strategy, policy, priority, program, or other

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27. The meta-evaluation team concurs that the composition of the System Office should be assessed to ensure that it serves the strategic interests of the CGIAR as a system.

28. Strong et al 1998.

proposals.” However, over the years TAC had been asked to perform a number of functions (e.g. resource allocation) that would normally be carried out by other units in an organization, such as management or a board.

Thus, the CDMT recommended that TAC would be transformed into a Science Council “composed of a small number of members of the highest intellectual caliber, with strong background on science policy and strategy questions and with broad vision on the major issues impinging on the CGIAR.” The Council would serve as a hub of global and regional networks of scientific and development experts who could provide advice on:

- Current and emerging major science and science policy questions that are important and relevant to the mandate and research agenda of the CGIAR;
- Advice on and contributions to the process of agenda setting and identification of broad priority research areas;
- Advice and comment on System strategy and priority and program plans and proposals under consideration by the CGIAR;
- Ensure that the science practiced within the System is relevant to the needs of the poor, that it meets world class scientific standards, and that mechanisms are in place to assess regularly the impact of the CGIAR; and
- Ensure that cross-Center and Systemwide issues, such as biosafety and ethics, are properly addressed.

At MTM01, the Group approved the recommendation to transform TAC into a Science Council. At the Business Meeting in AGM01, the Group further agreed on the following:

- The primary responsibilities of the Science Council will be: a) to serve as guardian of relevance and quality of science in the CGIAR, and b) to advise the CGIAR on strategic scientific issues relevant to the Group’s goals and mission. SC should also function as a strategic advisor to ExCo and its Program and Finance Committees and should ensure that a system of peer reviews is in place across the System.
- The SC will be composed of up to eight (8) individuals plus the Chair. The members should be eminent scientists in relevant disciplines in the biological, physical, and social sciences. While solid scientific stature should be a major selection criterion, the members of the Council should all have strong science policy and development experience, with the overall composition of the Council reflecting diversity in forms of science and understanding of science management.
- The SC and its Secretariat should have its operational costs covered by the Cosponsors and should be hosted by FAO. An agreement among Cosponsors covering the terms of FAO’s hosting of the SC Secretariat should be prepared and formalized. This agreement should cover, among others, an institutional arrangement permitting greater latitude to the SC in recruitment of staff and provision of services to SC members while satisfying any legal obligations of FAO as host organization.<sup>29</sup>

An Interim Science Council (iSC) currently is in operation, and a Working Group is moving forward plans for the full transformation to the Science Council, including outlining specific terms of reference. The Science Council is expected to be in place in January 2003.

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29. CGIAR Secretariat 2001, *Summary Record of Proceedings and Decisions, Annual General Meeting 2001*.

Historically, TAC played a powerful role in the CGIAR's governance and organizational structure.<sup>30</sup> As it is being established, there is a risk that the Science Council's role in priority setting and resource allocation will be diminished relative to that of TAC. According to the integrated CDMT proposal discussed at AGM01,<sup>31</sup> the changes will be in two main areas: priority setting and planning. Unlike TAC, it does not appear that the Science Council will be responsible for crafting and recommending priorities and strategies for the CGIAR; instead, it will advise on and review them. It will also have a more limited role in medium-term planning, in that it will review the science content of the consolidated project portfolio and will be brought in only at the end of the planning process if major revisions to a center's MTP are required. According to the integrated proposal, the Science Council will have no role in the annual financial planning process.

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30. In an interview, Robert McNamara indicated that he insisted on endowing the CGIAR with a strong TAC with a leader that carried considerable clout to guide allocations of donor resources, recognizing that most donors would lack either the technical knowledge or dedicated support within their agencies to enable them to make informed decisions on complex issues of global science policy, research priorities, allocations, and impacts. Strong TAC leadership with credibility and independence, he argued, was and must remain the hallmark of the CGIAR. Putting TAC in the FAO was intended to increase legitimacy in the establishment of research priorities by ensuring a voice for developing countries.

31. Interim Executive Council 2001, Draft IEC Recommendations on CGIAR Reform—An Integrated Proposal.

#### Box J.4. Responsibilities of TAC and the Science Council

	<b>Technical Advisory Committee<sup>1</sup></b>	<b>Science Council<sup>2</sup></b>
<b>Main Functions</b>	<ul style="list-style-type: none"> <li>• Provide independent advice and judgments on strategic issues and on the quality of the scientific programs supported by the CGIAR.</li> <li>• Recommend research priorities and strategies to the CGIAR.</li> <li>• Ensure the quality of research supported by the Group and its relevance to the CGIAR's goals and objectives.</li> <li>• Recommend the allocation of resources among centers in the context of CGIAR-approved priorities and strategies.</li> </ul>	<ul style="list-style-type: none"> <li>• Serve as guardian of the relevance and quality of science in the CGIAR.</li> <li>• Advise the CGIAR on strategic scientific issues relevant to the Group's goals and mission.</li> </ul>
<b>Context</b>	<ul style="list-style-type: none"> <li>• Monitor changes in the global context that have implications for the CGIAR.</li> </ul>	<ul style="list-style-type: none"> <li>• Conduct periodic assessments of global and regional trends, scientific challenges, and research opportunities; and prepare the planning context at the System level.</li> </ul>
<b>Priorities</b>	<ul style="list-style-type: none"> <li>• Recommend medium- and long-term priorities and strategies for the CGIAR.</li> <li>• Monitor research supported by the Group.</li> <li>• Recommend initiatives to close gaps in publicly funded research that could best be filled by the programs and centers supported by the CGIAR.</li> <li>• Draw up the CGIAR's research agenda "matrix" and recommends it to the Group.</li> </ul>	<ul style="list-style-type: none"> <li>• Assist the ExCo and its Program and Finance committees by providing them with scientific advice on the strategic framework and set of priorities conducive to achieving CGIAR objectives.</li> <li>• Provide a critical review of System-level strategic plans and the CGIAR project portfolio.</li> <li>• Review challenge program proposals; mount peer review mechanisms, as necessary, for review of the proposals.</li> </ul>
<b>Reviews</b>	<ul style="list-style-type: none"> <li>• Evaluate the quality and relevance of Center research and research-related programs, and monitor compliance with approved plans and CGIAR priorities.</li> <li>• Jointly with the CGIAR Secretariat, arrange for periodic (generally quinquennial) external reviews of the relevance, quality, effectiveness, and impact of each Center.</li> <li>• Conduct or commission studies of programs and activities common to more than one Center.</li> </ul>	<ul style="list-style-type: none"> <li>• Coordinate the CGIAR's science monitoring and evaluation (including oversight of the peer-review and other quality assurance mechanisms used by the Centers).</li> </ul>

1. CGIAR Secretariat, 2000. *Committees and Units of the CGIAR: Roles, Responsibilities, and Procedures*.

2. Excerpt from the Interim ExCo Integrated Proposal (CGIAR Annual General Meeting 2001).

**Box J.4. (continued)**

<b>Resource Allocation</b>	<ul style="list-style-type: none"> <li>• Recommend annual Systemwide resource allocation to CGIAR-supported programs and centers.</li> <li>• Undertake an annual review of the programs and budgets of the centers, and periodic reviews of center medium-term plans and resource requirements.</li> <li>• Monitor and review, from a technical and scientific point of view, major program changes proposed by a center before they are incorporated into the center's approved program, and recommend appropriate action to the Group (with input from CGIAR Secretariat and in consultation with Finance Committee).</li> </ul>	
<b>System Issues</b>	<ul style="list-style-type: none"> <li>• Address across-center and System issues such as commodity/activity balance, regional distribution, inter-center conflicts, and monitoring of the System's evolution.</li> </ul>	
<b>Impact Assessment</b>	<ul style="list-style-type: none"> <li>• Facilitate the strengthening of the CGIAR's ex post impact assessment capabilities.</li> <li>• Provide guidance and oversight to impact assessment activities, and recommend appropriate action by the CGIAR and/or the centers.</li> <li>• Ensure that the design and conduct of evaluations document the impact of the CGIAR as a system</li> </ul>	<ul style="list-style-type: none"> <li>• Coordinate System-level impact assessment activities.</li> </ul>

Sources: CGIAR Secretariat 2000, *Committees and Units of the CGIAR: Roles, Responsibilities and Procedures*; Interim Executive Council 2001, *Draft IEC Recommendations on CGIAR Reforms – An Integrated Proposal*.

The IEC integrated proposal clearly states that “the Science Council’s role in these processes will be more on strategic and longer-term science and science policy issues and less on operational matters—medium term plans, annual plans, etc.”<sup>1</sup>

### OED Assessment

Creation of a Science Council is partially in keeping with the Third System Review, which suggested that TAC’s scientific capacity should be strengthened and the committee reorganized to include a chair and a small number of strategic thinkers or “visionaries” constituting a TAC “nucleus.” At the same time, the TSR recognized the important role played by TAC and argued for the maintenance of independent scientific advice in the system.

OED appreciates the desire to reduce the burden of administrative tasks that have fallen to TAC. However, TAC’s role in resource allocation, both in making recommendations and in monitoring actual allocations, in the past played an important role in ensuring that its independent scientific advice, in the form of medium- and long-term strategies and priorities for the System, was heeded. This was particularly the case before the 1994 financial crisis.

There is widespread agreement within the CGIAR that the influence of TAC has declined over the past decade. Indeed, 67 percent of respondents to a survey of stakeholder views believe that TAC’s role in priority setting has declined over the past decade (see Annex O). But there is no consensus as to the reasons why this is the case. Many have offered the meta-evaluation team an explanation that the decline is due to the political correctness in the representation on TAC rather than scientific excellence. Some have acknowledged that the chairman, the donors, and Centers were weary of a strong TAC, such as existed in the past, and instead opted for a less-assertive leadership and membership. Some acknowledged that donor-driven funding underlies the decline. Others have recognized the profound impact of the changes in the funding formula for the World Bank’s contribution, which has compounded the effects of increasingly restricted funding. The combined result is a decoupling of resource allocation from system-level priority setting (see Annex H).

There is less agreement among stakeholders on whether TAC’s quality has declined, though responses to the questionnaires suggest a small majority believe it has.<sup>2</sup> Many have suggested that concern for representation has eclipsed science quality in determining TAC’s composition. The meta-evaluation team is not convinced that the problem of quality applies to developing country nationals alone. The selection process needs to be improved with wider searches in both OECD countries and developing countries to obtain the quality and expertise needed to meet today’s challenges. There is also a question of what scientific quality in TAC means. One concern expressed to the meta-evaluation team is that people on top of their games in science may not always be the most appropriate for TAC.<sup>3</sup>

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1. Interim Executive Council 2001, *Draft IEC Recommendations on CGIAR Reform—An Integrated Proposal*.

2. Fifty-two percent of respondents to OED’s questionnaire believe that TAC’s quality has declined; another 23 percent do not believe it has; and 25 percent are unsure. Relatedly, 45 percent of respondents indicate that the Centers’ research agenda is largely driven by developed countries; 34 percent believe it is primarily driven by developing countries; and only 35 percent feel it is mostly driven by scientific interests.

3. One respondent to the stakeholder questionnaire commented that “There is a question of the meaning of ‘quality’ – is it academic brilliance and novelty or relevance and its value to poor people? As a donor, I swing toward the latter.” Another respondent likewise has noted that “repeated references to the Science Council’s role in assuring quality of science misses the very important point of what the CGIAR is all about – it is about good, appropriate science/technology which can provide solutions to the problems of poverty, food security, and sustainability in the developing world. If it were only a

CGIAR stakeholders are taking a wait-and-see approach regarding whether the Science Council will represent scientific excellence and help ensure the scientific quality of CGIAR research. The membership has yet to agree that TAC or the new Science Council will play a lead role in system-level priority setting, a huge change from the initial years of the CGIAR. Among survey respondents, 50 percent of Center directors, 45 percent of Board chairs, 56 percent of OECD donors, but 86 percent of TAC members and 83 percent of NARS representatives, believe that the Science Council should have the lead role; 67 percent of the Third System Review panel also believe this. Eighty-one percent of stakeholders indicated that TAC/Science Council should have the financial resources necessary to help ensure the scientific quality of CGIAR research, but only 54 percent felt that it should have the lead role in priority setting (see Annex O).

The meta-evaluation team believes that the role of independent scientific advice has declined in the CGIAR, as has the strategic and global public goods nature of the CGIAR's work. Given the importance of guarding science quality and relevance in the CGIAR, for the Bank's resources to have the maximum possible impact on poverty reduction through research, it would seem that the Science Council would need to play a critical role in determining, monitoring, and evaluating the uses of funds to ensure that they are producing global or regional public goods that are of high value to the poor and are making a difference to outcomes on poverty.

Even if the Science Council were to have a lead role in priority setting and resource allocation equivalent to that previously enjoyed by TAC, a more challenging issue to resolve is ensuring congruence between recommended levels of resource allocation based on medium- and long-term priorities and strategies and actual resources allocated. Without a mechanism to ensure such congruence, it is questionable what influence the SC's independent scientific advice will have.

The quality and impact of the new Challenge Programs (see below) hinges on the performance of the new Science Council and its role, composition, and resources. It makes sense to engage an internationally prestigious group of scientists to identify the strategically important research questions to which CGIAR Centers and scientists can make significant contributions that should ultimately impact on poverty, food security, and sustainable improvements in agricultural productivity. But the body must be empowered to identify what the CGIAR should not do. The CGIAR has been repeatedly and justifiably criticized for lacking an architecture that enables it to make politically difficult but scientifically essential choices. To overcome these perceptions, it would be wise to vest the Science Council with the authority and responsibility for maintaining the system's focus and enhancing the selectivity of its research choices.

This leads to a significant design challenge. To effectively exert research and science oversight, the Science Council must have substantive input into resource allocation decisions. This suggests a need to identify specific areas of scientific expertise the council would need to encompass through its membership. However, as soon as resource allocation decisions become a prominent feature of the council's mandate, council composition related to attributes such as region and gender become an issue. There are inevitable tensions between balancing representative interests across stakeholder groups and the collective interest in gathering the best possible scientists. The relationship between scientific review and resource allocation needs further thought and clarification. In the end, donors will only value the Science Council's independent advice and commit the necessary resources if the scientific credibility of the group is beyond question and its procedures adhere to high standards of transparency.

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matter of excellent science, the donors are probably much better off simply supporting their national universities, science academies, and similar research bodies.”

A strong, qualified, and independent Science Council accountable to the general membership would better support ExCo. This is crucial since most current and likely future ExCo members will lack either the technical knowledge or the dedicated support within their own agencies to enable them to make informed decisions on complex issues of global science policy, research priorities, and allocations or impacts.

In order for the Science Council to effectively play this role, several things must happen as the committee is brought into full operation:

- The Science Council would need to have a strong Chair, with the necessary distinction in the knowledge of smallholder agricultural development, agricultural policy, and the role of science, who is widely respected for his/her intellect, has a reputation for independence, and is willing to speak his/her mind and enjoys the respect of CGIAR stakeholders;
- The Science Council views would need to be available to the general membership, including to the donors for their oversight of funds they are providing;
- The Science Council would have to have a full-time core body with sufficient resources and support; and
- The allocation of Bank funds would need to ensure reintroduction of a mechanism whereby the system's financial resources are less restricted than they are currently and are directly linked to its long-term priorities and strategies established by the Science Council, which should be based on global and regional public goods. In this way the World Bank can assure itself that its resources are leveraging other resources in support of global and regional public goods to maximize impact on poverty.

Unless the Science Council is strong and respected, its support to ExCo will be weak, and such weakness would increase the influence of the already powerful CGIAR Secretariat, which is vested with responsibility for resource mobilization. It would also increase the risk of having an agenda driven by the interests of donors rather than the needs of developing countries.

**Challenge Programs.** Among the four “pillars” of reform the CGIAR adopted based on the Change Design and Management process is the introduction of Global Challenge Programs (CP). The CDMT sought to address four issues through the CPs: 1) increasing scope for cross-Center work; 2) designing new procedures to bring in an even wider range of partnerships; 3) bringing new and increased funding from current and new donors; and 4) improving output accountability. Ultimately, the team believed that “substantial elements of CGIAR work should shift decisively to a programmatic approach in defining, financing, and managing research activities.”<sup>4</sup>

The CDMT envisioned the Challenge Programs as:

- Contributing to CGIAR goals and serving CGIAR clients;
- Building on core competencies of the CGIAR and usually involving at least two Centers;
- Involving at least two other major research partners (from North and South) outside the CGIAR;
- Taking a multi-sectoral research approach, and having clear mechanisms for the delivery and dissemination of research outputs;
- Requiring significant levels of multi-year funding (up to five years);
- Not being started unless such funding is at hand; and
- Having clear lines of accountability and clear institutional arrangements.

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4. CDMT 2001.

The regional approach to research planning, adopted at ICW00, would “add significant value to the identification and development of the [CPs], ...ensur[ing] that the process is demand-driven and bottom-up, with the full participation of major CGIAR stakeholders...” The CDMT proposed that, by 2006, around half of the CGIAR’s research agenda should be delivered through CPs. Overall oversight on behalf of the CGIAR would fall to the ExCo.<sup>5</sup>

A working group of stakeholders at MTM 2001 discussed the proposed Challenge Programs and reported back to the Group its agreement that Challenge Programs:

- Should be developed in the context of the CGIAR’s vision and strategy;
- Should complement Centers’ continuing research programs and build upon their core competencies;
- Should increase the visibility of the CGIAR research agenda, with qualitative and quantitative elements that are significantly different from the current *modus operandi*;
- Should be developed on an evolutionary basis, learning from experience with different models;
- Should be based on bottom-up, participatory planning, including the work by regional fora, combined with a global, strategic analysis of problems and opportunities;
- Should be reviewed by the Science Council for their scientific priority and coherence;
- Should seek to mobilize significant new funding; and
- Should have significant involvement of non-CGIAR institutions, including the use of creative new modalities such as competitive funding.

Ultimately at MTM01, the Group endorsed the Challenge Programs and the programmatic approach to research planning and financing that they embody. A task force established by the Interim ExCo was then charged with drafting an action proposal outlining key aspects of the development and implementation of CPs, focusing on design, selection criteria, and process issues.<sup>6</sup> At AGM01, the Group reaffirmed its commitment to the Challenge Program concept and initiated the CP development process. Ten concept notes for candidate pilot CPs were submitted at that time. At the first ExCo meeting, which immediately followed AGM, the ExCo set out a process and timeline for identification of “accelerated,” pilot CPs.

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5. Over time, if the number of CPs grows, the CDMT suggested that the ExCo may delegate part of its oversight functions to a Board (CDMT 2001).

6. CGIAR Secretariat 2001, *Summary Record of Proceedings and Decisions, Mid-Term Meeting 2001*.

### Box J.5. Challenge Programs: Concepts and Selections for Pre-Proposal Development

#### Pilot Phase

Concept Title	Principal Proponent Institution
1. Agriculture and Combating Desertification	ICRISAT, ICARDA
2. Animal Diseases, Market Access, Food Safety and Poverty Reduction	ILRI
3. Climate Change	ICRAF
4. Development of Sustainable Agricultural Production Systems in Central Asia and Caucasus	ICARDA
5. Global Genetic Resources: Conservation, Management and Improvement for Food and Nutritional Security, Agrobiodiversity and Sustainable Livelihoods	CIMMYT, IPGRI, IRRI
6. Global Initiative on HIV/AIDS, Agriculture and Food Security	ISNAR, IFPRI, WARDA, FAO
7. Global Mountain Program	CIP
8. Harnessing Agricultural Technology to Improve the Health of the Poor: Biofortified Crops to Combat Micronutrient Deficiency	CIAT, IFPRI
9. The African Challenge Program	
10. Water and Agriculture	IWMI

Note: Shading denotes projects that have been selected for fast-tracking.

#### Regular Process, First Batch

Concept Title	Principle Proponent Institution
1. Agricultural biodiversity for sustainable development	IPGRI
2. <i>Agriculture, Poverty and Combating Desertification</i>	ICRISAT/ICARDA
3. <i>Beating the Heat: Climate Change and Rural Prosperity</i>	ICW-CC, ICRAF
4. Biological nitrogen fixation for increased crop productivity, enhanced human health and sustained soil fertility	ICRISAT
5. BOSAWAS Biosphere Reserve project	MARENA/GTZ (Nicaragua)
6. Characterization of Latin American cattle breeds through molecular genetics and genomics	University of Mar de Plata (Argentina)
7. China-CIP potato program: From China to East Asia and Southeast Asia	Ministry of Agriculture (China)
8. Conservation of domesticated animal genetic resources	University of Goettingen (Germany)
9. The Contributions of the Future Harvest Centers to the Millennium Ecosystem Assessment: Creating a Dynamic Capacity for Integrated Policy-Driven Assessment of Agroecosystems, Forests, Coasts, Freshwaters, Grasslands, and Mountains of the Developing World	Millennium Ecosystem Assessment (based in ICLARM)
10. Creating the triple helix: Effective crop biotechnology partnerships for the developing world	Rothamsted International (U.K.)
11. Development of computer-based integrated water resources management systems (IWRMS) for water and soil conserving analyses	Friedrich-Schiller Universitat Jena (Germany)
12. Development of a portable field laboratory for field studies in saline environments	Uwe Schleiff, Free lance consultant (Germany)
13. <i>Development of Sustainable Agricultural Production Systems in Central Asia and the Caucasus</i>	ICARDA

14. Fish as indicators of ecosystem change	ICLARM
15. Food safety and risks: Health and economic implications for the rural poor of the semi-arid tropics	ICRISAT
16. Global assessment of conflicting water use: Water for food vs. water for nature	Center for Environmental Systems Research, University of Kassel (Germany)
17. Global assessment of groundwater resources and their future potential for agriculture	Center for Environmental Systems Research, University of Kassel (Germany)
18. Global assessment of the relation between agriculture and water quality	Center for Environmental Systems Research, University of Kassel (Germany)
19. Harnessing global IPM initiatives for sustainable harvests, improved livelihoods and healthier production environments in Africa, Asia and Latin America	IITA
20. <i>Improving Livelihoods and Natural Resources Management in Sub-Saharan Africa</i>	FARA
21. Increasing productivity in the coastal zone: Reversing habitat degradation and advancing livelihood options	ICLARM
22. Indigenous Knowledge and Utilisation and Underutilisation of Commodities in West-African Forests	Institut für Entwicklungsethnologie und angewandte Sozialforschung (Germany)
23. Information and communication technology enabled knowledge sharing and distance learning for enhanced food security	ICRISAT
24. Integrated modeling of land use and its bio-geophysical effects in forest margin areas	Center for Environmental Systems Research, University of Kassel (Germany)
25. Linking Smallholder Farmers to Growth Markets within a Globalized Economic System	PhAction (U.K.)
26. Monitoring and investigating mini-livestock as potential sustainable candidate to use biodiversity in the tropics	Padova University (Italy)
27. Organization of a System of Information Images and Sounds for the Research on Irrigation and Societies	IRD/Association Recherches Images & Sons (ARIS) (France)
28. Policies and Strategies for the Improved Management of Genetic Resources and Related Information	IPGRI
29. Promoting agricultural technologies through the media of school micro-businesses, plays, essay competitions and other means of popularization	Natural Resources Institute (U.K.)
30. Rainforest challenge program	IUCN and WWF
31. <i>Reducing Poverty by Removing Market Barriers Caused by Animal Diseases</i>	ILRI/FAO
32. Research to enhance the way the CG system identifies research priorities in order to improve the addressing of poverty alleviation	INBAR (based in China)
33. Securing Livestock Genetic Resources for Present and Future Food Security	ILRI
34. Strategies to Reduce Local and Global Environmental Threats: The Amazon	EMBRAPA Amazonia Oriental/CIAT (Brazil)
35. Strengthening the CGIAR's Access to and Delivery of Proprietary Science	Strategic World Initiative for Technology Transfer/Cornell University (U.S.)
36. <i>Sustainable Mountain Development</i>	CIP
37. Underutilized crops to enhance nutrition and diversification of incomes	IPGRI

38. Unwrapping the poverty, livestock and environment nexus – Towards greater sustainability and accountability	ILRI
39. Urban harvest: Program on urban and peri-urban agriculture	CIP
40. Vulnerability Under Increasing Variability	ICLARM
41. Water quality parameters for monitoring the drainage area of 1,200 km <sup>2</sup> of intensive agriculture (mechanization – fertilizers – pesticides) and their use in the development and assessment of a basin management plan in southern region of Brazil	Centro de Hidraulica e Hidrologia Professor Parigot de Souza (CEHPAR) (Brazil)

*Note: Shading denotes concepts that have been selected for pre-proposal development. Italics indicate concepts re-submitted for consideration in the regular process following the pilot phase selection process. Source: CGIAR, accessed at URL: [www.cgiar.org](http://www.cgiar.org), June 1, 2002.*

The Interim Science Council subsequently assessed the 10 concept notes presented at AGM01 and recommended 3 to ExCo for the pilot phase. It has since reviewed some 41 additional concept notes submitted in response to the first general call for proposals under the regular (as opposed to pilot) process (see Box J.5). Of these, the Interim Science Council has recommended and the ExCo endorsed 13 for pre-proposal development, based upon meeting the following criteria:

- Addresses an issue of overwhelming significance. Issues addressed can be global, regional or sub-regional in importance;
- Fits within the CGIAR mission and goals; and
- Is likely to generate significant outputs and impact.

Once concept notes have been endorsed for development of pre-proposals, they are de-linked from their initial phase of idea generation. That is, once the CP theme is identified, pre-proposal development will be an open, competitive process. This is open to anyone, not only to those who may have contributed the initial ideas. The objective is to generate a variety of meaningful pre-proposals on each selected theme, not to pre-select institutions to submit pre-proposals.

The criteria for evaluation of pre-proposals include:

- Is time bound and clearly defined in terms of research outputs as well as the potential impacts on CG clients;
- Has clearly defined mechanisms for the delivery and dissemination of research outputs;
- Is based on science that is both excellent and relevant, often requiring logical integration of multiple disciplines to address issues of great complexity;
- Employs a mode of operation that enhances efficiency and effectiveness of the CGIAR System, with demonstrable contribution to CGIAR goals;
- Involves both CGIAR centers and their partners and is based on the core competence and comparative advantage of collaborating partners;
- Adds value to existing research and produces synergies between existing core competencies of the Centers' and the partners;
- Is cooperative and collaborative in nature; with no overwhelming dominance by a single institution;
- Gives evidence of stakeholder involvement in problem identification and link to bottom-up priority setting mechanisms;
- Requires significant levels of up-front funding to achieve its objectives;
- There is clear evidence that donors are willing to commit significant up-front funding.<sup>1</sup>

### OED Assessment

The Challenge Program mechanism would seem to address many of the concerns raised in the Third System Review concerning the need for enhanced synergies among CGIAR Centers, more extensive partnerships with organizations beyond the CGIAR, and a greater emphasis on capacity building of NARS.<sup>2</sup>

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1. CGIAR 2002, accessed at URL: [www.cgiar.org/pdf/cpprocessguide.pdf](http://www.cgiar.org/pdf/cpprocessguide.pdf), July 20, 2002.

2. Strong et al 1998.

Many people, including notably some Center directors, have conveyed a general enthusiasm to the meta-evaluation team for Challenge Programs as a means for reinvigorating the system.<sup>3</sup> Indeed, the meta-evaluation team believes the Challenge Programs can be a step in the right direction to enhancing the CGIAR's effectiveness and impact. For example, the design, wherein problems of global importance are pursued through a network of in-depth, long-term, local applications<sup>4</sup>, in principle lends itself well to NRM research. However, there are several areas that lack clarity and/or stakeholder consensus, or that may raise early concern.

Various stakeholders have pointed out that success will depend on several things, including: the extent to which additional funds can be raised; incorporation of new ideas and new modes of operation – not just repackaging “old wine in new bottles”; learning from the successes and failures of Systemwide Programs; identification of strategic issues of global significance that build upon the comparative advantages of the CGIAR; and avoiding capture by the Centers.

While the pilot phase was expedited in order to launch the program and give the CGIAR a basis for “learning by doing,” concern has been raised that, indeed, the early CPs already may indicate capture by the Centers. Of the 41 concept notes submitted for the first regular phase, a commendable 22 were submitted from outside the CGIAR, with the remaining 19 coming from CGIAR centers. However, of the 13 selected for pre-proposal development, 12 of them were submissions from the centers, with only 1 selected from outside the CGIAR.<sup>5</sup> Further, of the 10 pre-proposals for the pilot phase, 9 “lacked any meaningful NARS participation.”<sup>6</sup>

With respect to whether the CPs will represent “old wine in new bottles,” of the 16 CPs approved in the pilot and first regular phases, 8 appear to have significant overlap with existing Systemwide (SWP) or Ecoregional (EP) Programs (see Box J.6). The Challenge Programs would seem to specifically address some important shortcomings of the SWPs/EPs, including insufficient financing, time-bound programs, and lack of adequate governance and management structures (see Box J.7). More funds already seem to be flowing to the system, and thus “elevating the game” may be working.

There appear to be differing views, however, on the extent to which the Challenge Programs should replace current CGIAR activities versus being an add-on to them. Many have indicated that the CGIAR already is spread too thin and cannot effectively take on the Challenge Programs in addition to its current work without an infusion of significant additional resources. Indeed, one of the overriding objectives of introducing the CP mechanism is to expand the CGIAR's financing envelope. At the same time, the CDMT foresaw Challenge Programs representing up to half of the CGIAR's research agenda by 2006, though it did not indicate whether this was to be achieved by a doubling of resources or a cut in existing programs to make room for Challenge Programs.

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3. For example, interview with Meryl Williams, 2002.

4. CDMT 2001.

5. CGIAR 2002, accessed at URL: [www.cgiar.org](http://www.cgiar.org), July 20, 2002.

6. CGIAR Secretariat 2002, *Second Meeting of the Executive Council, April 16-17, 2002, London, Summary Record of Proceedings*.

**Box J.6. Overlap Between Systemwide/Ecoregional and Challenge Programs**

Systemwide or Ecoregional Program	2002 Budget <sup>1</sup> (millions of US\$)	2002 Budget, <sup>2</sup> percent obtained	Challenge Program	Proposed Budget <sup>3</sup>	Proposed Budget, average per year (millions of US\$)
Systemwide Genetic Resources Program	1.15	56	<i>Global Genetic Resources: Conservation, Management and Improvement for Food and Nutritional Security, Agrobiodiversity and Sustainable Livelihoods</i>	\$50MM over five yrs	10.0
Systemwide Livestock Program	2.0	60	Securing Livestock Genetic Resources for Present and Future Food Security	\$7.5-10MM over 5 yrs.	1.5-2.0
Systemwide Initiative on Water Management	3.5	66	Water and Agriculture	16.5-18.5MM/yr <sup>4</sup>	16.5-18.5
CGIAR Systemwide Program on Integrated Pest Management	.715	Not available	Harnessing global IPM initiatives for sustainable harvests, improved livelihoods and healthier production environments in Africa, Asia and Latin America	\$11.7MM over 5 yrs.	2.34
Global Mountain Program	1.5	47	Sustainable Mountain Program	\$1.5-2MM/yr	1.5-2.0
Strategic Initiative on Urban and Peri-Urban Agriculture	.85	26	Urban harvest: Program on urban and peri-urban agriculture	Not available	Not available
Desert Margins Program	Not available	Not available	Agriculture, Poverty and Combating Desertification	\$80MM over 8 yrs.	10.0
Collaborative Research Program for Sustainable Development in Central Asia and the Caucasus	3.0	50	Development of Sustainable Agricultural Production Systems in Central Asia and the Caucasus	\$25MM over 5 yrs	5.0

1. Source: Fitzhugh and Brader, 2002. *Core Funding for Systemwide and Ecoregional Programs*, March 31 draft. Numbers are provisional and subject to updating.

2. Source: Fitzhugh and Brader, 2002. *Core Funding for Systemwide and Ecoregional Programs*, March 31 draft. Numbers are provisional and subject to updating.

3. Source: Concept Notes (for regular phase projects) and Pre-Proposals (for pilot phase projects), accessed at URL: [http://www.cgiar.org/research/res\\_cp.html](http://www.cgiar.org/research/res_cp.html), June, 2002.

4. Range is due to lack of clarity in pre-proposal as to whether the five proposed working groups will require \$.5MM/yr total or each.

### Box J.7. Lessons from Systemwide Programs

There have been a small handful of efforts to gauge and/or understand the factors underlying the success (or lack thereof) of Systemwide Programs,<sup>1</sup> including the Third System Review (Strong et al, 1998), Henzell et al (1999), the CBC (1999), Fitzhugh and Brader (2002), and the Interim Science Council (2002). Together, these reports provide a set of lessons applicable to the evolution of the new Challenge Programs.

Overall, the value added in operating in a Systemwide mode by and large has outweighed the transaction and management costs.<sup>2</sup> The SWPs generally have succeeded in raising System awareness and in bringing the Centers and their partners together in addressing related issues, in sharing knowledge, methods, and human resources. However, success across individual programs is highly variable.

Ultimately, important features of the more successful SWPs appear to be:

- Clear and focused objectives.
- Strong commitment by all partners, in cash and kind.
- Scientific leadership and significant resource commitment by the Convening Center.
- Clear, agreed governance and partner responsibilities.
- Support of key donors.

In general, several factors underlie the variable success of the SWPs:

- The hoped-for benefit of mobilizing significant additional resources has not materialized for many SWPs. By and large, SWPs have not received sufficient funding from donors.
- There must be sufficient financing for coordination and other indirect costs.
- Centers have faced serious problems balancing the financial requirements of their own Center's mandates for high-priority strategic research against the requirements for SWPs.
- Fundraising for SWPs can be in direct competition with fundraising for the Centers, creating conflicts of interest.
- SWPs have had insufficient governance and management structures.
- Governance and management problems derive in part from imposing "horizontal" programs on a vertically structured and financially competitive System.

The CDMT recognized that "a clear risk to the System exists in that the new programmatic approaches will be funded at least to some extent at the expense of current Center programs and institutions... [Challenge Programs] might help generate more resources for the System, but not the level of resources that could relieve the current pressure on institutional and 'regular program' funding. However, there is no guarantee that the adoption of a programmatic approach will attenuate the present trend of dwindling unrestricted or institutional support, resulting in reduced managerial flexibility at the Center level." Further, it acknowledged that the potential for additional funding depends directly on the adoption of new, attractive programming approaches, with more money flowing to "exciting concepts targeted at current and relevant challenges."<sup>3</sup> Early evidence suggests that certain bilateral donors are interested in particular Challenge Programs – for example the United States in biofortification and the Netherlands with \$25 million pledged to the water program.<sup>4</sup>

1. This is taken to include both Systemwide and Ecoregional Programs.

2. TAC notes that the added benefits seem to decline as the number of Centers involved increase beyond a few (Science Council 2002).

3. CDMT 2001.

4. Additionally, the United Kingdom has indicated an intention to substantially increase its support to the CGIAR. Likewise, Canada has announced a doubling of its contribution, with the additional resources largely devoted to Africa.

The target of having Challenge Programs comprising one-half of the CGIAR's research portfolio seems to overshoot the desirable expansion in the system's collaborative research. More importantly, it is likely to reinforce the current problems associated with donor-driven research foci. The Executive Council's and Science Council's capacity to maintain appropriate focus in the Challenge Programs may become an issue if core CGIAR funding does not underpin these major research initiatives.

The Challenge Programs clearly have the potential to help get systemwide priorities right from the outset. However, many of the early Challenge Program concept notes suggested further expansion of the scope of CGIAR research with the explicit ambition of capturing additional donor resources through networking at the thematic margins of agriculture. Thus, there is a risk that they could well reinforce the downstream drift toward applied and adaptive research unrelated to productivity growth, or lead to research of a strategic nature of interest to industrial countries willing to finance the new agenda but tangential to the poverty-oriented mission of the CGIAR. This seems unwise at a time when the system is still reeling from the rapid expansion of its mandate a decade ago and when there seems to remain spare capacity for approaching the System's possibilities frontier through improved connectivity within the CGIAR and between the Centers, NARS, SROs, and ARIs.

Avoiding such outcomes will require systemwide priorities as well as monitoring the content of individual Challenge Programs and assessing the opportunity cost to developing countries of undertaking some programs relative to others. Will the new programs bring skills, methodology, and experience that add value to national programs that urgently need to increase resource efficiency and productivity growth, or will it duplicate or substitute for what national programs do or should do best? Will they largely support the Centers' budgets? Only a thorough review of the CGIAR's current research program and Challenge Program proposals, examining them for quality, using clear criteria of global and regional public goods nature before committing to new programs and old Centers, can provide an answer to this question.

Up to \$20 million of the Bank's contributions 2003 are proposed to support Challenge Programs, as a way of attracting new money and giving them the seal of approval so valued by donors. Several experts have expressed concern that the Bank, which already gave away its strategic role in 1995 by opting to be a matching donor, may be weakening this strategic role further.<sup>5</sup> The diminished influence of the current Interim Science Council makes this a matter of even greater concern. Although the Challenge Programs clearly have the potential to help get Systemwide priorities right from the outset, until the new Science Council is in place and has clearly defined roles and responsibilities there is a risk that the programs could develop some of the same past weaknesses of the Systemwide and inter-Center programs they are intended to correct. These weaknesses include reinforcing the drift toward applied and adaptive research unrelated to productivity growth and overly reflecting the interests of donor countries, while further reducing the role of independent scientific advice in priorities and quality of science. In order to achieve their potential impact, the Challenge Programs must not only focus on the highest priorities of the System, but also be defined and based on increasing factor productivity and resource efficiency for the benefit of the largest number of the poor. Further, while adequate resources are important to the eventual success of the Challenge Programs, priorities must not be driven by resource availability alone.

On the question of adequacy of the Challenge Programs to address long-term, systemic issues, OED asked stakeholders whether they believe the Challenge Programs will be sufficient to open up the CGIAR System to obtain/produce the best science, whether inside or outside the System. Respondents were equally divided in agreeing, disagreeing, and being unsure (see Annex O). Many

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5. See, for example, Bertram and Dalrymple 2000, *Toward a More Strategic Allocation of World Bank Matching Funding to CGIAR Centers*, Draft No. 3.

suggest that the CPs alone are not sufficient, but some are hopefully they are a step in the right direction. Others are concerned that the CPs are essentially “tinkering at the margins.” One influential “insider” commented that “the use of the best science is not the major problem of the CGIAR. The major problem is the setting of priorities for research and decision-making processes that reward the Centers conducting good science in the high priority areas and penalize those Centers and programs that do not. Originally proposed, the CPs can enhance the scientific output and quality, but if it is simply reorganization and renaming of existing programs, it will not.”

Some have envisioned the Challenge Programs as a means to gradual “restructuring” of the System through the introduction of more overt competition for resources: those Centers and programs that continue to attract funding will survive, and those that do not, will be forced to merge with others or fold. However, only 33 percent of stakeholders surveyed indicate that the Challenge Programs are the best approach to achieve consolidations within the system.

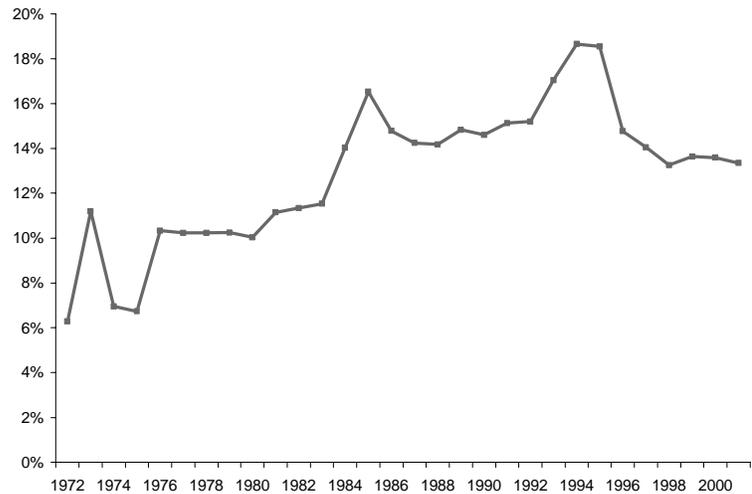
The meta-evaluation team believes that the Challenge Programs can be a positive step toward opening up the system and enhancing its impact. However, in order to achieve their potential impact, the CPs must be focused on the priorities and strategies of the system as a whole and be defined and based on increasing agricultural productivity. Further, while adequate resources are an important ingredient in the eventual success of Challenge Programs, priorities should not be driven by resource availability. The CGIAR should not be willing to further expand its mandate into areas beyond its comparative advantage and its commitment to global public goods in an effort to secure additional resources. Third, if the Challenge Programs are to promote meaningful partnerships, they must avoid capture by the Centers. Fourth, the meta-evaluation team does not believe that Challenge Programs are a sufficient means for addressing issues of consolidation/reconfiguration of centers and/or research programs.

## Annex K: World Bank and the CGIAR

**The World Bank has been the second largest donor to the CGIAR (after the United States) and the largest donor during the last 10 years**

The Bank's \$1.26 million contribution to the CGIAR in 1972 was the Bank's first grant to a multilateral activity out of the Bank's net income.<sup>1</sup> Up to December 31, 2001, the Bank has contributed \$795.9 million to the agreed research agenda of the CGIAR. This averaged 14.1 percent of the total contributions from all members, from a low of 6.3 percent in 1971 to a high of 18.6 percent in 1994 during the 1993-1994 financial crisis (Figure K.1 and Table K.1).

**Figure K.1. Bank's Contribution to the Agreed Research Agenda of the CGIAR (Percent of Total)**



The Bank has also contributed \$81.9 million to the costs of the CGIAR Secretariat, the TAC Secretariat, and ESDAR since 1978 (when records are first available), and \$1.9 million to CGIAR committees during the last five years, for a total recorded contribution of \$879.7 million. Even including the Bank's contribution to the secretariat and committee costs, the Bank has been the second largest donor since inception (after the United States, which has contributed more than \$1 billion), but has been the largest donor during the last 10 years.

**The Bank's lending to agricultural research and extension projects in developing countries has declined dramatically since the early 1990s**

The World Bank has committed \$5.98 billion to agricultural research and extension projects 173 projects in 91 countries since 1971.<sup>2</sup> These represented about 7 percent of Bank lending to the agricultural sector, which in turn represented about 18 percent of Bank lending in all sectors since 1971 (Table K.2). New commitments have declined in the 1990s from their peak of \$665.7 million in 1992. Commitments to agricultural research and extension have approached this amount only once since—\$420.1 million in 1998—due to the approval of a large agricultural research project to India (for \$196.8 million) in that year.

1. Anderson and Dalrymple (1999).

2. This comprises the total commitments of those projects that were coded as agricultural research or agricultural extension in the Bank's coding system up to 1989, and the commitments to the agricultural research and extension components of all projects with such components since 1990. This recent change in the Bank's coding system, retroactive to 1990, has been made in order to adequately capture the greater frequency of multi-component loans in recent years.

**The average performance of agricultural research and extension projects, at project closing, has declined during the last 10 years, both absolutely and relative to Bank-wide averages**

For projects that closed during the last five years (1997-2001), only 52 percent of agricultural research and extension projects had a satisfactory outcome, compared to 67 percent for all agricultural projects and 73 percent for all Bank projects (Figure K.2, panel a, and Table K.5.). This represented a decline from 73 percent satisfactory for research projects, and from 65 percent satisfactory for extension projects, which closed during 1992-1996.

Only 19 percent of agricultural research projects and 28 percent of agricultural extension projects that closed during 1997-2001 were rated as likely sustainable, compared to 48 percent for all agricultural projects and 59 percent for all Bank projects (Figure K.2, panel b).

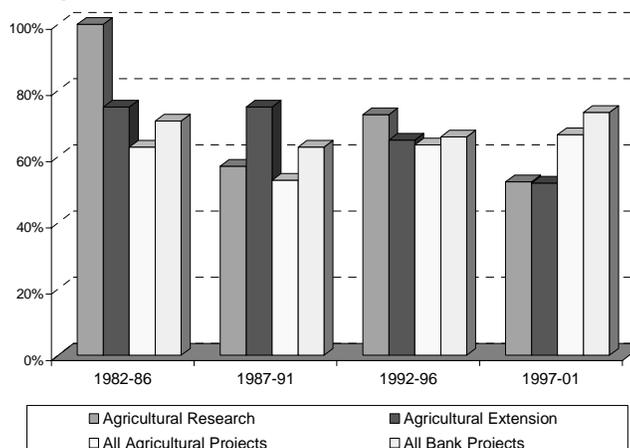
Only 29 percent of agricultural research projects and 28 percent of agricultural extension projects that closed during 1997-2001 had a substantial institutional development impact, compared to 40 percent for all agricultural projects and 43 percent for all Bank projects (Figure K.2, panel c.)

### **Sub-Saharan Africa has been a significant part of Bank lending to agricultural research**

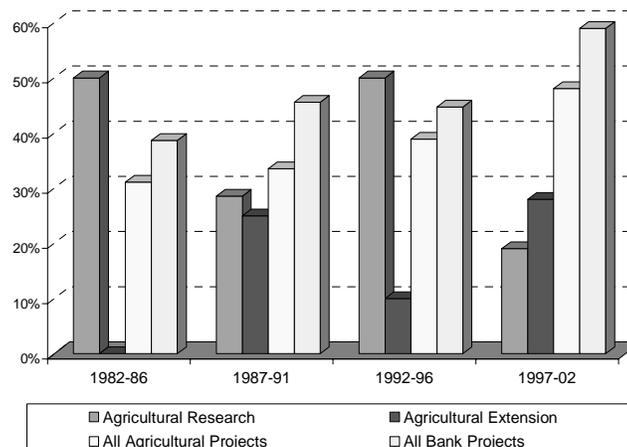
Bank lending to sub-Saharan Africa has represented 37 percent of agricultural research and extension projects (64 out of 173 projects) since 1971, and 25 percent of new commitments (Figure K.3 and Table K.3.)

**Figure K.2. OED Performance Ratings of Agricultural Research and Extension Projects**

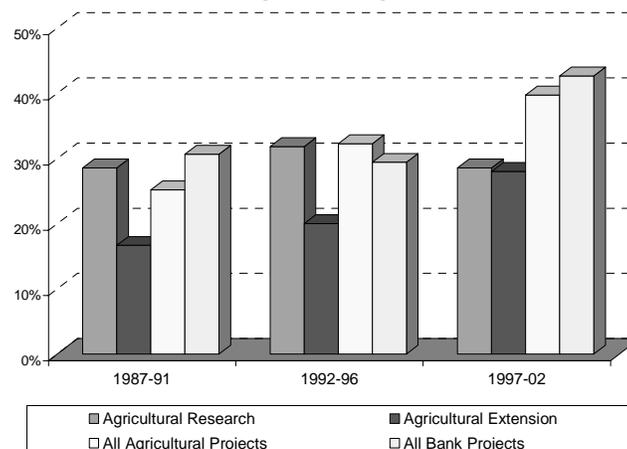
#### **a. Project Outcome**



#### **b. Sustainability**



#### **c. Institutional Development Impact**



Bank lending to Latin America and the Caribbean has represented 13 percent of agricultural research and extension projects (23 out of 173 projects) since 1971, and 24 percent of new commitments.

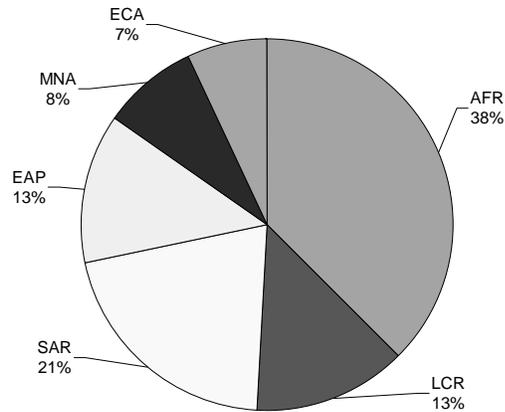
Bank lending to Latin America and the Caribbean has represented 13 percent of agricultural research and extension projects (23 out of 173 projects) since 1971, and 24 percent of new commitments.

Bank lending to South Asia and to East Asia and the Pacific has represented 21 percent and 13 percent of agricultural research and extension projects, respectively, and 20 percent and 18 percent of new commitments, respectively.

Bank lending to the Middle East and North Africa and to Europe and Central Asia has represented 8 percent and 7 percent of agricultural research and extension projects, respectively, and 7 percent and 6 percent of new commitments, respectively.

**Figure K.3. Bank Lending to Agricultural Research and Extension, 1971 to 2002**

**a. Number of Projects**



**b. Volume of Commitments (\$ millions)**

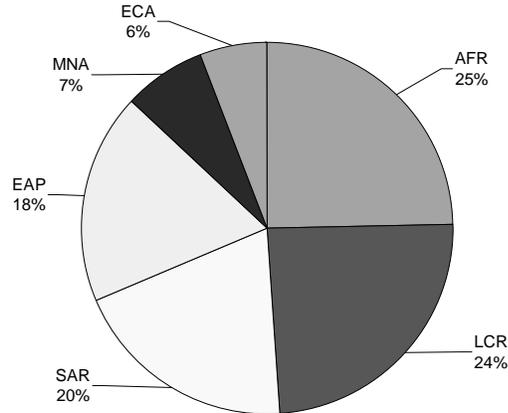


Table K.1. World Bank's Financial Contributions to the CGIAR System (US\$ millions)

	To the Agreed Research Agenda			To Secretariat Costs				To CGIAR Committees	Total Recorded Contribution
	World Bank	Total Contributions	Percent of Total	CGIAR Secretariat	TAC Secretariat	ESDAR /1	Total		
1972-76 Average	3.2	38.1	8.5%	n.a.	n.a.	–	n.a.	–	3.2
1977-81 Average	10.7	102.4	10.4%	n.a.	n.a.	–	0.6	–	11.3
1982-86 Average	23.2	168.8	13.8%	n.a.	n.a.	–	2.1	–	25.3
1987	30.0	210.6	14.2%	2.2	0.4	–	2.6	–	32.6
1988	30.0	211.5	14.2%	2.4	0.5	–	2.8	–	32.8
1989	33.3	224.5	14.8%	2.5	0.5	–	2.9	–	36.2
1990	34.3	234.9	14.6%	3.1	0.6	–	3.7	–	38.0
1991	35.1	232.0	15.1%	4.2	0.8	–	5.0	–	40.1
1992	37.6	247.3	15.2%	4.2	0.8	–	5.0	–	42.6
1993	40.0	234.7	17.0%	4.5	0.8	–	5.2	–	45.2
1994	50.0	268.1	18.6%	4.5	0.8	–	5.2	–	55.2
1995	50.0	269.6	18.5%	4.4	0.8	0.2	5.3	–	55.3
1996	44.9	304.0	14.8%	4.3	0.8	0.3	5.4	–	50.3
1997	45.0	320.3	14.0%	4.1	0.8	0.2	5.1	0.5	50.6
1998	45.0	339.5	13.3%	4.1	0.8	0.2	5.0	0.5	50.5
1999	45.0	330.0	13.6%	4.6	0.8	–	5.3	0.3	50.6
2000	45.0	331.0	13.6%	4.3	0.8	–	5.0	0.2	50.2
2001	45.0	337.1	13.3%	4.3	0.8	–	5.0	0.4	50.4
<b>Total</b>	<b>795.9</b>	<b>5,641.9</b>	<b>14.1%</b>	<b>63.2</b>	<b>11.4</b>	<b>0.9</b>	<b>81.9</b>	<b>1.9</b>	<b>879.7</b>

Source: CGIAR Secretariat, and Anderson and Dalrymple (1999).

1/ Agricultural Research and Extension Group in the Environmentally Sustainable Development Vice-Presidency.

**Table K.2: Share of Agricultural Research and Extension Projects in Bank Lending (Commitments Basis)**

Fiscal year	Number of New Projects				Volume of New Commitments (US\$ millions)				Percent of Agriculture		Agriculture as percent of total
	Agricultural research	Agricultural extension	Agriculture sector	Total – All sectors	Agricultural research	Agricultural extension	Agriculture sector	Total – All sectors	Agricultural research	Agricultural extension	
1971	1	0	37	129	12.7	0.0	448.2	2,505	2.8%	0.0%	18.2%
1972	0	0	36	140	0.0	0.0	436.3	2,966	0.0%	0.0%	18.6%
1973	0	0	48	146	0.0	0.0	941.1	3,409	0.0%	0.0%	29.4%
1974	0	0	57	170	0.0	0.0	983.9	4,314	0.0%	0.0%	29.0%
1975	2	0	72	188	50.0	0.0	1,857.6	5,896	2.7%	0.0%	25.1%
1976	1	1	70	212	40.0	22.0	1,648.1	6,632	2.4%	1.3%	29.1%
1977	1	4	86	227	20.0	60.0	2,328.4	7,067	0.9%	2.6%	34.8%
1978	2	6	88	236	21.0	158.5	3,269.7	8,411	0.6%	4.8%	43.4%
1979	1	5	85	247	27.0	95.0	2,546.8	10,011	1.1%	3.7%	31.4%
1980	1	3	87	246	65.0	92.0	3,526.4	11,482	1.8%	2.6%	37.9%
1981	3	4	88	245	114.0	105.5	3,919.8	12,291	2.9%	2.7%	33.6%
1982	3	3	71	247	70.5	73.6	3,107.6	13,016	2.3%	2.4%	23.6%
1983	2	1	70	243	77.5	15.0	3,724.4	14,477	2.1%	0.4%	27.6%
1984	1	4	64	235	24.5	94.7	3,478.0	15,522	0.7%	2.7%	20.0%
1985	4	6	75	235	82.3	115.6	3,789.3	14,384	2.2%	3.1%	27.7%
1986	3	4	64	230	203.1	186.8	4,558.7	16,399	4.5%	4.1%	26.6%
1987	6	7	58	235	180.5	167.1	2,930.3	17,674	6.2%	5.7%	16.9%
1988	3	1	58	217	47.5	17.6	4,524.4	19,221	1.0%	0.4%	25.5%
1989	7	3	51	225	219.0	80.3	3,494.0	21,367	6.3%	2.3%	16.9%
1990	9.6		50	222		315.6	3,265.1	20,702		9.7%	13.1%
1991	9.1		44	228		374.9	3,157.8	22,686		11.9%	13.9%
1992	12.3		44	222		665.7	3,209.9	21,706		20.7%	14.8%
1993	7.1		41	244		340.1	2,902.8	23,696		11.7%	12.3%
1994	7.6		43	228		312.2	3,555.1	20,836		8.8%	17.1%
1995	6.0		41	242		290.6	2,208.5	22,522		13.2%	9.8%
1996	4.5		34	255		125.8	2,063.2	21,312		6.1%	9.7%
1997	4.0		44	241		121.5	3,540.5	19,147		3.4%	18.5%
1998	7.4		46	286		420.1	2,636.9	28,594		15.9%	9.2%
1999	3.5		37	276		250.4	2,718.8	28,996		9.2%	9.5%
2000	3.8		27	223		48.4	1,336.7	15,276		3.6%	8.8%
2001	2.6		29	225		111.5	1,456.9	17,251		7.7%	8.4%
2002	2.3		26			69.9	1,996.2			3.5%	
Total	172.6		1,770	6,945		5,984.9	85,561	469,766		7.0%	18.3%

Table K.3. Agricultural Research and Extension Projects: New Projects and Commitments by Region

Fiscal year	Number of New Projects							New Commitments (US\$ millions)						
	AFR	EAP	ECA	LAC	MNA	SAR	Total	AFR	EAP	ECA	LAC	MNA	SAR	Total
1971			1				1	0.0	0.0	12.7	0.0	0.0	0.0	12.7
1972							0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973							0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974							0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975		2					2	0.0	50.0	0.0	0.0	0.0	0.0	50.0
1976		1		1			2	0.0	22.0	0.0	40.0	0.0	0.0	62.0
1977		1				4	5	0.0	28.0	0.0	0.0	0.0	52.0	80.0
1978	2	1		1			4	21.0	19.0	0.0	100.0	0.0	39.5	179.5
1979	1	1					4	10.5	35.0	0.0	0.0	0.0	76.5	122.0
1980		3					4	0.0	147.0	0.0	0.0	0.0	10.0	157.0
1981		1		1		5	7	0.0	30.0	0.0	60.0	0.0	129.5	219.5
1982	1	1		1	1		2	19.5	45.0	0.0	40.6	6.0	33.0	144.1
1983	1	1		1			3	15.0	14.1	0.0	63.4	0.0	0.0	92.5
1984	1	1	2				5	13.1	2.0	79.6	0.0	0.0	24.5	119.2
1985	3	1	1		1		4	57.3	25.0	7.0	0.0	5.0	103.6	197.9
1986	3			2	1	1	7	46.3	0.0	0.0	264.0	7.5	72.1	389.9
1987	7	1		2		3	13	107.9	70.0	0.0	24.0	0.0	145.7	347.6
1988	3				1		4	47.5	0.0	0.0	0.0	17.6	0.0	65.1
1989	8	1			1		10	236.0	35.3	0.0	0.0	28.0	0.0	299.3
1990	4.8	0.6	1.0	1.5	1.6	0.1	9.6	69.9	64.3	65.0	67.2	41.4	7.8	315.6
1991	6.0	0.6	0.0	1.9	0.0	0.6	9.1	139.4	171.8	0.0	41.6	0.0	22.1	374.9
1992	4.5	0.6	1.0	3.1	1.8	1.3	12.3	119.8	48.2	55.0	356.3	65.3	21.1	665.7
1993	3.2	1.7	0.4	0.8	0.6	0.4	7.1	73.7	110.2	61.3	30.8	44.9	19.1	340.1
1994	3.2	0.9	0.0	0.5	2.9	0.1	7.6	61.2	58.2	0.0	22.9	164.3	5.6	312.2
1995	2.8	0.8	0.1	1.7	0.3	0.5	6.0	90.1	47.3	4.0	70.5	1.7	77.1	290.6
1996	0.7	0.8	1.9	0.1	0.2	0.7	4.5	24.0	22.6	25.5	1.4	10.5	41.8	125.8
1997	1.8	0.1	0.4	1.7	0.0	0.0	4.0	42.7	4.8	3.8	63.6	0.0	6.5	121.5
1998	2.3	0.3	1.0	0.6	0.8	2.4	7.4	78.2	38.1	14.0	30.2	16.4	243.2	420.1
1999	2.8	0.0	0.3	0.3	0.0	0.0	3.5	90.4	6.0	9.8	142.2	0.0	1.9	250.4
2000	0.1	0.1	1.9	1.1	0.0	0.6	3.8	2.3	6.3	16.3	16.5	0.0	7.0	48.4
2001	1.5	0.1	0.2	0.0	0.7	0.1	2.6	87.0	2.2	2.0	0.0	14.3	6.0	111.5
2002	0.9	0.0	0.0	0.8	0.4	0.2	2.3	34.6	0.0	0.7	0.7	1.8	32.2	69.9
<b>Total</b>	<b>64.5</b>	<b>22.7</b>	<b>12.2</b>	<b>23.0</b>	<b>14.1</b>	<b>36.1</b>	<b>172.6</b>	<b>1,487.5</b>	<b>1,102.3</b>	<b>356.7</b>	<b>1,435.9</b>	<b>424.5</b>	<b>1,177.9</b>	<b>5,984.9</b>
<b>Percent of total</b>	<b>37%</b>	<b>13%</b>	<b>7%</b>	<b>13%</b>	<b>8%</b>	<b>21%</b>	<b>100%</b>	<b>24.9%</b>	<b>18.4%</b>	<b>6.0%</b>	<b>24.0%</b>	<b>7.1%</b>	<b>19.7%</b>	

**Table K.5. OED Performance Ratings of Agricultural Research and Extension Projects**

Projects closing in fiscal year	Agricultural Research	Agricultural Extension	All Agricultural Projects	All Bank Projects
	<b>Project Outcome: Percent Satisfactory</b>			
1982-86	100%	75%	63%	71%
1987-91	57%	75%	53%	63%
1992-96	73%	65%	64%	66%
1997-01	52%	52%	67%	73%
<b>Overall: 1982-2001</b>	<b>67%</b>	<b>64%</b>	<b>61%</b>	<b>68%</b>
	<b>Sustainability: Percent Likely</b>			
1982-86	50%	0%	31%	39%
1987-91	29%	25%	34%	46%
1992-96	50%	10%	39%	45%
1997-01	19%	28%	48%	59%
<b>Overall: 1982-2001</b>	<b>35%</b>	<b>20%</b>	<b>39%</b>	<b>49%</b>
	<b>Institutional Development Impact: Percent Substantial</b>			
1982-86	0%	0%	16%	22%
1987-91	29%	17%	25%	31%
1992-96	32%	20%	32%	29%
1997-01	29%	28%	40%	43%
<b>Overall: 1982-2001</b>	<b>29%</b>	<b>21%</b>	<b>30%</b>	<b>34%</b>

**Table K.6. List of Approved Agricultural Research and Extension Projects, by Region & Country<sup>1</sup>**

#	Project ID	Region	Country	Project Description	Approval FY	Closing FY	Commitments (US\$ millions)
1	P000274	AFR	Burkina Faso	Ag. Research	1988	1997	17.9
2	P000296	AFR	Burkina Faso	AG SERVICES II	1998	2003	41.3
3	P000195	AFR	Burundi	Muyinga Ag. Development	1988	1996	10.0
4	P000362	AFR	Cameroon	National Ag. research project	1987	1993	17.8
5	P000376	AFR	Cameroon	AGRIC. EXT. TRAINING	1990	1999	21.0
6	P045348	AFR	Cameroon	AG EXT & RES SUPPORT	1999	2004	15.1
7	P000501	AFR	Chad	AG SERVICES	1995	2003	22.1
8	P003129	AFR	Congo, DR	Pilot Extension Project	1991	1994	14.5
9	P000566	AFR	Congo, DR	Natnl. Ag Ext & adaptive res. proj.	1992	n/a	15.8
10	P003112	AFR	Congo, DR	National Ag. research project	1992	1997	16.7
11	P001193	AFR	Cote d'Ivoire	NAT'L AGRICULTURAL Services	1994	1998	12.2
12	P037588	AFR	Cote d'Ivoire	AGRIC. SVCS. II	1999	2003	42.5
13	P000646	AFR	Equatorial Guinea	CROP DIVER & AGRIC SERVICES	1991	n/a	3.8
14	P000700	AFR	Ethiopia	Ag. Research	1985	1994	22.0
15	P000704	AFR	Ethiopia	Peasant Agric. Dev.	1989	1997	85.0
16	P000822	AFR	Gambia, The	WOMEN IN DEVELOPMENT	1990	1998	2.1
17	P000818	AFR	Gambia, The	AG SERVICES	1993	1999	11.1
18	P000918	AFR	Ghana	AGRIC DIVERSIFICATION	1991	2000	15.5
19	P000928	AFR	Ghana	AGRIC RESEARCH	1991	2000	22.0
20	P000931	AFR	Ghana	AGRIC EXTENSION	1992	2000	20.4
21	P000968	AFR	Ghana	AGRIC SERVICES	2001	2004	42.2
22	P001064	AFR	Guinea	Natl. Research and Extension	1989	1996	18.4
23	P001081	AFR	Guinea	AGRIC SERVICES	1996	2001	22.8
24	P001297	AFR	Kenya	National Agric. Research	1988	1995	19.6
25	P046838	AFR	Kenya	LAKE VICTORIA ENV.	1997	2003	4.9
26	P001354	AFR	Kenya	NARP II	1997	2004	39.7
27	P046836	AFR	Kenya	Lake Victoria Env.	1997	2004	5.3
28	P001546	AFR	Madagascar	National Ag. Research	1989	1998	24.0
29	P001521	AFR	Madagascar	PILOT EXTENSION	1990	1995	3.7
30	P001563	AFR	Madagascar	Ag. Extension Prog. Support Proj.	1995	2001	25.2
31	P001623	AFR	Malawi	National Ag. research project	1985	1994	23.8
32	P001660	AFR	Malawi	Ag. Services	1993	2000	45.8
33	P001725	AFR	Mali	AG SERVICES	1991	1998	14.6
34	P001751	AFR	Mali	AG RESEARCH	1994	2002	20.0
35	P035630	AFR	Mali	Agric. & producer organizations	2002	2006	23.9
36	P001864	AFR	Mauritania	AGRIC SERVICES	1994	2001	6.4
37	P001781	AFR	Mozambique	AGR.SER. REHAB.	1992	2000	14.4

1. This list comprises all the projects that were coded as agricultural research or agricultural extension in the Bank's coding system up to 1989, and the projects since 1990 in which agricultural research and extension represents the largest component.

#	Project ID	Region	Country	Project Description	Approval FY	Closing FY	Commitments (US\$ millions)
38	P001968	AFR	Niger	National Ag. Research	1990	1999	19.9
39	P001995	AFR	Niger	AG. SERVICES	1992	1998	17.6
40	P002092	AFR	Nigeria	National Ag. Research	1991	2000	78.0
41	P002140	AFR	Nigeria	AGRIC TECH	1992	2000	37.0
42	P002212	AFR	Rwanda	Ag. Research	1985	1992	11.5
43	P002243	AFR	Rwanda	AGRIC RESEARCH II	1994	1999	15.0
44	P002314	AFR	Senegal	Ag. research project	1982	1990	19.5
45	P002331	AFR	Senegal	AG. SERVICES	1990	1998	10.4
46	P002351	AFR	Senegal	Ag. Research 2	1990	1997	18.5
47	P002367	AFR	Senegal	Agr. Services & Prod. Orgs.	1999	2003	27.4
48	P002574	AFR	Sudan	Ag. research project	1978	1988	15.0
49	P002597	AFR	Sudan	Agric. Extension & Training	1986	1993	22.0
50	P002601	AFR	Sudan	Southern Kassala Agric.	1989	1996	20.0
51	P002749	AFR	Tanzania	Nat'l Agric. & Livestock Res.	1989	1998	8.3
52	P002804	AFR	Tanzania	AGRIC RESEARCH	1998		21.8
53	P002891	AFR	Togo	NAT.AGRICULTURE SERV	1998	2003	13.6
54	P002991	AFR	Uganda	AGRIC. EXTENSION PROGRAM	1993	1999	15.8
55	P002938	AFR	Uganda	AGRIC RES & TRNG I	1993	2001	25.0
56	P002977	AFR	Uganda	Cotton Subsector Dev. Project	1994	2002	4.6
57	P044695	AFR	Uganda	Natl. Agric. Advisory Services Proj.	2001	2008	31.5
58	P003190	AFR	Zambia	Agric. Research & Extension	1987	1997	13.0
59	P003218	AFR	Zambia	Ag. Sector Investment Program	1995	2002	29.4
60	P003429	EAP	China	Ag. Research 2	1985	1992	25.0
61	P003558	EAP	China	HEBEI AGRIC. DEVT.	1990	1998	51.0
62	P003559	EAP	China	AGRIC. SUPPORT SERVICES	1993	2001	72.5
63	P003742	EAP	Indonesia	Ag. research and extension	1975	1983	21.5
64	P003795	EAP	Indonesia	National Ag. research project	1980	1990	65.0
65	P003934	EAP	Indonesia	Ag. Research Mgt.	1989	1996	35.3
66	P004009	EAP	Indonesia	INTEGRATED PEST MGMT	1993	2000	31.4
67	P003985	EAP	Indonesia	WTRSHED CONSERVATION	1994	2000	44.6
68	P003972	EAP	Indonesia	AG RESEARCH II	1995	2003	63.0
69	P004011	EAP	Indonesia	SULAWESI AGRI AREA	1996	2003	11.8
70	P004008	EAP	Indonesia	NUSA TENGGARA DEV.	1996	2004	10.8
71	P004241	EAP	Malaysia	Ag. research and extension	1975	1984	28.5
72	P004364	EAP	Papua New Guinea	Ag. support services project	1983	1989	14.1
73	P004487	EAP	Philippines	Ag. Support Services	1982	1991	45.0
74	P004716	EAP	Thailand	National Ag. research project	1981	1992	30.0
75	P008335	ECA	Croatia	FARMER SUPPORT SERV	1996	2003	17.0
76	P065715	ECA	Georgia	AGR RES EXT & TRG	2000	2006	7.6
77	P008513	ECA	Kyrgyz Republic	SHEEP & WOOL IMPRVMT	1996	2003	4.2
78	P040721	ECA	Kyrgyz Republic	ASSP	1998	2004	8.1

#	Project ID	Region	Country	Project Description	Approval FY	Closing FY	Commitments (US\$ millions)
79	P043882	ECA	Romania	AGR SUPPORT SERVS	2000	2005	11.0
80	P037489	ECA	Spain	Ag. research project	1971	1980	12.7
81	P008974	ECA	Turkey	AG.EXTN. II	1990	1998	63.0
82	P009044	ECA	Turkey	AG RESEARCH	1992	2001	55.0
83	P006079	LCR	Barbados	Ag. Development	1987	1996	4.0
84	P006188	LCR	Bolivia	Ag. Technology Development	1991	1999	21.0
85	P006269	LCR	Brazil	Ag. research project	1976	1983	40.0
86	P006312	LCR	Brazil	Second Ag. research project	1981	1988	60.0
87	P006467	LCR	Brazil	AG RESEARCH III	1990	1996	47.0
88	P006473	LCR	Brazil	BR LND MGMT II-S. CATAR	1990	1999	10.9
89	P006467	LCR	Brazil	Agric. Research 3	1990	1996	47.0
90	P043873	LCR	Brazil	AG TECH DEV	1997	2003	60.0
91	P006474	LCR	Brazil	BR LAND MGT 3 (SAO PAULO)	1998	2006	23.1
92	P006636	LCR	Chile	SMLL FARMER SERVICES	1992	1998	81.7
93	P006778	LCR	Colombia	Ag. research and extension I	1983	1992	63.4
94	P006880	LCR	Colombia	AGRICULTURE TECHNOLOGY	1995	2004	51.0
95	P006943	LCR	Costa Rica	AG SECTOR INVESTMENT	1992	1999	31.6
96	P007131	LCR	Ecuador	AG RESEARCH	1997	2004	21.0
97	P007167	LCR	El Salvador	AG SCTR REFORM & INV - PRISA	1993	2003	30.8
98	P007633	LCR	México	Agric. Dev. Project 2	1986	1996	109.0
99	P007682	LCR	México	Ag. Technology	1992	1999	150.0
100	P047690	LCR	Peru	RES & EXTENSION	2000	2004	9.6
101	P008065	LCR	St. Kitts and Nevis	AG DEV SUPPORT	1991	1999	1.6
102	P008222	LCR	Venezuela	AG EXT	1995	2003	39.0
103	P004923	MNA	Algeria	Agric. Res. & Pilot Extension	1990	1998	32.0
104	P004938	MNA	Algeria	SAHARA DEVELOPMENT	1992	1998	40.5
105	P034140	MNA	Algeria	LOCUST CONTROL	1994	1996	27.0
106	P005157	MNA	Egypt, Arab Rep. of	AGRICULTURAL MODERNIZATION	1994	2002	100.4
107	P005468	MNA	Morocco	Ag. Research & Exten.	1989	1996	28.0
108	P005499	MNA	Morocco	IRR. AREAS AGR. SERV	1994	2001	25.0
109	P005519	MNA	Morocco	LAKHDAR WATERSHED MG	1999	2004	4.0
110	P005727	MNA	Tunisia	Ag. Research & Extension	1990	1997	17.0
111	P005750	MNA	Tunisia	AGRIC SUPPORT SVCS	2001	2007	21.3
112	P005780	MNA	Yemen Arab Rep.	Ag. Research & Development	1982	1992	6.0
113	P005810	MNA	Yemen, Rep	NAT.AGRIC.SECT.MGMT	1992	2000	14.4
114	P009387	SAR	Bangladesh	First agricultural research	1978	1985	6.0
115	P009438	SAR	Bangladesh	Second Ag. research project	1984	1992	24.5
116	P009516	SAR	Bangladesh	AGRIC. SUPPORT SERVICES	1991	n/a	22.1
117	P009484	SAR	Bangladesh	Agriculture Research Mgt.	1996	2002	50.0
118	P009719	SAR	India	Orissa Ag. Development	1977	1984	20.0
119	P009745	SAR	India	National Ag. research project	1979	1986	27.0

#	Project ID	Region	Country	Project Description	Approval FY	Closing FY	Commitments (US\$ millions)
120	P009847	SAR	India	Nat. Ag. Res. 2	1986	1996	72.1
121	P009863	SAR	India	Nat. Ag. Exten. 3	1987	1995	85.0
122	P010561	SAR	India	NATL AGR TECHNOLOGY	1998	2004	196.8
123	P048026	SAR	Nepal	AGRI RES & EXTENSION	1998	2003	24.3
124	P010159	SAR	Pakistan	Ag. research project	1981	1988	24.0
125	P010273	SAR	Pakistan	Agric. Ext. & Adaptive Res. 2	1987	1994	42.1
126	P010349	SAR	Pakistan	Agricultural Research 2	1990	1998	57.3
127	P010276	SAR	Sri Lanka	Ag. Research	1987	1997	18.6
128	P010398	SAR	Sri Lanka	SECOND AGRIC. EXTENSION	1992	1998	14.2

## **Annex L: CGIAR Secretariat Report on the Implementation of the Recommendations from the Third System Review**

Prepared for the Independent Meta-Evaluation by CGIAR System Office (CGIAR Secretariat) Washington, D.C.

### **INTRODUCTION**

The Third System Review (TSR) containing 29 recommendations was presented to the CGIAR at International Centers Week 1998 (ICW98) by Review Chair Maurice F. Strong, and members of the review panel. Over half of the meeting time at ICW98 (17 out of 32.5 hours) was reserved for discussion of the TSR. Additionally, numerous informal discussions were held among groups of like-minded CGIAR members. Formal consideration of the TSR was organized as follows:

- Presentation of the report by Panel Chair and members;
- Questions and comments in plenary;
- Discussion by three working groups (Science, Partnerships/Governance, and Finance);
- Review in plenary of reports from working groups;
- Discussions at heads of delegation dinner meeting;
- Decisions in plenary.

Each working group took the TSR recommendations as its starting point, but expanded the discussion beyond the report as necessary. Agreement was reached on several recommendations (see Annex). More discussion was considered necessary, however, in order to clarify issues, agree on what was attainable, and speed up the process of implementation.

The Group decided, therefore, to establish a Consultative Council, chaired by the CGIAR Chairman, as a follow-up mechanism to assist the Group in reaching decisions on TSR recommendations.<sup>1</sup> In preparation for a meeting of the Council, the CGIAR Chairman assigned specific TSR recommendations to committees and other components of the System, and requested them to prepare implementation proposals with a rationale for the action proposed. Short deadlines were set for this exercise, which involved the Committee of Board Chairs (CBC), Center Directors Committee (CDC), the Finance Committee (FC), the Global Forum on Agricultural Research (GFAR), the Oversight Committee (OC), the CGIAR Secretariat, and the Technical Advisory Committee (TAC). The NGO Committee (NGOC) and the Private Sector Committee (PSC) held special sessions to consider TSR recommendations in preparation for participation by the Chairs of the two committees in the Consultative Council.

An intensive effort was made by all groups to craft implementation proposals that were consistent with the spirit of TSR recommendations, the accumulated experience of the CGIAR System, the views of CGIAR members, the capacities and role of the Centers, and the views of partners and beneficiaries in the South; as well as to link recommendations with actions already underway. The Council met in Brussels on February 27-28, 1999. The outcome of that meeting was a set of implementation proposals covering TSR recommendations and, equally, taking full account of the analyses and views presented to the Council.

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1. In a later, separate exercise, the CGIAR Oversight Committee commissioned a study of the TSR and the lessons to be drawn from it for the conduct of future reviews. The retrospective review was conducted by Martin Pineiro (Chair), Elliot Stern (Chair, European Evaluation Association), and Dana Dalrymple.

The Council presented the next Mid-Term Meeting (MTM99) in Beijing, China, with a package of five implementation reports, as follows:

- MTM/99/05 – Summary Report of the Consultative Council meeting;
- MTM/99/08 – Science;
- MTM/99/09 – Partnerships;
- MTM/99/10 – Governance; and
- MTM/99/11 – Finance.

After full discussion of these reports, the Group decided on action points for implementation.

ICW99 brought consideration of the Third System Review to closure, but refashioning of the CGIAR System's strategic orientation and thrusts remains a continuing effort. Thus, for instance, integrated gene management and integrated natural resource management continue to be the twin thrusts of CGIAR-supported research. Recommendation 4 (integrated gene management) has been met almost in its entirety, with the exception of the proposed single entity for holding patents, a proposal that was rejected on legal advice. Recommendation 5 (integrated natural resource management) has been implemented, as well (See [www.inrm.cgiar.org](http://www.inrm.cgiar.org)).

Several of the Challenge Programs currently under consideration have their origins in TSR recommendations. Many of them include a significant focus on policy and management research as recommended by the TSR, demonstrating how these aspects of research have been integrated with the priorities and strategies of most Centers. The greatly expanded use of information technology is consistent with the TSR recommendation on global knowledge sharing. A number of incremental steps have been taken to streamline and tighten governance, in keeping with the spirit of TSR recommendations. Other changes generated by the TSR continue to grow and be further developed.

## **DECISIONS/ACTIONS**

### **RECOMMENDATION 1**

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:

To contribute to food security and poverty eradication 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.

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.

**Decision:**

The Group endorsed the recommendation for changes in the CGIAR mission statement, and invited the Centers to modify their mission statements, as necessary, to be consistent with the CGIAR statement.

**Actions:**

- The following mission statement emphasizing food security and poverty eradication was adopted:

To contribute to food security and poverty eradication through research, partnership, capacity building, and policy support, promoting sustainable agricultural development based on the environmentally sound management of natural resources.

- Centers that have revised mission statements since 1998 have taken account of TSR recommendation, e.g., the ILRI mission statement that was revised and approved by the Board in 1999 follows the TSR recommendation.
- The CGIAR mission statement was subsequently further revised, in keeping with the new CGIAR vision as proposed by TAC, and the current mission statement is:

To achieve sustainable food security and reduce poverty in developing countries through scientific research and research-related activities in the fields of agriculture, forestry, fisheries, policy, and environment.

**RECOMMENDATION 2**

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.

**Decision:**

The Group agreed that the Centers should continue to serve as global institutes whose primary endeavor is to bring advanced science and technology to bear on the needs of the poor.

**Action:**

- Capacity in genomics, bioinformatics, ICT, GIS and other frontier sciences and methodologies has expanded, especially through alliances with advanced research institutes (ARIs).
- Well-established efforts to work with partners and develop knowledge-sharing mechanisms have been continued.
- Expanded application of participatory methodologies (e.g., through Systemwide programs) for problem identification, priority setting, and research planning has promoted blends of

traditional and modern and environmentally sensitive methods. Results were highlighted in the Center presentations at ICW2000 and AGM01, in the annual reports of Centers, as well as in numerous scientific and extension publications.

- Increased efforts to conduct research beneficial to low-potential areas particularly in WANA and SAT areas.

### RECOMMENDATION 3

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:

- 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 conveners 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.

#### Decision:

The Group endorsed the broad thrust of this recommendation and entrusted Centers and TAC with the responsibility of implementation.

#### Action:

New Vision and Strategy formulated by TAC and approved by the Group at ICW01 follows the TSR recommendation to concentrate on topics relevant to sustainable food security and rural income (poverty alleviation). Centers have significantly changed their ways of doing business in line with the TSR Recommendation. Some examples are given below:

- Multiple centers and non-CGIAR partners have been building synergies and are demonstrating the convening power of CGIAR, in the current development of Challenge Programs.
- Establishment of inter-Center working groups on INRM, climate change, GIS, *inter alia*.
- Development of the series of Meetings of Minds (MOM) in 1999-2001 with national partners on the agreed vision, strategy, and plan for CGIAR in sub-Saharan Africa (re: Recommendation 10).
- Strengthened linkages with sub-regional organizations and regional groups in Asia (APAARI), Americas (PROCI), sub-Saharan Africa (CORAF/SACCAR/ ASARECA and FARA), and Central Asia.
- The Centers continued inter-center collaboration both at working level (e.g., networking among scientists, development of HR services, information technology initiatives) and through cohesion and collectivity on key issues by CDC and CBC.

### 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 that could hold CGIAR patents;
- The conservation of agro biodiversity 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, 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, with total transparency and accountability in relation to work in the field of biotechnology; and
- A Systemwide review of plant breeding efforts, with the aim of freeing up resources for new priorities while accelerating the introduction of modern marker-assisted breeding and bioengineering technologies.

**Decision:**

The Group endorsed the use of an integrated gene management approach at the Centers, but decided against creating a single entity to hold CGIAR patents. The latter decision was based on legal advice.

**Action:**

- Systemwide review of “Plant Breeding Methodologies in the CGIAR” completed under TAC’s auspices, endorsed by the Group, and published.
- Rockefeller Foundation has taken the lead to develop a “single entity” mechanism with participation from PSC members. A parallel initiative being conducted by DfID.
- Continued efforts by Centers to embrace genomics, molecular breeding, and bioengineering in their research.
- Exchange of information/experience among Centers on these efforts, with strong encouragement from CDC.
- Forty advanced IGM technologies currently in use by Centers identified.
- Center guidelines on genetic resources, intellectual property rights, and biotechnology collated and published.
- Guidelines currently being updated in consultation with FAO and GRPC.
- IP audits launched at all Centers as means of developing better management procedures and processes for IPR.
- Central Advisory Service established to provide advice to Centers and partners in addition to establishment of in-house IP Management capacities in those Centers with principal activity, including ILRI, CIMMYT, IRRI, and IPGRI. (Rockefeller Foundation has provided grants to IRRI. CIMMYT and ILRI to establish this in-house IPM capacity and lessons learned from experience are shared with other Centers and national partners, such as KARI).
- Advanced biotechnology methods adopted at ILRI in collaboration with ARIs.
- High-level “think tank” on development of IGM in association with private sector held at CIMMYT, with participation of all relevant Centers.
- The CGIAR System is a principal supporter of the Convention on Biological Diversity (including development of appropriate material transfer agreements, the “yellow bean”

- lawsuit, etc.), and led by IPGRI has been at the forefront of negotiations on the International Undertaking, which is in final stages of negotiation.
- The limited mandate for major food crops has been widened, so that Centers are now addressing crops (and livestock, fish, and trees) relevant to farming systems in the ecoregions, including those that have market opportunities and/or indigenous genetic resources at risk of loss.
  - With the expansion of capacity in frontier sciences (Ref. Recommendation 2), Centers have expanded coordinated use of Mendelian and molecular methods in their plant and animal genetic improvement programs (major changes in breeding programs and molecular capacity have been made at CIMMYT, IRRI, ILRI, CIAT, IITA, ICRISAT, CIP, and ICARDA).
  - The Systemwide Genetic Resources Program facilitates a coordinated and systematic response to issues involving *in situ* and *ex situ* conservation, gene bank management and transfer of genetic resources, the SINGER information database, *inter alia*.

## 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 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.

### Decision:

The Group decided that all CGIAR research would be carried out under the complementary thrusts of integrated gene management (IGM) and integrated natural resource management (INRM).

### Action:

- The first review of Systemwide programs with an ecoregional approach has been completed.
- Efforts made to develop priorities and strategies for marginal lands.
- Creation of an inter-Center INRM Task Force under the auspices of the CDC sub-committee on Sustainability and the Environment.
- Collaboration between the Task Force and TAC to develop methodologies for INRM research, and to analyze its impact.
- Development of a CGIAR/INRM web site ([www.inrm.cgiar.org](http://www.inrm.cgiar.org)).
- International meetings of scientists under Task Force auspices, e.g., at Bilderberg (leading to the Bilderberg Consensus) and Penang, to explore common approaches to INRM.
- Data management for INRM.

- Development of research management paradigms/cultures; systemic impact assessment, and the future INRM agenda.
- Focus on decentralized decision-making, on problem-focused collaboration as a driving force, and on a culture of feedback.

(**Note:** For an account of major INRM efforts since TSR on participatory methodology development, combining “hard” and “soft” sciences, and on developing indicators, see [www.consecol.org/Journal/vol5/iss2](http://www.consecol.org/Journal/vol5/iss2)).

## RECOMMENDATION 6

The Panel recommends that, 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;
- Promote cooperative activities through a geographically indexed Web database containing projects of all organizations performing agricultural research and development in each region; and
- Take account of existing relevant databases.

### Decision:

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.

### Action:

- Partners such as existing networks established by the CGIAR centers, FAO, IFAD, CGIAR members, the CGIAR Secretariat, NGOs, farmers’ organizations, and GFAR developed **WISARD**, the Web-based Information System on Agriculture Research and Development ([www.wisard.org](http://www.wisard.org)), which serves as a global clearing house of knowledge. Target users include researchers, managers of NARIs, universities, NGOs, and farmers’ organizations. WISARD focuses on four areas: projects, persons, organizations, and outputs/documents (gray literature, maps, PowerPoint presentations, training materials).
- Information Management Professionals/Librarians at the CGIAR Centers are working with FAO/WAICENT to standardize classification schemes and improve access to technical and scientific information. The objectives of the collaboration are to:

1. Provide CGIAR with new research tools and information delivery capacities;
  2. Increase collaboration between CGIAR centers and FAO; and
  3. Provide new information portals for researchers and the public.
- To further enhance their cooperation on knowledge sharing, Centers and CGIAR Secretariat are in the process of recruiting a Chief Information Technology Officer for the CGIAR System Office, who will be based at ICLARM, and will help to coordinate all activities envisaged as a follow-up to the Group's decision on this recommendation (See *The Economist*, Feb. 2, 2002).
  - ISNAR convenes the IARC-NARS training group that supports a Web site and provides management training for IT in French and English.
  - Several Knowledge Management workshops were held in the CGIAR and a network of Knowledge Management Champions established across the System.

## RECOMMENDATION 7

The Panel recommends that:

- Greater emphasis be placed on social and management sciences in order to address 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 Systemwide 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 to strengthen the capacity for collaborative policy research and formulation in countries where inadequate public policy support is the major cause of a wide gap between potential and actual yields in farmers' fields; and
- Capacity building in policy research covers economic policy, as well as environmental, science, and technology research policies.

### Decision:

The Group endorsed the need to strengthen policy research and capacity building for policy research.

### Action:

- Networks to strengthen capacity building for collaborative research in sub-Saharan Africa established by IFPRI, supported by other Centers.
- With targeted funding from CGIAR members, IFPRI and other Centers (e.g., CIFOR, ILRI, and IWMI) have expanded policy research in collaboration with NARS in selected developing countries.
- Systemwide programs on Collective Action and Property Rights (CAPRI) address the broader social and management sciences in research, such as *inter alia*, common property use, natural resources management, and conflict resolution.
- Members and Centers periodically engage in policy dialogue (e.g., on biotechnology policy) with policy makers.

## 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.

### Decision:

The Group agreed that the CGIAR System should continue to maintain its emphasis on capacity building, without creating a new mechanism for this work.

### Action:

- Centers re-emphasized capacity strengthening and broadened the areas of emphasis, e.g., policy research, INRM, and research management.
- Several Centers have published self-learning materials accessible through CD-ROM and related advanced technologies.
- Partnerships developed between Centers and universities in South and North through which capacity building is supported in NARS.
- Several CGIAR members (e.g. Canada, the Netherlands, U.K., and the U.S.) have established “linkage” funds to promote these linkages with their universities.
- Center participation in national, sub-regional, and regional consultative processes has increased markedly, leading to shared priorities and plans for collaborative research.
- Capacity building has been encouraged through annual CGIAR Partnership Awards.

## RECOMMENDATION 9

The Panel recommends that CGIAR organize an International Network for the Technological Empowerment of Women in Agriculture. The network should promote a common platform for action at the country level by national, bilateral, international, nongovernmental, private-sector, and women’s organizations. IRRI could serve as the coordinating Center for the Network, based on its experience with the Women in Rice Farming Network in Asia.

**Decision:**

The Group decided that the CGIAR System should continue to rely on existing programs on gender analysis and gender staffing, but should not establish an additional network.

**Action:**

- CGIAR Gender and Diversity Program strengthened. The leader of the Gender and Diversity Program presented a “Report of Achievements, July 1999-October 2001” at the CGIAR annual general meeting (See [www.cgiar.org](http://www.cgiar.org); Annual General Meeting, AGM/01/05).
- Leadership training for women.
- Specialized guidance to Centers for recruiting women scientists.
- Participatory Research and Gender Analysis (PRGA) program convened by CIAT further strengthens attention to gender in CGIAR research.
- Emphasis on analysis of gender-related issues is now part of experimental design at most Centers, especially involving household and field-based research.

**RECOMMENDATION 10**

The Panel recommends a special collaborative focus on Africa that incorporates the following elements to create an effective strategy for African agriculture and one that complements the efforts of other organizations, including sub-regional associations:

- Promote national/regional consultative processes for agricultural research and development in order to facilitate the integration and increase the efficiency of the efforts of all actors.
- Set up an African Capacity Building Initiative for Sustainable Food Security as a major inter-Center initiative. It should help train a cadre of African leaders who can assist the political leadership in their countries to remove policy constraints and develop a well-conceived strategy for sustainable food security.
- Under the leadership of the director of the proposed African Capacity Building Initiative, set up a task force with the Centers, TAC, the CGIAR Secretariat, FAO, the World Bank, UNDP, the U.N. Environment Programme (UNEP), and other relevant organizations, including sub-regional associations, to develop a special focused program for African food security.
- Launch a well-planned Lab to Land Program to take the benefits of the best available technologies to farmers and to promote on-farm participatory testing, breeding, and research.
- Develop research programs in urban and peri-urban agriculture in cooperation with relevant organizations, including AVRDC.
- Emphasize modern ecological farming methods, taking into account the poor infrastructure and low use of external inputs.
- Set priorities on staple or relevant food crops, such as cassava, yams, cowpeas, plantain, and other “indigenous” African food crops.
- Promote partnerships between strong NARS from various parts of the world and strategic African NARS.

**Decision:**

The Group welcomed consultations between Centers and African NARS leaders and encouraged all those engaged in this exercise to continue and complete their discussions. The CDC, working with SPAAR and FARA, was invited to take the lead in developing proposals for a special collaborative focus on Africa.

**Action:**

- CDC worked in partnership with SPAAR, FARA, and Africa’s CGIAR members to develop a “Vision for African Agricultural Research.” The Vision has set a goal of achieving 6 percent annual growth in sustainable agricultural productivity by 2020.
- CDC convened the “meetings of minds” with African NARS partners to develop vision, priorities, and strategy for CGIAR contributions to agricultural research in Africa.
- SPAAR/FARA vision and CGIAR collaboration re-endorsed in Durban Statement on “The Way Forward for Agricultural Research and Development in sub-Saharan Africa.”
- Post-TSR approach and efforts by Centers integrated with current “New Partnership for African Development” (NePAD) supported by international agencies.
- Lab-to-land approach developed by CGIAR being implemented in the African Highlands Initiative, the Desert Margins Program (supported by GEF), and by a variety of CGIAR-NARS collaboration projects:
  - IITA/ILRI/ICRISAT have developed new varieties of dual purpose cowpeas across the ecological transect from semi-arid to humid West Africa;
  - WARDA has developed a new variety of rice (NERICA) for field-testing by NARS partners;
  - IITA, CIP, CIAT and IPGRI have developed major research activities on cassava, plantains, yams, and other indigenous crops;
  - CIP organized and convenes the Systemwide Initiative on Urban and Peri-Urban Agriculture in sub-Saharan Africa;
  - Principal focus of NARS-CGIAR Training Group (INTG) is on sub-Saharan Africa; and
  - ILRI, IFPRI, IPGRI, and CIMMYT, coordinated by ICARDA, contribute to research in North Africa.

**RECOMMENDATION 11**

The Panel recommends that:

- Where appropriate, the range of the CGIAR’s partnership be broadened to include other organizations with a shared commitment to its mission and goals;
- In relevant areas, the CGIAR enter into Memoranda of Understanding with partners that contain a Voluntary Code of Conduct;
- IARCs should not enter into partnerships that will lead to the monopolistic and exclusive use of the research results;
- The CGIAR establish a Media and Communications Unit; and
- The Chair convene a high-level meeting with CEOs of interested representative agribusiness to exchange views and consider opportunities for new partnership relationships, including with farmers’ cooperatives and seed growers’ associations.

**Decision:**

The Group agreed that partnership arrangements should be strengthened, as appropriate; requested that partnership committee memberships be reviewed; and decided on the establishment of a Science Partnership Committee.

**Action:**

- Science Partnership Committee established, but later disbanded.
- PSC membership reduced from 12 to 8, NGOC membership to 9.
- Revamping of NGOC as a small civil society group to include farmers' representation being developed.
- ToR proposed by TAC Chair for analytic review on “Partnerships and Research: Lessons for the CGIAR” approved.
- Work on review commenced, but is temporarily suspended.

(For developments related to collaboration with private sector and proposed meeting with CEOs, see Recommendation 27. For developments concerning media and communications, see Recommendation 28.)

**RECOMMENDATION 12**

The Panel recommends that the CGIAR's governance continue to be based on the principles of member sovereignty, Center autonomy, and independent scientific advice. While we fully endorse the principle of member sovereignty, we stress the necessity for individual member governments to harmonize their own national policies and speak with one voice in all international fora and negotiations relevant to CGIAR business, particularly on genetic resources and intellectual property rights.

**Decision:**

The Group agreed that CGIAR governance should continue to be based on its founding and fundamental principles as listed in this recommendation.

**Action:**

N/A

**RECOMMENDATION 13**

The Panel recommends that the CGIAR's consensus decision-making, non-political nature, and informal status be updated and modified to enable the System to address the current and anticipated needs of the CGIAR and its stakeholders effectively.

**Decision:**

The Group agreed to maintain its informal style of decision-making by consensus. This is in keeping with the trend towards decision-making by consensus in international organizations and at international conferences.

**Action:**

N/A

**RECOMMENDATION 14**

The Panel recommends that:

- The CGIAR establish a special task force, including TAC and Center Directors, for improving the efficiency of the evaluation processes;
- The EPMR 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 EPMRs and CCERs;
- Centers be financially compensated by donors that wish to conduct their own reviews of Center projects;
- EPMRs give greater attention to Board governance; and
- The present IAEG be replaced with a more pragmatic unit, possibly located within TAC.

**Decisions:**

The Group endorsed the need to re-visit, strengthen, and streamline review and evaluation processes in the CGIAR

**Action:**

- TAC and the CGIAR Secretariat developed revised procedures for evaluation, involving greater reliance on Center Commissioned External Reviews (CCERs). Reform of the review system is continuing.
- TAC proposals for streamlining evaluation processes endorsed.
- TAC and CGIAR Secretariat requested to implement proposals and report periodically.
- IAEG integrated with TAC.

**RECOMMENDATION 15**

The Panel recommends that the informal structure of the central mechanisms of the existing CGIAR System be transferred to a new central Board to be incorporated as a non-profit public service organization in an appropriate jurisdiction, to be established after consideration of legal and other factors relevant to its effective functioning. The central Board would have the following specific characteristics:

- It would consist of Members, a Board of Directors and Executive Committee, the CGIAR Chair, and a Chief Executive Officer. (A full-time CGIAR Chair could also serve as Chief Executive Officer.)
- Membership of the central Board would be drawn from the stakeholders of the CGIAR. Based on a principle of rotation, all Members would have the possibility of serving on the board. Regular meetings should be held once a year. In addition to the Chair, the body would contain representatives of or individuals from the following categories: Members from the South (up to 6 persons), the North (up to 6), the private sector (up to 3), the NGO community (up to 3), institutions and foundations (up to 3), and co-sponsors (4). The total would be up to 26 persons. The central Board would be elected by its members, with the number of seats to be allocated to each stakeholder group being elected by the members of such group, so as to ensure a balanced and representative character.

- Central Board members would serve staggered, three-year terms, and would be eligible for re-election for up to a period of six years. There would be no alternates. Each category would elect its members on the body, using the following criteria: funding exceeding U.S. \$ 500,000 annually during the full period of membership; “vision” and knowledge about global agricultural research; “vision” and knowledge about agricultural research in the South; and ability and willingness to consult with other relevant actors. The chairs of TAC, the Committee of Board Chairs (CBC), and the Center Directors Committee (CDC) would be ex-officio, non-voting members of the Board.
- Acting on behalf of the central Board, an Executive Committee would meet up to three times a year and be chaired by the CGIAR Chair. It would perform the current tasks of the Oversight Committee and would exercise the powers of the central Board when not in session, subject to the terms as agreed by the Board. The Executive Committee would be composed of three members each from the categories of the North and the South, and one member each from the private sector, NGOs, and institutions, plus the co-sponsors. In all, it would have 14 members (including the chairs of TAC, CBC, and CDC as non-voting, ex-officio members).
- The Finance Committee would become a committee of the central Board.
- A portion of the agenda support funds would be at the disposal of the central Board/Executive Committee in order to ensure stable and guaranteed support for Centers in such important areas as training, maintenance of gene banks, and indirect cost recovery.

**Decision:**

The Group decided not to reconstitute itself as a legal entity with a central board.

**Action:**

N/A. (See Action, Recommendation 18).

**RECOMMENDATION 16**

The Panel recommends that the CGIAR broaden its membership by, over time, including more governments and other stakeholders to enable the CGIAR to become even more inclusive, as research becomes increasingly globalized and dependent on collaboration among a wider range of partners. Specifically:

- Membership in the CGIAR should be broadened to include the private sector and the NGO community, as both play increasingly important roles in the international research-development continuum. The basis of membership should be not only financial, but a shared commitment to the mission and goals of the CGIAR.
- The minimum, annual contribution should be U.S. \$ 1 million for all Members. However, for Members from the South with a per capita GNP of less than U.S. \$ 750, the current annual minimum contribution should remain unchanged for the next 5–7 years.
- In-kind contributions should be officially recognized by the CGIAR.
- As the membership base broadens to include new sectors, ethical ground-rules for collaboration with new partners will need to be developed.
- Regional representatives should be eliminated.

**Decisions:**

The Group agreed on the need to expand CGIAR membership, and that the current annual “minimum contribution” of \$500,000 should remain unchanged to encourage greater participation by the South.

The Group decided that private sector and NGO input into CGIAR decision-making should be strengthened, and requested the CGIAR Chairman to review the operation of the NGO Committee and the Private Sector Committee with the members of those committees. The Group endorsed the establishment of a Science Partnership Committee.

The Group agreed that the system of non-member regional representation at the CGIAR should be phased out, and agreed to ask FAO to act accordingly.

**Action:**

- Membership drives led by CGIAR Chairman and CGIAR Director. Uganda joined in 1998. Malaysian and Moroccan membership negotiations are in process.
- Requests for recognition of in-kind contribution considered case-by-case.
- No new non-member regional representatives appointed as terms of current representatives end.
- Operation of partnership committees under constant review. (See Action, Recommendation 11).

**RECOMMENDATION 17**

The Panel recommends that while the World Bank’s primary leadership role and financial support to the CGIAR continue, a vice president of the World Bank (or a person of equivalent or higher stature within the World Bank) should continue to serve as Chair of the CGIAR. The Chair will be appointed by the central Board in consultation with the World Bank. The position of CGIAR Chair may require a full-time effort in the future. In this case, the Chair could also serve as Chief Executive Officer.

**Decision:**

The Group fully supported the continued leadership role of the World Bank.

**Actions:**

- CGIAR views conveyed to World Bank management.
- Position of Executive Secretary, CGIAR eliminated.
- Position of Director, CGIAR established.

**RECOMMENDATION 18**

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

- The proposed central Board’s Executive Committee should assume Oversight Committee functions.
- 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,” together forming the TAC nucleus. They would assist the proposed Chief Executive Officer in formulating a CGIAR Strategy and 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 or attached to TAC as a permanent sub-panel.
- The NGO Committee and the Private Sector Committee should be replaced with wider consultative processes with representatives from each sector during each ICW. Representatives would be invited to participate according to their relevance to the issues considered. The two committees should continue to exist until such consultative processes are implemented.
- The input of the CDC and CBC should be sought and valued.

**Decision:**

The Group agreed on the need to strengthen governance mechanisms including the committee structure.

**Action:**

Over time, governance mechanisms and committee structure have changed:

- Change Design and Management Team established to refine governance processes.
- Executive Council (ExCo) established, without legal power but with mandate similar to TSR Recommendation 15. OC and FC lapsed.
- New ExCo to appoint Program Committee and Finance Committee; ToRs currently under review.
- TAC transformed into Science Council.
- Evaluation is primarily a responsibility of ExCo.
- Integrated communications strategy being developed (See Action, Recommendation 28).
- Importance of GRPC confirmed; mandate and operations to be reviewed.
- CDC and CBC represented on ExCo. All Center Directors invited to participate fully in “open” meetings of the Group.

**RECOMMENDATION 19**

The Panel recommends that:

- “Co-sponsor” status be replaced with permanent seats for the four co-sponsor agencies on the central Board and its Executive Committee;
- A World Bank representative continue to chair the Finance Committee, as long as the World Bank’s leadership and financial support continues;

- Joint programmatic efforts between the CGIAR and these four agencies receive high priority, particularly in the area of strengthening NARS;
- Collaborative efforts between the FAO's Special Programme for Food Security and the CGIAR should be further explored to facilitate more intensive collaboration at the national level; and
- These agencies should play a more consistent role in strategic issues through coherent efforts during major meetings related to the mission and work of the CGIAR.

**Decision:**

The Group decided that the role of cosponsors should remain unchanged; and that wide consultation should take place in searches for major System posts spearheaded by cosponsors.

**Action:**

- Role of cosponsors modified consequent to establishment of ExCo.
- Cosponsors continue to serve as strategic advisory group to Chairman.

**RECOMMENDATION 20**

The Panel recommends that the CGIAR support the convening of a Global Forum every three years, confined to a general meeting on future global agricultural research issues and involving all major stakeholders. Further, the CGIAR should monitor GFAR's development and viability, as well as the implications of GFAR with respect to the work of CGIAR Centers, particularly ISNAR.

**Decision:**

The Group agreed on the importance of GFAR and the significance of the CGIAR-GFAR relationship.

**Action:**

- Global Forum held in Dresden at time of CGIAR Mid-Term Meeting.
- Review of GFAR completed.
- GFAR represented on CGIAR ExCo.
- GFAR works with Centers and TAC to identify regional research priorities and strategies.
- Donor Support Group established for GFAR.
- Contribution made from CGIAR to GFAR in FY01.
- CGIAR Secretariat disburses funds to GFAR from CGIAR members.

**RECOMMENDATION 21**

The Panel recommends that there be one annual business meeting at ICW. MTM should be held every third year, with possible elimination over the longer term. Additional ad hoc meetings could be held around the Executive Committee meetings as necessary. A triennial MTM would be complementary to TAC's three-year planning cycle; the recommendations of the Finance Committee currently given at MTM would be circulated in writing. Further, the size of all kinds of delegations to CGIAR business meetings should be restricted.

**Decision:**

The Group decided to defer change of its bi-annual rhythm of meetings.

**Action:**

Subsequently, however:

- One annual general meeting a year was introduced.
- Mid-Term meetings were eliminated.
- An Executive Council, representing all segments of the CGIAR System, was established to maintaining decision-making continuity between annual general meetings.

**RECOMMENDATION 22**

The CGIAR Secretariat should expand and strengthen its human resources services to ensure the Centers are able to identify and attract the very best scientists and managers, including young professionals.

**Decision:**

The Group agreed that the CGIAR System should commit itself to seeking the best talent for all openings, and that the search for suitable talent should be widened and deepened to ensure diversity (particularly in terms of gender and nationality) and infusion of new generation scientists.

**Action:**

- Human Resources (HR) focal points established and developed at Centers.
- HR networking among Centers and between Centers and CGIAR Secretariat intensified.
- Analysis and compilation of HR policies and practices at Centers launched with Secretariat support.
- HR workshops supported by Secretariat developing Systemwide HR policy and administration.

**RECOMMENDATION 23**

The Panel recommends that a special task force of key CGIAR stakeholders, with supporting staff, be established to plan an implementation process for governance changes recommended in this report.

**Decision:**

The Group agreed on the need for CGIAR System governance to be further developed.

**Action:**

- Oversight Committee mandated to set up Synthesis Group to integrate inputs from all groups (e.g. Center Board Chairs Committee, Center Directors Committee, TAC) on governance, structure, and finance issues.
- Synthesis report led to Change Design and Management study and current reform program.

**RECOMMENDATION 24**

The Panel recommends that Boards of Trustees of individual Centers maintain much closer relationships between themselves and the Central Board. We recommend establishment of a special task force to develop a strategy to delineate the nature and modalities of the relationship between

Center Boards of Trustees and the proposed central Board. This task force should consist of a small number of Center Directors, Board Chairs, and CGIAR Members.

**Decision:**

Does not arise.

**Action:**

N/A

**RECOMMENDATION 25**

The Panel recommends that:

- Relevant Systemwide programs be provided sufficient funding on a long-term basis (at least five years), as they can be a useful complement to the CGIAR through improved coordination;
- Since eco-regional activities are part of the strengthening of NARS, a workshop should examine and assess past practical experiences, issues, and potentials involving all relevant actors in a region, with a proposal for further actions to be discussed by the CGIAR in 1999, at the latest;
- Members and Centers place high priority on ensuring funding of high-quality collaborative research activities, including ecoregional and other Systemwide programs, as well as other inter-Center initiatives that are important to the CGIAR mission;
- Eco-regional activities be managed by the NARS and regional and sub-regional organizations, with the political and financial support of both the NARS and any bilateral donors; and
- A special task force composed of key stakeholders be established to formulate specific plans and modalities to improve the governance and financing of Systemwide programs.

**Decision:**

The Group welcomed a Progress Report from the CBC, and sought additional input from CGIAR members and others involved with the design and implementation of Systemwide programs.

**Action:**

- TAC conducted evaluation of ecoregional programs in 1999, involving workshops with NARS and Centers, leading to changes in operations and management.
- INRM workshops have drawn on ecoregional research experience in developing indicators and methodologies.
- ISNAR manages the Dutch Ecoregional Research Fund that supports ecoregional research; this Fund is currently evaluating projects it has supported.
- Centers have supported development of ecoregional research by ASARECA, APAARI, and GFAR, but with few exceptions donors have been reluctant to fund organizations that are not financially accountable in the way the CGIAR Centers are.
- CDC and the CGIAR Secretariat have jointly commissioned an analysis of experiences and requirements of Systemwide and ecoregional programs for consideration by ExCo.

- Sustainability Systemwide programs being strengthened with new measures under discussion, involving the CDC.

(**Note:** See also [www.cgiar.org/research/res\\_initiative](http://www.cgiar.org/research/res_initiative)).

### **RECOMMENDATION 26**

The Panel recommends that the international development community reverse the decline in ODA for agriculture and agricultural research, tap other non-ODA public sector resources, and commit all parties (all governments, international organizations, national research organizations, NGOs, and the private sector) to coordinate their resources and efforts to combat the risk and threat of pervasive poverty, food insecurity, and environmental degradation in developing countries. Given the challenges ahead, this is a time for greater financial commitment to the CGIAR.

#### **Decision:**

The Group agreed.

#### **Action:**

Continued resource mobilization.

### **RECOMMENDATION 27**

The Panel recommends that an overall policy for CGIAR collaboration with the for-profit sector be developed at the System level under conditions that contribute to and do not compromise the basic public interests and objectives of the CGIAR. Financial contributions from the for-profit sector should be accepted for research activities of mutual interest, in line with the CGIAR mission statement, and directed toward the agreed research agenda. Further, a foundation should be the locus of a major fund-raising strategy to mobilize funding from private sources.

#### **Decision:**

The Group endorsed the principle of strengthening collaborative and consultative processes with the private sector.

#### **Action:**

- Preliminary soundings of private sector CEOs by Chairman.
- Engagement of CGIAR in World Bank consultation with private sector CEOs.
- Centers continue to work with private sector, as opportunities arise.
- Proponents of “Challenge Programs” encouraged to seek private sector partners.

### **RECOMMENDATION 28**

The Panel recommends that:

- Three-year financial commitments to the agreed research agenda be encouraged;
- As a general rule, no individual Center should have less than 50 percent “unrestricted” funding of its annual budget;

- A project based approach to center planning should remain and, together with the CGIAR Financial Report, provide Members with excellent financial information and accountability;
- The use of the agenda matrix is most likely the best approach for the present CGIAR Governance model, although caution should be taken to avoid a complete dependence on resource allocation by the free market in the longer run;
- Donors improve their current disbursement practices so that Centers receive all funds at the beginning of the fiscal year; and
- Members ensure funding for indirect costs and for areas in which the CGIAR has a global responsibility, such as germplasm collections and training, with funds at the discretion of the proposed central body possibly used to ensure sufficient support for these budget items.

**Decision:**

The Group endorsed the need for the System to plan and implement a strategy for stable, longer-term financing and resource mobilization.

**Action:**

- Working Group on financial strategy established, functioning as a sub-group of the Finance Committee (FC), supported by an external consultant.
- Three-tier strategy proposed by Working Group:
  1. Stabilize ODA contributions;
  2. Increase financial contributions from the South; and
  3. Attract non-traditional (i.e. private sector and philanthropy) support.
- Separate working group crafting communications strategy, linked with long-term financing, and taking into account existing efforts such as those of Future Harvest.
- CGIAR Secretariat's communication and resource mobilization work enhanced. Appointment of new Communications Adviser (higher level position than before) is imminent.
- Global Genebank Trust being established.

**RECOMMENDATION 29**

The Panel strongly recommends that the World Bank continue to provide the financial and policy support and intellectual leadership that is indispensable to the future of the CGIAR as envisaged by this Review.

**Decision:**

The Group agreed.

**Action:**

Continued efforts by CGIAR Chairman and Director to ensure that the CGIAR continues to benefit from World Bank leadership and support.

**Excerpts from Preliminary End-of-Meeting Report,  
International Centers Week 1998  
Washington, DC October 26 - 30, 1998**

Following discussion in plenary on the System Review Panel's recommendations, the Group:

- Endorsed a new mission statement emphasizing food security and poverty eradication.
- Asked the CGIAR Centers to adopt congruent mission statements emphasizing their functions as global centers of frontier science.
- Decided that the Centers should continue to create strong synergies across the CGIAR system and, through creative partnerships, bring both traditional scientific knowledge and advanced science and technology to bear on the needs of the world's poor.
- Endorsed the thrust of the Panel's recommendations on the CGIAR's scientific agenda and directions concerning integrated gene management and integrated natural resources management. The Centers and the Technical Advisory Committee will incorporate these broad thrusts as they set the 2000 research agenda. The recommendations on related institutional changes require further consideration in the context of other governance issues under study.
- Endorsed the goals and principles embodied in the System Review's recommendations on broadening CGIAR partnerships. The Group agreed to implement more effective consultative processes, both within the System and with external partners, including the NGO, private sector, and scientific communities. This will also include partnership arrangements with institutions working with African research organizations. The CGIAR will strengthen its partnership with the Global Forum on International Agricultural Research (GFAR).
- Endorsed the strategic thrust of the Panel's recommendations on the CGIAR's governance and finance. The Group agreed to streamline the evaluation process, improve the efficiency of the Technical Advisory Committee (TAC), link the Impact Assessment Evaluation Group (IAEG) more closely with TAC, improve long-term financial prospects, and improve the efficiency of decision making in the CGIAR (by improving both the structure and processes of decision making). The recommendation for establishment of a central board requires further study.
- Expressed reservations about the Panel's recommendations to establish the CGIAR as a legal entity, eliminate the co-sponsor status of the UN agencies that founded the CGIAR, appoint a full-time Chairman who also acts as Chief Operating Officer, and expand the CGIAR Secretariat's services relating to Center staff recruitment.
- Asked the Chairman to organize follow up to the System Review report by appointing a Consultative Council to monitor the implementation of decisions made at ICW98, arrange for or conduct follow-up studies on issues requiring further elaboration, and draft action-proposals for consideration at the CGIAR's mid-term meeting (MTM99).
- Decisions will be taken in plenary sessions at MTM99. The Council should make every effort to have its recommendations available to the CGIAR 4-6 weeks before MTM99.

## Annex M: Assessment of Previous Evaluations

To form a coherent picture of the CGIAR and the challenges facing the System today, this meta-evaluation drew on a variety of past System- and Center-level evaluations. (See Bibliography.) The annexes and OED working papers accompanying this report provide detailed treatments of many of these reviews from the point of their treatment of impacts either on the ultimate objectives of poverty reduction, sustainability, or capacity building in developing countries in various ways as well as the issues of organization of science and its quality. From among these many evaluations at the System level, the team paid particular attention to the OED's Process Review of World Bank Grant Programs (1998), OED's 1999 Review of the CGIAR, The Third System Review (1998), the thematic Systemwide reviews, and the latest 16 Center level External Program and Management Reviews (EPMRs). The first three reviews provided insight into the strengths and weaknesses of the CGIAR's evaluation system at the System level and of the Bank's own efforts to monitor and evaluate its investment in the CGIAR. The remaining provided insights into the CGIAR's own evaluation of the management of major themes and the Centers. A discussion of general issues raised by the meta-evaluation team's assessment of previous evaluations is discussed first followed by an assessment of the groups of reviews at the System and Center levels to derive lessons for the use of evaluations in enhancing the effectiveness of the System and Center governance and management and future strategic directions.

### THE CGIAR EVALUATION SYSTEM: GENERAL ISSUES

The CGIAR's extensive and comprehensive evaluation system has served it well in the past in understanding impacts of some parts of its work and one of the meta-review team members has described the CGIAR System as far more reviewed than comparable counterparts, such as the U.S. land grant system.<sup>1</sup> But when the System-level reviews, TAC's reviews of thematic issues through Systemwide reviews, and the EPMRs are considered as a whole, it is evident that, overall, the evaluation system is beset by several weaknesses, all of which combine to severely limit the opportunities for their synergetic and systemic change in the CGIAR at the System level. To wit,

1. There is no system to ensure that Systemwide reviews are conducted on a regular and timely basis. Most significantly, the TSR was the first Systemwide review after a 17 year hiatus.
2. Certain key parts of the System have been cushioned from evaluation altogether since inception, such as the roles of the Chairman, TAC, and the various committees and units, and the issues of governance and management of the partnership as a whole.
3. There is no meaningful interface between the System and Center levels for the evaluation of governance and management issues: While issues are reviewed at both levels, the critical relationship between the System and its Centers has yet to be evaluated as a whole.
4. There is no system to liaise between external evaluation panels and System decision making. Until the ExCo was established there was no clear point beyond the Chairman and the committees on finance and management for decision making. Some of the key issues – such as the experience with the expansion or consolidation of the Centers, the role of the System in dealing with IPR, and private sector partnerships – that now confront the System have never been evaluated, resulting in little in way of material for the meta-review to go by. There has been a history of active communication from the chairman of the recently renamed Science

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1. Gardner, 2002.

Council to the chairman of the System and discussions in the general meetings of the various thematic, Systemwide, and Center reviews. But since the general meeting is not an executive body, its resolutions do not result in well organized, concerted decisions and actions. Even today, after the establishment of the ExCo, there is no body with authority from the membership to make decisions or oversee implementation, although as indicated in the main report, there is hope that this will occur in due course. Some of the indicators of the use of these evaluations are the extent to which the System as a whole does or does not change, Centers adopt changes, or the donors use them to make allocative decisions from the a la carte menu of options open to them. The meta-evaluation's observations on the first two have been provided in the main report. On the third issue of donor financing, since it has become increasingly micro, and donor decisions to fund Centers are influenced by a complex combination of national philosophies, constituency influences, and changes in their own domestic politics, there is no way of telling the extent to which their funding as been influenced by the reviews, an issue the CGIAR should investigate. The meta team finds that many of the valuable observations of the Systemwide reviews and EPMRs simply did not get the attention they deserved.

5. A successful external evaluation panel depends on a formal point of contact through which to receive feedback on its conclusions and recommendations and a systematic process for ensuring the recommendations are either accepted and implemented, or rejected, and the reasons why.<sup>2</sup> Without such a systematic process, the external panels may be unable to undertake a relevant evaluation that effectively addresses System management issues and present new visions and strategies, while also maintaining a well-grounded stance in System realities and cultivating ownership among stakeholders. As a consequence, the impacts of evaluations may be no more than random events. Some of the recent examples of EPMRs demonstrate the limited ability of the current CGIAR governance and management system to address head-on the issues that are widely known to plague certain Centers.
6. There exists extensive controversy over the extent to which review panels are independent evaluators of the CGIAR System or its Centers, programs, and activities.
7. There exist certain difficulties in receiving meaningful input from members and institutions representing developing countries, thereby posing a distinct challenge to ownership, quality, and relevance of the CGIAR's evaluative processes.
8. In short, the CGIAR lacks an effective evaluation and follow-up system. Moreover, its vast evaluation resources have not been used to leverage the CGIAR's admirable tradition of evaluations and provide a feedback loop to improve governance and management. This is more of a weakness at the System than the Center level although there are other issues at the Center level, as outlined below.

### **OED's 1998 Process Review**

The OED's 1998 Process review offered a critical set of guidelines as criteria for grant allocation under the Bank's DGF. These guidelines were to

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2. At the request of the meta-evaluation team, the CGIAR secretariat produced a report on the progress on implementation of each of the TSR's 29 recommendations, the details of which have been incorporated throughout this report. See Annex L. Yet despite this paper, it has proved difficult to assess the extent to which the TSR's recommendations have been implemented.

1. **Ensure subsidiarity.** Unless properly targeted, grants can compete with the Bank's own lending programs. Ensuring against such an eventuality requires an insistence on the principle of subsidiarity: that is, limit Bank grants to situations in which lending is inappropriate and no other source of funding exists. The CGIAR has generally followed this principle, although the Bank's allowing its funding to leverage national and local research has not ensured that the partnership as a whole has had the impact it should.
2. **Maintain an arm's length relationship.** Multi-year programs in which the Bank acts as both sponsor and administrator obliterates the distinction between grantor and grantee; in addition, in-house secretariats make it difficult to maintain an arm's length relationship with programs, including addressing steps needed to achieve reforms as an input into the Bank's decision-making processes for further support. While recognizing the special status of the CGIAR's in-house secretariat in this regard, OED recommended that the Bank avoid establishing additional in-house secretariats and examine the issue of the treatment of those existing at the time of the review. The OED Phase 1 report and this report have indicated the extent to which this recommendation has been breached.
3. **Vigorously follow an exit strategy policy.** The two-window approach since adopted by DGF provides gains in transparency for the Bank's disengagement strategy, but falls short of addressing the fundamental problems of long-term Bank-funded grant programs (the Window 1 programs). In the OED's Phase 1 report, OED expressed a concern that the two-window approach may well further strengthen the hold of the old programs on grant resources and raised the question of why such programs should not become part of the regular Network budget. Exit strategies of global programs from across Networks suggest that the quality of exit strategies is variable. OED undertook to examine the issue of exit strategy in Phase 2 of the global review, of which the CGIAR meta-evaluation forms a part. OED has concluded that, in the case of the CGIAR, the Bank has not made the necessary effort to get the CGIAR on a sound financial footing with a strong governance and management structure.

### **OED's 1999 Review of the CGIAR**

The 1999 OED review of the CGIAR is rich in factual detail and includes an important description of the role the World Bank has played in the CGIAR. But it did not explore issues in as much depth as it could have to address certain critical issues that even then confronted the System – e.g., the change in funding formula for the World Bank's allocation to the CGIAR Centers – except to identify thoughtful concerns about both the previous “donor of last resort” and the current “donor of first resort” mechanisms that future decision makers should be mindful of. Similarly, the reader is left without a thorough assessment of the trend in restricted financing of the research agenda, the conflicts of interest created by the various roles played by the Bank in governance, financing, and management of the System, and so forth. The OED report and the subsequent OED global review stress the importance of building capacity within OED to periodically undertake high-quality independent evaluations of global programs to advise Bank management and the Board about the performance of global programs and the pros and cons of the Bank's performance of its various and often conflicting roles.

### **The Third System Review (1998)**

The TSR, completed in 1998, was the first comprehensive, Systemwide external evaluation of the CGIAR since 1981, that is, in 17 years. The key recommendations of the TSR concerning science and strategy include:

- The mission statement should be revised to include poverty and environment.

- The research strategy should build upon the dual pillars of Integrated Gene Management (IGM) and Integrated Natural Resources Management (INRM).
- Capacity-building efforts should be maintained and strengthened.
- Policy analysis and capacity building in policy research should be strengthened.
- Partnerships must be broadened and deepened, including those with national research systems, advanced research institutes, NGOs, and private sector enterprises.
- The CGIAR should have a special collaborative focus on Africa, including creation of an African Capacity Building Initiative for Sustainable Food Security.

The main governance, structure, and finance recommendations were:

- The CGIAR's consensus decision making, non-political nature, and informal status should be updated.
- The informal central governance structure should be transferred to a representative central board with legal status.
- Streamlining the committee structure is necessary.
- Some consolidation of Centers is necessary. This should be addressed through an in-depth management review.
- CGIAR membership should be broadened to include NGOs and the private sector.
- A System-level policy for collaboration with the private sector is necessary.
- The World Bank should continue to provide financial support and intellectual leadership to the CGIAR.
- Donors should provide longer-term funding with fewer restrictions.

Overall, although the TSR was strongly supportive of the CGIAR, there was considerable difficulty in receiving and making use of its findings and recommendations.<sup>3</sup> The review reinforced the CGIAR's crucial and continued role but recommended that the CGIAR adopt a substantially expanded mission to address issues of poverty eradication and environmental sustainability by "walking on two legs" of research in support of productivity growth and natural resource management.

Its science and strategy recommendations proved relatively uncontroversial but they were not based on analysis of the CGIAR's practice of science. The thrust of the governance recommendations, which centered on the creation of a central board with legal standing, were the most contentious and remain so to date. Several recommendations were rejected by the CGIAR at the time the report was presented, including creation of a central board and a legal persona for the System. The Chair established a Consultative Council as a follow-up mechanism to assess and act on the recommendations on which no agreement was reached during ICW.

The subsequent discussion on the TSR within the CGIAR has focused on four issues: (a) the extent of analysis of the System and hence the credibility of the recommendations; (b) the extent of independence of the panel—whether it was internal or external; (c) the cost of the review; and (d) the level of ownership of the review within the System. In addition, the meta-evaluation team raises issues about (a) the vision articulated by the TSR and its implications for the System's structure and functions; and (b) Bank and donor oversight of the evaluation, follow up, and CGIAR and donor accountability in the use of their funds. These issues are addressed below.

*The OED's Assessment of the TSR:* In terms of the overall quality and coverage of the TSR, the meta-evaluation's assessment is mixed. The TSR brought to bear an important strategic vision for the

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3. Pineiro et al., 2000.

CGIAR from a distinguished panel, and the meta-evaluation team concludes that the TSR has had far more impact than is generally recognized within the CGIAR, both for better and for worse. This report has shown that the expanded mission reinforced the history of mission creep in the CGIAR. Many of the 29 recommendations and 104 sub-recommendations did not lend themselves to easily actionable decisions due both to weaknesses in report writing and in the context of the CGIAR decision-making processes.<sup>4</sup>

The TSR addressed many key issues confronting the CGIAR, including the need for a more effective, efficient governance structure; more strategic partnerships; greater voice for developing countries; strategies for biotechnology research, management of intellectual property rights, and partnering with the private sector; and continued and strengthened capacity-building efforts.

It attempted to address the issue of the interface between System- and Center-level management and governance by reviewing EPMRs during the evaluation process. Although addressing structural issues that consume both the Centers and the System as a whole may have been beyond the scope of the review, it represents an important effort to delve into issues that even today remain untouched.

However, the TSR was plagued by significant shortcomings. First, there was little organization or prioritization of many recommendations, some of which were long term in nature and did not lend themselves to easily actionable decisions at either the ICW or subsequently; other important observations in the TSR were buried in the text and omitted from the recommendations themselves. The sheer number of recommendations, especially without a relative priority assigned to them, diminished the report's digestibility and ultimately its effectiveness.

Second, the TSR did not address what activities the CGIAR *should not* be undertaking, either in general terms or in terms of specific activity areas and/or Centers that the CGIAR should consider consolidating or divesting itself from. Nor did it evaluate or discuss past impact of the CGIAR as a basis for its recommendations. Further, it did not include assessment of the costs of its recommendations. By the very nature of the review, the TSR understandably failed to provide the CGIAR with a road map of how to get from here to there, nor did it set clear milestones for progress along this journey.

Third, while its governance recommendations showed great concern for enhancing System effectiveness and efficiency, the same cannot be said of the science and strategy recommendations, despite their uncontroversial acceptance by the CGIAR members. The broadened agenda proposed by the TSR, without a concomitant understanding of costs, would only have spread the System thinner.

Fourth, the TSR evaluation process was challenged by issues over the selection, independence, and management of the panel. The purpose of staffing the review with a distinguished panel, the Chairman of which was selected by the CGIAR Chairman, was to help position the CGIAR to meet the challenges of the 21<sup>st</sup> century, to expose the CGIAR to a wider non-CGIAR audience, and to help mobilize additional financial support.<sup>5</sup> The TSR's focus on strategic issues facing in the CGIAR in the 21<sup>st</sup> century, rather than the governance- and management-issues addressed by the First and Second System Reviews and the stature and reputation of the review panel, was intended to direct it to an external audience. But unlike its two predecessors, the TSR's organization did not include

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4. Indeed, the Oversight Committee concluded that "while there were many useful ideas in the SR Report, they were not presented in a way that facilitated analysis and discussion" (Report of the 16th Meeting of the Oversight Committee, October 1998).

5. One member of this meta-evaluation team served in the Review Secretariat. Thus, the meta-evaluation has the benefit of first-hand knowledge of the work of the TSR.

CGIAR stakeholders.<sup>6</sup> Considerable attention was paid to members: some key panel members appear to have been selected in an effort to “sensitize” them to the importance of the CGIAR, while others on the panel included both long-time “friends” of the System and influential “outsiders.”<sup>7</sup> The selection of the Review Chair—himself instrumental in the CGIAR’s founding and credited with christening it the Consultative Group—was done to give the TSR the same status as the-then prestigious donor consultative groups the Bank supported at the country level to mobilize resources.

Some have expressed a view to the meta-evaluation team that, in view of the funding crisis, a panel was chosen that would produce a positive review of the System, and both the former chair of the CGIAR and the Chairman of the review acknowledge that continued and enhanced support for the CGIAR was certainly part of the reason. All three reviews reported to the Chairmen and involved people selected by the Chairs; in the case of the Third System Review, reporting was to the Chairman of the CGIAR, with no internal processes in the System at the time the review was conducted to develop ownership. Hence the World Bank ended up paying the full cost of a review whose “externality and independence” has been questioned, including within the World Bank.<sup>8</sup>

Because the Second System Review was far more analytical in terms of use of data and information on impact than the third, the issue of independence has arisen more in the case of the TSR. But the meta-evaluation considers this not to be a significant issue in terms of its content, given what it was intended to achieve, although it does offer lessons for the analytical content and management process of such reviews in the future.

The TSR’s key recommendations were rejected by the CGIAR members because they considered the review to have been conducted by a panel that did not understand the CGIAR culture and did not consult them enough.<sup>9</sup> The meta-evaluation team has determined that the TSR panel did in fact conduct a very wide set of consultations, but did not always approve of the culture on which the CGIAR is based, leading to a conflict between the two cultures. The collective action problem that the TSR diagnosed is one the meta-evaluation has also detected and analyzed further.<sup>10</sup>

The absence of an internal process in the System as a whole, beyond the Chairman, at the time the review was conducted and thereafter during follow up, appears to have posed one of the several challenges for its ownership, and arose from a lack of internal system at the World Bank, which had paid for a systematic management-level follow up to the review. The process by which the TSR was undertaken did not help to generate external credibility and internal ownership of the findings. To date, the CGIAR and its donor supporters have lacked a process for managing Systemwide reviews, conducting follow-up implementation action plans, or even recording the implementation process. This is a style of operations the current Chairman and Director have acknowledged and are attempting to change, at least in relation to CGIAR internal management and the current meta-review, with some initial successes.

The Change Design and Management Team, which was empanelled in 2000 to outline a strategy for reform in the CGIAR (see Annex J), took the TSR as a starting point and sought to learn lessons from

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6. The first two System reviews included a Review Committee, headed by the CGIAR Chair and comprised of CGIAR members, and four-member Study Groups made up of outside professionals. The Study Groups carried out all the analytical work and drafted the recommendations, with the Review Committee overseeing their work (Pineiro et al 2000).

7. Pineiro et al., 2000.

8. Pineiro et al., 2000

9. Pineiro et al., 2000.

10. The Chairman of the review has expressed his frustration of a System that is bound by its own culture.

it in terms of the process of proposing reforms for the System, including the need to take into account “internal tolerance” for change and building ownership for a reform process.<sup>11</sup> The new management is moving expeditiously towards a governance and management system oriented toward a decision-making and implementation mode. Evaluation, scientific assessment, and financing upstream are hopefully on the way to becoming an integral part of this process.

Finally, the TSR raises the issue of costs associated with Systemwide evaluations. External Systemwide reviews are expensive and time consuming due to the enormous complexity of the issues the CGIAR is currently addressing, as documented in this meta-evaluation. The direct costs of the TSR were approximately \$1.5 million, while indirect costs are estimated at \$3 million when taking into account the cost of support for the review.<sup>12</sup> This figure is not atypical of large reviews of this kind for a system of \$350 million and is similar to the costs of independent reviews of other large programs such as GEF and UNAIDS, in order for the TSR to focus specifically on strategic issues and challenges facing the CGIAR in the 21<sup>st</sup> century, using all the global experience the panel could muster.<sup>13</sup> Despite this intent, the TSR focused less on critical governance and management issues and development of a strong analytical foundation than the First and Second System Reviews. The direct cost of OED’s meta-evaluation, excluding costs for two OED senior staff who carried out other responsibilities during the review, has been about \$235,000. The usefulness of such a meta-evaluation as a prelude to larger reviews to identify key issues needing further exploration should be assessed.

### **Past TAC Systemwide Reviews**

The meta-evaluation also considered the on-going reforms from the standpoint of Systemwide, inter-Center, and Center-level reviews and other related thematic reviews and papers prepared by the CGIAR either formally or submitted to it informally.

Many of the Systemwide thematic reviews contained important analysis on the issues of genetic resources, plant breeding, Systemwide programs, Africa, capacity building, etc. Many of the reviews’ observations, conclusions, and recommendations are cited throughout this review. While their quality was mixed and operational decision-orientation deficient, the meta-evaluation team attributes this largely to action- and efficiency-orientation failures within the System. This is most evident in the case of organizational and management reforms during a dynamic period of change in science.

While the Change Design and Management Team took into account the TSR and other reviews undertaken at the System level,<sup>14</sup> it did so more from a process standpoint and seems to have under-emphasized these studies in terms of their lessons for science-related substantive issues within the System.

### **Impacts of External Program and Management Reviews (EPMRs)**

CGIAR has been conducting External program and Management Reviews (EPMRs) to provide a mechanism of transparency and accountability to Members and other stakeholders. As each Center is

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11. CDMT, February 2001.

12. The review process itself cost some \$1.5 million. Publication of a follow-up popularized version of the review’s findings was an additional \$155,000, for a total cost of \$1,655,000. The review was financed out of the World Bank’s contribution, after individual members failed to pledge financing for the exercise (Pineiro et al 2000).

13. To wit, the covering letter to the TSR, written by Maurice Strong, states that “cutting edge agricultural science serves the entire human family; the poor will not be excluded, the hungry will not be ignored, the environment will not be assailed and ethical considerations will not be subverted.”

14. CDMT, February 2001.

autonomous, EPMRs are meant to provide a measure of central oversight and serve as an essential component of the CGIAR's accountability system. EPMRs have been the joint responsibility of TAC for science quality and the CGIAR secretariat for management and finance related issues. They are conducted for each Center approximately every five years. (Box M.1). As a part of the meta-evaluation of the CGIAR, the most recent EPMRs of all the 16 Centers were reviewed by the meta team to ascertain how effective they have been in meeting the above objectives.

**Box M.1. Procedure for Conducting EPMRs**

TAC advises CGIAR management on the EPMR modalities, and its Standing Committee on External Reviews helps in the selection of the review panels. The role of TAC in EPMRs is important as its function is to provide intellectual leadership to CGIAR on scientific matters by providing advice and judgment on strategic issues and on the quality of scientific programs. In that context it is expected to evaluate the quality and relevance of the Centers' research and research-related programs and monitor compliance with approved plans and CG priorities. The updated<sup>15</sup> standard TORs of the EPMRs, set by TAC, charge the panels specifically to assess:

- a) The Centers' missions, strategy and priorities in the context of the CGIAR's priorities and strategies;
- b) The quality and relevance of the science undertaken, including the effectiveness and potential impact of the Centers' completed and ongoing research;
- c) The effectiveness and efficiency of management, including the mechanisms and processes for ensuring quality; and
- d) The accomplishments and impacts of the Centers' research and related activities.

On the completion of an EPMR, TAC obtains the concerned Center's comments on the EPMR findings and recommendations, adds its own comments and recommendations, and forwards the report to CGIAR<sup>16</sup>.

The areas of focus for the EPMRs are: adherence to the CGIAR mission,<sup>17</sup> strategies and priorities, science quality, management, accomplishment, and impact of the Center. However, the panels appear to have faced timing and other constraints in conducting in-depth reviews.

The main report cites these reviews extensively in addressing substantive issues at the System level on impact, strategies and priorities, science quality, management, and accomplishments of the System as a whole, as well as making specific System- and Center-level observations based on these reviews. But as the main report argues, there are issues in terms of the mission itself—whether poverty alleviation and women's participation, or bringing the best and most relevant science to achieve these objectives, should be the CGIAR's mission, given that poverty reduction is achieved by a large number of factors beyond the control of the CGIAR and the mission has contributed to the CGIAR's loss of focus. There are also a variety of strategy and priority issues at the System level that the main report identifies. Because some of the analysis contained in the EPMRs is now overtaken by events,

15. The standard TORs for EPMRs appear to have gone through updating since the inception of the process. The latest updating is of the set of "standard TORs" that were endorsed by CGIAR at MTM95.

16. This Review has found that TAC has commented on all EPMRs. It has endorsed fully, and in some cases partially, the findings and recommendations of the panels and has also commented on the management responses to the EPMR observations. From some of TAC's comments on the issues, one wonders why those issues were not pursued earlier by TAC and why it had to wait for the EPMR to re-emphasize them. However, TAC commentaries are appropriate and have been helpful particularly on quality of science and governance and management issues. Further discussion on the role of TAC is in the paper on mission statements and operating strategies of the CGIAR Centers.

17. Poverty Alleviation; Natural Resource Management; Food Security and Sustainability and Relevance to Beneficiaries, particularly Women.

the summary of findings assembled by the meta team is not provided here. Rather, this annex raises several issues related to the composition, substance, and impacts of EMPR procedures.

The first issue is that the Centers seem to lack a uniform, consistent, and thorough self-evaluation process, with the results widely available to outsiders. Not all the self-evaluations conducted by the Centers seem to be available to outsiders for quotation, as the meta-evaluation review team discovered in using Center-commissioned evaluations. Some of the important criteria for such reviews should be whether and to what extent the programs achieve GPG and regional public goods function and whether the Centers are the most cost-effective way of achieving this goal, even if it is an important research issue from a public goods viewpoint. The donor-driven nature of the Centers' funding appears to have prevented the EPMRs from addressing this important question to the extent it deserves at the Center level.

The second issue relates to why some programs and issues in the System are addressed in quinquennial (and sometimes longer) EPMRs rather than through more regular and independent reviews of each research program in the Centers. Because they are carried out every five years and involve review of the entire research program as well as organization and management, a team cannot possibly do justice to the review of science quality and science management of individual programs. More regular review of science quality and a science management-oriented approach to reviews seems to be needed for all Centers.

The third issue is that, even if TAC endorsed findings of the EPMRs, the extent to which such endorsement affects their adoption or subsequent funding by donors remains unclear. Some donors indicate they take the EPMRs quite seriously in funding decisions.

An informed observer of EPMRs has argued that:

(T)he assignment given to an EPMR is a form of 'Mission Impossible' ... much to do in too short a time, a mentally and physically exhausting process. The team itself... selected with a variety of criteria .... sometimes has little idea of how they [the team] will actually perform... Sometimes they... click, sometimes they don't. Illness can reduce the ranks, and some individuals prove unable to write adequately or well. Sometimes the Center directors try to influence the nature and outcome of the review: the line between trying to correct oversights by the team, which is working on very high pressure, and shaping reality according to the director's wishes can sometimes be rather fuzzy and occasionally abused... it is somewhat of a miracle that at least a reasonably well done, and sometimes excellent, report is produced. It is amazing when someone signs up to do a second or third review.

The observer goes on to say that:

It has long been widely recognized that the reviews vary in quality and successive reviews of centers may come up with contradictory recommendations. The most variable part may be on the management side. Generally there is only one management specialist, with, in recent years, a consultant or two. Much depends on the individual chosen. And some of the choices seem idiosyncratic. There is not a large pool to draw from and an effort to widen the base, has sometimes reached out beyond a core group, with quite variable results. It is the old dilemma of the degree to which one stays with the tried and true (which can also lead to the "old boy or girl" charge) and the degree to which one is more venturesome. This is less a problem on the biological side.

The EPMRs seem decidedly weak on aspects of organization, management, and finance and will need a shot in the arm if Center management issues are to be addressed and dealt with adequately. The EPMR process clearly needs reform to establish more frequent, less ambitious, higher quality, perhaps random reviews of programs that explore science quality and management issues in depth.

**CONCLUSION: DISCONNECT BETWEEN EVALUATION AND IMPLEMENTATION**

The CGIAR is rich in the history of evaluation but short on follow up. Its overall evaluation system is too costly in relation to its benefits for the System: like the CGIAR's governance and management, it requires an overhaul. As this meta-evaluation has documented, the TSR's many recommendations and previous recommendations by other Systemwide reviews have not been implemented or could not be implemented, in part due to a lack of analysis of the crucial role of financial rules in the governance and management of the System and a lack of procedures, both internal and external (including in the World Bank), for ensuring monitoring, evaluation, and oversight.

Implementation and monitoring of implementation remain issues. First, there are no benchmarks to measure implementation. Second, the CGIAR lacks formal processes for monitoring follow up to System-level reviews. Third, the CGIAR's failure to address the key challenges and recommendations of the TSR has been in part a failure of the World Bank's internal processes for the systematic conduct and follow-up of evaluations of large and important programs such as the CGIAR, as articulated in the OED's Phase 1 report on the *Bank's Approach to Global Programs*. The issue of oversight is complicated by the numerous, often conflicting roles played by the Bank's Vice President and managers, responsible for both managing and overseeing the CGIAR at the same time.

## Annex N: CGIAR Board Members

The questions of board role, quality, size, composition and costs, selection process, and accountability have been raised on a number of occasions. Even former chairs have concerns about self-nominating boards with no formal process of accountability to the system as a whole, or to donors or clients of the system. The functioning of boards as a Systemwide issue has never been evaluated. Moreover, no one interviewed by the meta-evaluation team could explain who the boards are accountable to or how their accountability is assessed. There is considerable debate, but no resolution, on how the boards should be selected, what their roles should be in the future, and to whom they are accountable.

In the survey of CGIAR stakeholders conducted by the meta-evaluation team (see Annex O), few respondents were willing or able to comment on either the scientific and managerial excellence or the governance abilities of specific Center boards. A total of 58 percent of respondents believed that Center boards drive the strategic vision of the Center, and 42 percent felt that Center directors drive the vision. Thirty-five percent of respondents agreed that investors in the system should nominate Center board members to ensure quality instead of the current nomination process, while 56 percent disagreed. While the majority of respondents believed that Centers were generally accountable to their donors, their second line of accountability was to their boards. Comments accompanying several responses pointed to the need for a closer review and assessment of the structure and role of Center boards.

An analysis of board membership for each of the 16 CGIAR centers is given in the tables below. As of October 2001, 30 of the total 214 CGIAR board members (or 14 percent) serve either concurrently on two boards or have served on other Center(s) boards in the past. A total of 11 are serving concurrently on two boards, 11 have served previously on one other Center board, 2 current Director Generals have served previously on another Center board, and 9 have previously served on two or more Center boards. Two members who serve concurrently on two boards and one who served previously on another Center board (Gill Shepherd), do so because the constitutions of CIFOR and ICRAF require the board Chair of each Center to serve on the board of the other. A total of 72 percent of the board members are male, while 28 percent are female. Fifty-three percent are from industrial or “north” countries, while 47 percent are from developing or “south” countries.

In the tables below, board members whose entry is denoted by an asterisks currently serve on more than one board; those denoted with an “1” have previously served on one other Center board; those denoted with a “2” have served on two or more boards of other Centers; and those denoted with a “DG” are Director Generals who have previously served on another Center’s board.

**Centro Internacional de Agricultura Tropical (CIAT)**

<i><b>Name</b></i>	<i><b>Gender</b></i>	<i><b>Nationality</b></i>	<i><b>Discipline</b></i>	<i><b>Nominated By</b></i>	<i><b>Remarks</b></i>
Contini, Elisio	M	Brazil	Economics	Board	
Gebhardt, Christiane	F	Germany	Plant Pathology	Board	
Girard, Collette M.	F	France	Natural Resource Management	Board	
Holm-Nielsen, Lauritz Broder	M	Denmark	Botany	CGIAR	1
Jones, James W.	M	United States	Agricultural Systems	Board	
Maeno, Nobuyoshi	M	Japan	Agronomy	Board	
Moncayo, Victor Manuel	M	Colombia	Law	Ex-Officio	
Pantin, Graciela	F	Venezuela, R.B. de	Sociology	Board	
Paul, Samuel	M	India	Management	Board	*
Samper Gnecco, Armando	M	Colombia	Agricultural Economics	Emeritus	
Sibale, Elizabeth	F	Malawi	Plant Breeding	CGIAR	
Uribe, Alvaro Francisco	M	Colombia	Zoology	Ex-Officio	
Valent, Barbara	F	United States	Biochemistry	Board	
Villalba, Rodrigo	M	Colombia	Social Science and Law	Member Co	
Voss, Joachim	M	Canada	Anthropology	Ex-Officio	

## Center for International Forestry Research (CIFOR)

<i>Name</i>	<i>Gender</i>	<i>Nationality</i>	<i>Discipline</i>	<i>Nominated By</i>	<i>Remarks</i>
Amoako-Nuama, Christina	F	Ghana	Plant Pathology	Board	
Bethlehem, Lael	F	South Africa	Industrial Policy	Board	
Cropper, Angela	F	Trinidad and Tobago	Forestry	Board	
Edwards, Lucie	F	Canada	Administration/Social Science	Ex-Officio	*
Falcon, Walter Phillip	M	United States	Economics	Board	2
Fattah, Abdul	M	Indonesia	Forestry	Member Co	
Kaimowitz, David	M	United States	Economics	Ex-Officio	
Larsen, J. Bo	M	Denmark	Forestry	Board	*
Lee, Don Koo	M	Korea, Republic	Silviculture	Board	
Maini, Jagmohan S.	M	Canada	Plant Ecology	Board	*
Padoch, Christine	F	United States	Anthropology	Board	
Patosaari, Pekka Antero	M	Finland	Forestry	Board	
Shepherd, Gill	F	United Kingdom	Anthropology	Board	1
Tanaka, Yumiko	F	Japan	Economics	Board	
Valeix, Jacques	M	France	Forestry	Board	

**Centro Internacional de Mejoramiento de Maíz y Trigo (CIMMYT)**

<i>Name</i>	<i>Gender</i>	<i>Nationality</i>	<i>Discipline</i>	<i>Nominated By</i>	<i>Remarks</i>
Aveldano, Rodrigo	M	Mexico	Administration	Member Co	
Colijn-Hooymans, Tini (C.M.)	U	The Netherlands		Board	
Dun, Niu	M	China		Board	
Fowler, Cary	M	United States	Sociology	Board	
Goodman, Robert	M	United States	Plant Genetics	Board	
Gregson, Anthony	M	Australia	Chemistry	Board	
Hirai, Atsushi	M	Japan	Plant Genetics	Board	
Holmberg, Johan Fredrik	M	Sweden	Business Administration	Board	
Jaramillo, Carlos Felipe	M	Colombia	Economics	CGIAR	
Leisinger, Klaus M.	M	Germany	Economics	Board	
McCalla, Alexander F.	M	Canada	Agricultural Economics	Board	
Moncada de la Fuente, Jesus	M	Mexico	Soil Science	Ex-Officio	1
Olembo, Norah K.	F	Kenya	Biochemistry	Board	
Rai, Mangala	M	India	Plant Breeding	CGIAR	
Reeves, Timothy G.	M	Australia	Agronomy	Ex-Officio	
Tan-Kim-Yong, Uraivan	F	Thailand	Sociology	Board	1
Usabiaga, Javier	M	Mexico		Member Co	
Witcombe, John	M	United Kingdom	Plant Breeding	CGIAR	

**Centro Internacional de la Papa (CIP)**

<i>Name</i>	<i>Gender</i>	<i>Nationality</i>	<i>Discipline</i>	<i>Nominated By</i>	<i>Remarks</i>
Godfrey, James	M	United Kingdom	Agriculture	Board	
Kaneda, Chukichi	M	Japan	Plant Breeding	Board	1
Kim, Kang-Kwun	M	Korea, Republic	Horticulture	CGIAR	
MacKenzie, David Robert	M	United States	Plant Pathology	Board	
Olcese, Orlando	M	Peru	Biochemistry	Member Co	
Pehu, Eija P.	F	Finland	Plant Breeding	CGIAR	
Sengooba, Theresa	F	Uganda	Pathology	Board	*
Swaminathan, Madhura	F	India	Economics	Board	
Takahashi Sato, Josefina	F	Peru	Plant Pathology	Member Co	
Zandstra, Hubert G	M	Canada	Agronomy	Ex-Officio	

**International Center for Agricultural Research in the Dry Areas (ICARDA)**

<i>Name</i>	<i>Gender</i>	<i>Nationality</i>	<i>Discipline</i>	<i>Nominated By</i>	<i>Remarks</i>
Al-Ahmed, Hassan	M	Syrian Arab Republic	Agricultural Economics	Member Co	
Catley-Carlson, Margaret	F	Canada	International Development	CGIAR	
de Nuce de Lamothe, Michel	M	France	Plant Genetics	Board	1
El-Beltagy, Adel S.	M	Egypt	Physiology	Ex-Officio	
El-Zabri, Ismail T.	M	Jordan	Agricultural Economics	Board	
Fogelberg, Teresa	F	The Netherlands	Sociology/Anthropology	Board	2
Franck-Oberaspach, Peter S.M.	M	Germany	Plant Breeding	CGIAR	
Havener, Robert D.	M	United States	Agricultural Science	Board	*, 2
Ismail, Toufik	M	Syrian Arab Republic	Economics	Member Co	
Jones, Richard Gareth Wyn	M	United Kingdom	Biochemistry	Board	
Kazzaka, Khalil	M	Lebanon	Agronomy	Board	
Keshavarz, Abbas	M	Iran	Irrigation	Board	
Ketema, Seyfu	M	Ethiopia	Plant Breeding	CGIAR	*
Kobori, Iwao	M	Japan	Geography	Board	1
Rao, Rosa	F	Italy	Genetics	Board	
Sharafeldin, Mamdouh Abdel-Wahab	M	Egypt	Animal Science	Board	

**International Center for Living Aquatic Resources Management (ICLARM)**

<b>Name</b>	<b>Gender</b>	<b>Nationality</b>	<b>Discipline</b>	<b>Nominated By</b>	<b>Remarks</b>
Ahmad, Dato' Hashim	M	Malaysia	Agriculture	Member Co	
Ayyappan, S.	M	India	Aquatic Microbiology	CGIAR	
Bjorndal, Trond	M	Norway	Economics	CGIAR	
Christensen, Katherine Richardson	F	United States	Marine Biology	Board	
Garcia, Serge	M	France	Marine Fish Science	FAO	
Joshi, Joan H.	F	United States	Management	Board	*
Kearney, Robert Edward	M	Australia	Fisheries	Board	
Khalil, Yehia Hassan	M	Egypt	Food Science	Member Co	
Nose, Takeshi	M	Japan	Aquaculture	Board	
Soegiarto, Aprilani	M	Indonesia	Marine Science/Oceanology	CGIAR	
Williams, Meryl	F	Australia	Marine Biology	Ex-Officio	
Williams, Stella	F	Nigeria	Resource Economics	Board	
Zhang, Linxiu	F	China	Agricultural Economics	CGIAR	

## International Centre for Research in Agroforestry (ICRAF)

<i>Name</i>	<i>Gender</i>	<i>Nationality</i>	<i>Discipline</i>	<i>Nominated By</i>	<i>Remarks</i>
Adams, Mark A.	M	Australia	Botany	Board	
Beahrs, Richard	M	United States	Business Administration	Board	
Edwards, Lucie	F	Canada	Admin./Social Science	Board	
Garrity, Dennis	M	United States		Ex-Officio	
Kaosa-ard, Mingsarn	F	Thailand	Economics	CGIAR	
Ketema, Seyfu	M	Ethiopia	Plant Breeding	Board	*
Larsen, J. Bo	M	Denmark	Forestry	Board	*
Murdiyarsa, Daniel	M	Indonesia	Ecology	CGIAR	
Mwangi, Wilfred	M	Kenya	Agricultural Economics	Member Co	*
Reenberg, Anette	F	Denmark	Geography	Board	
Scholes, Robert J.	M	South Africa	Silviculture	Board	
Terry, Eugene Robert	M	Sierra Leone	Plant Pathology	Board	*, 1
Trindade, Sergio C.	M	Brazil	Environment	Board	
van Dijk, Kees	M	The Netherlands	Development	Board	
Watanabe, Hiroyuki	M	Japan	Forestry	Board	

**International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)**

<b>Name</b>	<b>Gender</b>	<b>Nationality</b>	<b>Discipline</b>	<b>Nominated By</b>	<b>Remarks</b>
Beachy, Roger N.	M	United States	Biotechnology	CGIAR	
Bengtsson, Bo Malteingvar	M	Sweden	Agricultural Science	Board	2
Best, Simon G	M	United Kingdom	Business Management	Board	
Dar, William D.	M	Philippines	Horticulture	Ex-Officio	DG, 2
Latham, Marc	M	France	Soil Science	Board	
Marshall, Donald R.	M	Australia	Plant Genetics	CGIAR	1
Mokwunye, A. Uzo	M	Nigeria	Soil Science	Board	
Mukiibi, Joseph K.	M	Uganda	Plant Pathology	Board	2
Mutukwa, Gladys M. N.	F	Zambia	Law	Board	
Prisco, Jose Tarquinio	M	Brazil	Plant Physiology	CGIAR	
Rao, P. V.	M	India	Public Administration	Member Co	
Singh, Panjab	M	India	Agronomy	Member Co	
Srivastava, J.N.L.	M	India	Public Administration	Member Co	
Stone, Martha B.	F	Canada	Information Sciences	Board	
Yoneyama, Tadakatsu	M	Japan	Agricultural Science	Board	

**International Food Policy Research Institute (IFPRI)**

<b>Name</b>	<b>Gender</b>	<b>Nationality</b>	<b>Discipline</b>	<b>Nominated By</b>	<b>Remarks</b>
Ahluwalia, Isher Judge	F	India	Economics	Board	
Dioum, Baba	M	Senegal	Agricultural Science	CGIAR	
Eide, Wenche Barth	F	Norway	Nutrition	CGIAR	
Grynspan Mayufis, Rebeca	F	Costa Rica	Economics	Board	
Kuyvenhoven, Arie	M	The Netherlands	Development Economics	CGIAR	
Matsuoka, Susumu	M	Japan	Economics	CGIAR	
Miller, Geoff	M	Australia	Agricultural Economics	Board	
Monsod, Solita Collas	F	Philippines	Economics	CGIAR	
Ostry, Sylvia	F	Canada	Economics	Board	
Pinstrup-Andersen, Per	M	Denmark	Agricultural Economics	Ex-Officio	
Rukuni, Mandivamba	M	Zimbabwe	Agricultural Economics	CGIAR	
Schuh, Edward G.	M	United States	Agricultural Economics	Member Co	
Stewart, Frances	F	United Kingdom	Development Economics	Board	
Vazquez Platero, Roberto	M	Uruguay	Agricultural Economics	CGIAR	
Wen, Simei	M	China	Agricultural Economics	Board	

**International Institute of Tropical Agriculture (IITA)**

<i>Name</i>	<i>Gender</i>	<i>Nationality</i>	<i>Discipline</i>	<i>Nominated By</i>	<i>Remarks</i>
Babale, Aboulaye	M	Cameroon	Agricultural Research	CGIAR	
Cisse, Limamoulaye	M	Senegal	Soil Science	Board	
Collinson, Michael P.	M	United Kingdom	Agricultural Economics	Board	
Gyang, Erastus O.	M	Nigeria		Member Co	
Hartmann, Peter	M	United States	Economics	Ex-Officio	
Iwanaga, Masaru	M	Japan	Genetics	Board	
Jakobsen, Jorgen	M	Denmark	Plant Protection	CGIAR	
Kanoute, Assetou	F	Mali	Accounting	Board	
Kwesiga, Joy	F	Uganda	Social Science	Board	
Mrema, Geoffrey Christopher	M	Tanzania	Agricultural Engineering	CGIAR	*
Neufville, Mortimer Hugh	M	United States	Animal Nutrition	Board	
Oloko, Olatunde Adeyemi	M	Nigeria		Member Co	
Porceddu, Enrico	M	Italy	Genetics	Board	2
Synnevag, Gry	F	Norway	Agroecology	Board	
Tollens, Eric	M	Belgium	Agricultural Economics	Board	
Usman, B. D.	M	Nigeria		Ex-Officio	
Von Lengerke, Hans J.	M	Germany	Agrometeorology	Board	

**International Livestock Research Institute (ILRI)**

<i>Name</i>	<i>Gender</i>	<i>Nationality</i>	<i>Discipline</i>	<i>Nominated By</i>	<i>Remarks</i>
Ejigu Begashaw, Belay	M	Ethiopia	Administration	Member Co	
Fujita, Teruhide	M	Japan	Veterinary Medicine	Board	
Gill, Margaret	F	United Kingdom	Nutrition	Board	
Luck, Jo	F	United States	Business Management	Board	
Mwangi, Wilfred	M	Kenya	Agricultural Economics	Member Co	*
Pastoret, Paul-Pierre	M	Belgium	Immunology	Board	
Philipsson, Jan	M	Sweden	Animal Genetics	CGIAR	
Rola, Agnes Casiple	F	Philippines	Agricultural Economics	Board	
Sere, Carlos Otto	M	Uruguay	Agricultural Economics	Ex-Officio	
Sittenfeld, Ana	F	Costa Rica	Microbiology	CGIAR	
Tau Mzamane, Nthoana M.	F	South Africa		CGIAR	
Vercoe, John Edward	M	Australia	Animal Science	Board	

**International Plant Genetic Resources Institute (IPRGR)**

<i>Name</i>	<i>Gender</i>	<i>Nationality</i>	<i>Discipline</i>	<i>Nominated By</i>	<i>Remarks</i>
Cottier, Thomas	M	Switzerland	Law	Board	
Hawtin, Geoffrey C.	M	United Kingdom	Plant Breeding	Ex-Officio	
Lefort, Marianne	F	France	Genetics & Plant Breeding	Board	
Miyazaki, Shoji	M	Japan	Genetics & Genetic Resources	Board	
Monti, Luigi M.	M	Italy	Plant Breeding	Member Co	1
Nakagahra, Masahiro	M	Japan	Plant Genetics	Board	
Nielsen, Ivan	M	Denmark	Botany	Board	
Salazar, Renato	M	Philippines	Sociology	Board	
Sengooba, Theresa	F	Uganda	Pathology	CGIAR	*
Shinawatra, Benchaphun	F	Thailand	Socio-Economics	CGIAR	
Wambugu, Florence Muringi	F	Kenya	Biotechnology	CGIAR	

**International Rice Research Institute (IRRI)**

<b>Name</b>	<b>Gender</b>	<b>Nationality</b>	<b>Discipline</b>	<b>Nominated By</b>	<b>Remarks</b>
Abed, Fazle Hasan	M	Bangladesh	Rural Development	Board	
Akita, Shigemi	M	Japan	Plant Physiology	NA	
Arima-Sakai, Makiko	F	Japan	Comm., Journalism, Women in Dev.	Board	
Cantrell, Ronald P.	M	United States	Plant Breed., Genetics, Res. Mgt.	Ex-Officio	
Gale, Michael Denis	M	United Kingdom	Cytogenetics, Genomics & Plant Breeding	CGIAR	
Kamba, Angeline Saziso	F	Zimbabwe	Public Service & HR Mgmt.	Board	
Lange, Lene	F	Denmark	Microbiology	CGIAR	
Montemayor, Leonardo Q.	M	Philippines	Govt., Agri. Reform, Ppeas & Farm Issues	Member Co	
Nemenzo, Francisco	M	Philippines	Public Science & Education	Ex-Officio	
Qualset, Calvin O.	M	United States	Genetics & Genetic Resources	CGIAR	
Saphangthong, Siene	M	Lao PDR	Agronomy	Board	
Serrao, Emanuel Adilson Souza	M	Brazil	Agronomy	Board	
Siddiq, E. A.	M	India	Genetics & Plant Breeding	Board	
Song, Jian	M	China	Engineering & Education	Board	

## International Service for National Agricultural Research (ISNAR)

<i>Name</i>	<i>Gender</i>	<i>Nationality</i>	<i>Discipline</i>	<i>Nominated By</i>	<i>Remarks</i>
Alvarez, Isabel	F	Spain	Plant Pathology	FAO	
Balit, Silvia	F	Italy	Information Sciences	Board	
Bie, Stein W.	M	Norway	Soil Science	Ex-Officio	DG
Confesor, Ma Nieves R.	F	Philippines	Management	Board	
Hedley, Douglas D.	M	Canada	Economics	Board	
Kobayashi, Masashi	M	Japan	Plant Breeding	Board	1
Mensah, Moise C.	M	Benin	Economics	CGIAR	2
Mrema, Geoffrey Christopher	M	Tanzania	Agricultural Engineering	CGIAR	*
Olsen, José Maria Figueres	M	Costa Rica	Management	Board	
Paul, Samuel	M	India	Management	Board	*
Reid, Janice C.	F	Trinidad and Tobago	Entomology	CGIAR	
Röling, Niels	M	The Netherlands	Agricultural Extension	Member Co	
Sunna, Sami Jadalla	M	Jordan	Plant Ecology	CGIAR	
Toulmin, Camilla	F	United Kingdom	Economics	Board	

**International Water Management Institute (IWMI)**

<b>Name</b>	<b>Gender</b>	<b>Nationality</b>	<b>Discipline</b>	<b>Nominated By</b>	<b>Remarks</b>
Abdullah, Shahrizaila bin	M	Malaysia	Civil Engineering	Board	
Altaf, Zafar	M	Pakistan	Economics	Member Co	
Bandusena, S. B.	M	Sri Lanka	Irrigation	Member Co	
Beek, Klaas Jan	M	The Netherlands	Soil Science	Board	
El-Kady, Mona Moustafa	F	Egypt	Civil Engineering	CGIAR	
Gautschi, Remo	M	Switzerland	Civil Engineering	Board	
Huppert, Walter	M	Germany	Engineering	Board	
Joshi, Joan H.	F	United States	Management	Board	*
Kej, Asger	M	Denmark		Board	
Lesaffre, Benoit	M	France	Water Management	CGIAR	
Mase, Toru	M	Japan	Irrigation Engineering	Board	
Rijsberman, Frank	M	The Netherlands	Civil Engineering	Ex-Officio	
Terry, Eugene Robert	M	Sierra Leone	Plant Pathology	CGIAR	*

**West Africa Rice Development Association (WARDA)**

<b>Name</b>	<b>Gender</b>	<b>Nationality</b>	<b>Discipline</b>	<b>Nominated By</b>	<b>Remarks</b>
Ayuk-Takem, Jacob Assam	M	Cameroon	Agronomy	Member Co	
Dabire, Clementine L.	F	Burkina Faso	Entomology	Member Co	
Diomande, Mamadou	M	Cote d'Ivoire	Plant Pathology	Member Co	
Griffith, W. John	M	United States	Economics	Board	
Horie, Takeshi	M	Japan	Agricultural Science	Board	
Innes, Norman Lindsay	M	United Kingdom	Crop Science	CGIAR	2
Mokwunye, Mary Uzo B.	F	Nigeria	Horticulture	Member Co	
Musangi, Richard S.	M	Kenya	Animal Science	Board	
Nwanze, Kanayo F.	M	Nigeria	Entomology	Ex-Officio	
Pochat, Remi	M	France	Civil Engineering	Board	
Price, Edwin C.	M	United States	Agricultural Economics	Board	
Spencer, Dunstan Sylvester C.	M	Sierra Leone	Agricultural Economics	Member Co	

## **Annex O: Meta-Evaluation: Results from the Survey of CGIAR Stakeholders**

In support of the meta-evaluation, OED mounted a questionnaire in December 2001, soliciting input from CGIAR stakeholders and outside observers on an anonymous basis.

The questionnaire was sent to a total of 235 people, including:

- Directors General from the past five years
- Board Chairs from the past five years
- Member representatives (as obtained from the CGIAR Secretariat database)
- Current TAC members, including SPIA
- NGO Committee Co-chairs
- Private Sector Committee Chair
- GFAR representative and executive secretary
- Non-member NARS representatives (as obtained from the CGIAR Secretariat database)
- Non-CGIAR scientists and research managers (as provided by CGIAR member representatives from France, Germany, United Kingdom, and United States)
- Leaders of all review teams from the past five years, including EPMRs, stripe reviews, and other System-level reviews
- Third System Review main panel and Executive Secretary

The following received a copy of the questionnaire for their information. In some cases, this was the basis for more in-depth interaction through interviews.

- Past and current CGIAR Chairs
- CGIAR Director
- Co-sponsor representatives
- Chair of Third System Review
- Chair of Change Design and Management Team

The survey was distributed electronically and responses were received electronically, by fax and by post. The response rate is presented in the table below.

**Table S.1. CGIAR Survey - Response Rates by Category**

Category	Surveys sent	Responses received	Response Rate (%)
Center DGs	24	13	54.17
Board of Trustees	30	21	70.00
OECD Donor	31	9	29.03
Other donor/member	15	2	13.33
System Review Team	6	6	100.00
TAC	14	7	50.00
Non-CG Scientist	41	6	14.63
Private Sector	1	1	100.00
NGO	1	0	0.00
GFAR	2	1	50.00
NARS Representative <sup>1</sup>	54	7	12.96
Other	16	5	31.25
TOTAL	235	78	33.19
Exec. Council member	17	3	17.65

Despite OED's hopes of soliciting perspectives from "outside" the CGIAR, the response rate was quite low among non-member NARS representatives<sup>2</sup> and non-CGIAR scientists and research managers. This may be due to insufficient familiarity with the issues addressed in the questionnaire, or lack of a sense of ownership in the CGIAR. Removing these categories from the calculation, the response rate rises to 39.20 percent. Thus, the questionnaire had a meaningful response from those within the System.

OED acknowledges that, as a result of time constraints, there were some limitations to the questionnaire, including:

- Inability to reach several stakeholders with the questionnaire, including many NARS representatives, due to failure of both e-mail and fax communication;
- Insufficient pre-testing of the questionnaire; and
- No formal non-respondent follow up;

Additionally, several respondents indicated that certain questions were posed in such a way as to constrain answers. OED encouraged all questionnaire recipients to submit supplementary comments should they have felt unable to fully express themselves through the questions as presented. Indeed, many stakeholders provided important additional insights and information through such supplementary comments.

1. The category "NARS Representatives" includes representatives from both member and non-member NARS.

2. Because the category "NARS Representatives" includes representatives from both member and non-member NARS, it is difficult to accurately calculate response rates for each sub-category. However, OED believes, to the best of its knowledge, that four of the seven respondents in this category are from CGIAR member countries.

**1. How familiar are you with the new change management decisions reached at Annual General Meeting 01, e.g., on creation of Executive Council, Challenge Programs, Science Council, and System Office?**

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Very familiar	85% (11)	48% (10)	78% (7)	100% (2)	50% (3)	60% (3)	43% (3)	17% (1)	50% (1)	100% (1)	17% (1)	55% (43)
Familiar	15% (2)	38% (8)	22% (2)	0% (0)	33% (2)	0% (0)	57% (4)	33% (2)	50% (1)	0% (0)	33% (2)	29% (23)
Not so Familiar	0% (0)	14% (3)	0% (0)	0% (0)	17% (1)	40% (2)	0% (0)	50% (3)	0% (0)	0% (0)	50% (3)	15% (12)
Respondent Total	13	21	9	2	6	5	7	6	2	1	6	78

**2. The External System Review in 1998 concluded that some consolidation of Centers is necessary, and recommended an in-depth management review to address this. In the meta-evaluation team's consultations, some CGIAR stakeholders also have suggested that the number of Centers should be reduced.**

2a. In your opinion, is a consolidation in the number and functions of Centers advisable?

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	79% (11)	86% (18)	50% (4)	100% (2)	100% (4)	50% (3)	100% (7)	83% (5)	100% (2)	0% (0)	71% (5)	79% (61)
No	7% (1)	10% (2)	38% (3)	0% (0)	0% (0)	33% (2)	0% (0)	17% (1)	0% (0)	0% (0)	14% (1)	13% (10)
Don't know	14% (2)	5% (1)	13% (1)	0% (0)	0% (0)	17% (1)	0% (0)	0% (0)	0% (0)	0% (0)	14% (1)	8% (6)
Respondent Total	14	21	8	2	4	6	7	6	2	0	7	77

2b. If yes, in your opinion, which approach is best to achieve consolidation? (choose one: Challenge Programs through their competitive funding process; An in-depth management review; Don't know; Other (Please Specify))

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Challenge Programs	18% (2)	53% (10)	25% (1)	50% (1)	33% (2)	33% (1)	0% (0)	0% (0)	50% (1)	0% (0)	43% (3)	33% (21)
Management review	55% (6)	21% (4)	25% (1)	0% (0)	33% (2)	0% (0)	40% (2)	80% (4)	50% (1)	0% (0)	29% (2)	34% (22)
Don't know	0% (0)	5% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	14% (1)	3% (2)
Other	27% (3)	21% (4)	50% (2)	50% (1)	33% (2)	67% (2)	60% (3)	20% (1)	0% (0)	0% (0)	14% (1)	30% (19)
Respondent Total	11	19	4	2	6	3	5	5	2	0	7	64

Although a majority of respondents believed that consolidation of the number and functions of the CGIAR Centers was advisable, there were numerous comments on how best to achieve this goal.

- While members of the Board of Trustees suggested reducing and consolidating the Centers, especially the four or five Centers recognized for their weaknesses, they also noted that no one, especially the donors, has the courage to do so. And while the Challenge Programs (CPs) were perceived as enhancing cluster and program alliances, board members advocated other means of consolidation, including a bottom-up approach from the Centers themselves and individual consideration of each Center. Members also recommended stronger collaborative work with the advanced research institutes (ARIs) and NARS through solid MoUs and strategic alliances on key program themes.
- Center Directors recommended (a) voluntary alliances between Centers, while maintaining the Centers as legal entities for reasons relating to agreements between the CGIAR headquarters and host countries; (b) consolidation where mandates and functions were clearly overlapping with other providers; (c) consolidation where a Center is existing on past glories but no longer delivers; (d) a more cautious or tempered approach to consolidation so as to minimize disruption; and (e) a review of each Center's functions with an emphasis on how the Center contributes at different levels—global, eco-regional, and regional—and how these functions relate to other research providers beyond the CGIAR System.

- Comments from NARS representatives similarly recommended merging Centers with overlapping mandates and further argued for reductions in administrative posts to benefit research. Non-CG scientists commented that consolidation should be based on examination of core and regional competencies. OECD donors suggested that consolidation should be undertaken through (a) multi-Center working groups designed to review all overlapping program areas and improve specialization and coherence; (b) regional consolidation and agreements with the NARS; and (c) a process that examines the functions of Centers as an issue separate and distinct from the number of Centers in the CGIAR System (the “System”). While TAC members recommended consolidation and viewed competition as a means of achieving these ends, comments indicate that some do not necessarily view the CPs as the best means possible.
- Other respondents made the observation that consolidation was not advisable so long as greater collaboration and coordination among and between Centers is achieved. They also pointed out that consolidation has already occurred in sectors such as livestock, and that the results have not been entirely favorable: the example of ILRI, the only Center currently addressing livestock issues, was given in this context. Further, they noted that past efforts to consolidate Centers such as ILRI and ILCA have been half-hearted attempts at best, and any future consolidations must be undertaken with strict action in order to reduce large overheads arising from multiple management teams. Moreover, they argued that the Challenge Programs are not rigid enough to consolidate Centers, though they do lead to important collaborative efforts. To the extent that consolidation is pursued, these respondents recommended that the CGIAR and its donors provide strong signals to the Centers of the intent to effect mergers and to provide indications of Centers should merge.
- Members of the System Team Review offered more concrete recommendations for consolidation. They suggested that a review should extend beyond management to include an examination of a Center’s utility and policy, and that an “independent” task force should be established with five to nine members willing and empowered to propose specific and practical options for consolidation. Alternatively, a respected external moderator could be used to work with a representative group (comprised of five Center or NARS directors, five donor representatives, and five independent members) to recommend a strategic plan. The suggestion called for these groups to provide results within three months of a given start date.

**3. Should the CGIAR System have a Systemwide Policy on Intellectual Property Rights (IPR) - related matters (patents, copyrights, and so forth)?**

	Center DG	Board of Trustees	OECD Donor	Other Donor/ Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	85% (11)	71% (15)	89% (8)	100% (2)	100% (6)	83% (5)	100% (6)	67% (4)	100% (2)	0% (0)	43% (3)	79% (62)
No	15% (2)	24% (5)	11% (1)	0% (0)	0% (0)	17% (1)	0% (0)	33% (2)	0% (0)	0% (0)	43% (3)	18% (14)
Don't know	0% (0)	5% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	14% (1)	3% (2)
Respondent Total	13	21	9	2	6	6	6	6	2	0	7	78

The need for a Systemwide policy on IPRs was recognized by the majority of respondents to the questionnaire, particularly in light of the growing importance of IPRs in agricultural research. However, respondents also expressed the need for a flexible policy that permits Centers to address IPR issues in a manner appropriate and specific to individual products, countries, and clients.

- Comments from the Board of Trustees emphasized the critical importance of IPRs and, in this context, the need for the CGIAR to work as a System with the International Convention on Biodiversity (CBD), the private sector, the WTO, and the future World Environment Organization (WEO). Members of the Board of Trustees expressed the need to define and encourage a uniform or best practices policy with respect to IPRs. However, they recognized the fact that no Center is large enough to secure the necessary technical and legal capacity to pursue IPRs, and saw the potential harm from competition, conflict, or legal disputes among Centers and between the Centers and private sector over intellectual property. On the other hand, there were also concerns over centralizing ownership and control of IPRs in the CGIAR. Board members also expressed the need for IPRs to extend beyond germplasm and genetic materials to geographic information systems (GIS) and related matters, and for harmonization of IPR issues in agreements on collaborative research.
- Center Directors echoed the need for a consistent and harmonized IPR policy, but recognized the difficulty of generating common guidelines for the wide spectrum of intellectual property the Centers deal with, the many types of clients at each Center, and countries with varying IPR regimes. In general, many Directors supported a consistent CGIAR policy, but called for flexibility to adapt the policy to meet the requirements of specific products, countries, and clients.

- NARS representatives expressed concern that an IPR policy could adversely affect technology transfers to developing countries, an outcome they felt is contrary to the CGIAR's mandate and status as a non-profit institution. However, some did recognize the benefits of a Systemwide IPR policy with respect to the NARS.
- Non-CG scientists, OECD donors, and others similarly recognized the need for a Systemwide policy, while also acknowledging the need for flexibility to allow Centers to address specific IPR issues appropriately. Non-CG scientists commented that a CGIAR policy will likely set the standard for the rest of the world on IPR issues, particularly pertaining to plants. Related to this is the recommendation from OECD donors that the Centers should also assist developing countries in establishing or strengthening their own IPR regimes and capacity.
- OECD donors further commented that the Centers should adopt guidelines approved by the Genetic Resources Policy Committee (GRPC) and accepted by the CGIAR members. Comments from other donors/members reiterated that adoption of a Systemwide IPR policy was recommended by the Proprietary Science Panel that reported to the MTM 98. But the donors/members argued that seeking a formal CGIAR policy, as opposed to Center-specific policies, sets an unrealistic goal for a diverse group of members who have widely varying approaches to IPR. Furthermore, they noted that CGIAR donor representatives are generally not empowered to take formal positions on IPR policy, and that CGIAR is a consultative, rather than a policy-making, body, thus precluding it from establishing a Systemwide IPR policy.
- Member of the System Team Review supported a Systemwide IPR policy provided that flexibility is ensured for individual Centers. Members argued that in order to increase its impact, the CGIAR must strengthen its policy advocacy role not only on IPR issues but also in areas like agricultural subsidies in rich countries, trade barriers, and environmental and social standards. Members of TAC similarly supported Systemwide IPR guidelines, but point out that a Systemwide IPR policy is only a means of meeting CGIAR's broader objectives in an environment where private investment and IPR dominate some areas, e.g., improvement of major crops.

**4. In your opinion, as part of Systemwide accountability, should there be routine System-level monitoring, oversight and annual reporting to CGIAR membership of the implementation of System-level IPR policy by Centers?**

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	69% (9)	86% (18)	78% (7)	100% (1)	83% (5)	100% (4)	100% (7)	67% (4)	100% (2)	0% (0)	71% (5)	82% (62)
No	15% (2)	14% (3)	11% (1)	0% (0)	0% (0)	0% (0)	0% (0)	17% (1)	0% (0)	0% (0)	14% (1)	11% (8)
Don't know	15% (2)	0% (0)	11% (1)	0% (0)	17% (1)	0% (0)	0% (0)	17% (1)	0% (0)	0% (0)	14% (1)	8% (6)
Respondent Total	13	21	9	1	6	4	7	6	2	0	7	76

Most Board members, Center directors and others supported a system of monitoring, oversight, and reporting for a System-level IPR policy. However, some cautioned that the System should be integrated into other monitoring mechanisms in the CGIAR and that excessive emphasis on IPR monitoring was a small issue relative to other CGIAR research activities. Members of the System Review Team emphasized the issue of how resources would be allocated from within the System to fund monitoring, oversight, and reporting.

**5. The External System Review recommended that membership in the CGIAR should be broadened to include the private sector and NGO community [currently they sit on committees and Executive Council but they are not members].**

5a. Should the CGIAR encourage private companies to become members?

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	82% (9)	29% (6)	56% (5)	0% (0)	50% (3)	20% (1)	86% (6)	50% (3)	50% (1)	100% (1)	43% (3)	49% (38)
No	18% (2)	62% (13)	33% (3)	100% (2)	50% (3)	80% (4)	14% (1)	50% (3)	50% (1)	0% (0)	43% (3)	45% (35)
Don't know	0% (0)	10% (2)	11% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	14% (1)	5% (4)
Respondent Total	11	21	9	2	6	5	7	6	2	1	7	77

5b. If yes, should a differential membership fee be charged to private companies?

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	44% (4)	60% (6)	43% (3)	0% (0)	60% (3)	100% (1)	33% (2)	100% (3)	50% (1)	100% (1)	75% (3)	56% (27)
No	44% (4)	30% (3)	43% (3)	0% (0)	40% (2)	0% (0)	33% (2)	0% (0)	50% (1)	0% (0)	0% (0)	31% (15)
Don't know	11% (1)	10% (1)	14% (1)	0% (0)	0% (0)	0% (0)	33% (2)	0% (0)	0% (0)	0% (0)	25% (1)	13% (6)
Respondent Total	9	10	7	0	5	1	6	3	2	1	4	48

5c. Should the CGIAR encourage NGOs to become members?

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	75% (9)	40% (8)	78% (7)	100% (2)	50% (3)	60% (3)	86% (6)	33% (2)	50% (1)	100% (1)	60% (3)	60% (45)
No	25% (3)	55% (11)	22% (2)	0% (0)	50% (3)	40% (2)	14% (1)	67% (4)	50% (1)	0% (0)	40% (2)	39% (29)
Don't know	0% (0)	5% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	1% (1)
Respondent Total	12	20	9	2	6	5	7	6	2	1	5	75

5d. Should the CGIAR encourage farmer organizations to become members?

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	75% (9)	42% (8)	50% (4)	100% (2)	17% (1)	60% (3)	71% (5)	50% (3)	50% (1)	100% (1)	71% (5)	56% (42)
No	25% (30)	47% (9)	50% (4)	0% (0)	83% (5)	20% (1)	14% (1)	50% (3)	50% (1)	0% (0)	29% (2)	39% (29)
Don't know	0% (0)	11% (2)	0% (0)	0% (0)	0% (0)	20% (1)	14% (1)	0% (0)	0% (0)	0% (0)	0% (0)	45% (4)
Respondent Total	12	19	8	2	6	5	7	6	2	1	7	75

Comments from many respondents indicated that membership should be encouraged for private companies, NGOs, and farmer organizations, provided they pay similar fees in the range of \$0.5 and \$1 million per annum. However, some Board of Trustee members, Center Directors, and OECD donors expressed concern over private company membership, given the CGIAR's commitment to producing global public goods, and instead suggested that companies work with the System as implementing and co-financing partners. Comments from Center Directors, OECD donors, and TAC members indicated that NGO and/or farmer organizations membership was desirable if such groups were committed to the

CGIAR's goals and willing to engage constructively with the CGIAR, and even then, only as donors to the System. Board members also felt that farmer organizations should be encouraged, possibly represented, by the Centers themselves, while others recognized the difficulty in implementing such a membership policy, given the large number of farmer organizations. Some NARS representatives believed that the status quo should be maintained.

**6. The External System Review recommended that the scientific capacity of TAC be strengthened. Similarly, in the meta-evaluation team's consultations, some stakeholders expressed concern about a decline in TAC's scientific quality and in its role in priority setting.**

6a. Do you agree that TAC's scientific quality has declined this past decade?

	Center DG	Board of Trustees	OECD Donor	Other Donor/ Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	77% (10)	43% (9)	67% (6)	100% (2)	67% (4)	80% (4)	0% (0)	17% (1)	0% (0)	100% (1)	50% (3)	51% (40)
No	8% (1)	14% (3)	33% (3)	0% (0)	0% (0)	20% (1)	71% (5)	33% (2)	100% (2)	0% (0)	17% (1)	23% (18)
Don't know	15% (2)	43% (9)	0% (0)	0% (0)	33% (2)	0% (0)	29% (2)	50% (3)	0% (0)	0% (0)	33% (2)	26% (20)
Respondent Total	13	21	9	2	6	5	7	6	2	1	6	78

6b. In your opinion, will the new/transformed Science Council (intended to provide guidance on broad global directions of science) help ensure the scientific quality of CGIAR research?

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	54% (7)	70% (14)	78% (7)	50% (1)	50% (3)	40% (2)	57% (4)	33% (2)	50% (1)	0% (0)	71% (5)	59% (46)
No	8% (1)	0% (0)	11% (1)	0% (0)	17% (1)	0% (0)	0% (0)	33% (2)	0% (0)	0% (0)	0% (0)	6% (5)
Don't know	38% (5)	30% (6)	11% (1)	50% (1)	33% (2)	60% (3)	43% (3)	33% (2)	50% (1)	100% (1)	29% (2)	35% (27)
Respondent Total	13	20	9	2	6	5	7	6	2	1	7	78

6c. In your opinion, will the new/transformed Science Council membership represent scientific excellence?

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	25% (3)	60% (12)	89% (8)	50% (1)	17% (1)	20% (1)	71% (5)	67% (4)	50% (1)	100% (1)	67% (4)	54% (41)
No	8% (1)	0% (0)	0% (0)	0% (0)	33% (2)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	4% (3)
Don't know	67% (8)	40% (8)	11% (1)	50% (1)	50% (3)	80% (4)	29% (2)	33% (2)	50% (1)	0% (0)	33% (2)	42% (32)
Respondent Total	12	20	9	2	6	5	7	6	2	1	6	76

6d. Do you agree that TAC's role in priority setting has declined this past decade?

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	92% (12)	67% (14)	56% (5)	100% (2)	67% (4)	60% (3)	29% (2)	67% (4)	50% (1)	100% (1)	67% (4)	67% (52)
No	0% (0)	10% (2)	44% (4)	0% (0)	0% (0)	40% (2)	43% (3)	0% (0)	50% (1)	0% (0)	17% (1)	17% (13)
Don't know	8% (1)	24% (5)	0% (0)	0% (0)	33% (2)	0% (0)	29% (2)	33% (2)	0% (0)	0% (0)	17% (1)	17% (13)
Respondent Total	13	21	9	2	6	5	7	6	2	1	6	78

6e. In your opinion, should the Science Council have the lead role in priority setting at the System level as in the past?

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	50% (6)	45% (9)	56% (5)	50% (1)	67% (4)	40% (2)	86% (6)	17% (1)	50% (1)	100% (1)	83% (5)	54% (41)
No	42% (5)	35% (7)	44% (4)	50% (1)	17% (1)	20% (1)	0% (0)	67% (4)	0% (0)	0% (0)	0% (0)	30% (23)
Don't know	8% (1)	20% (4)	0% (0)	0% (0)	17% (1)	40% (2)	14% (1)	17% (1)	50% (1)	0% (0)	17% (1)	16% (12)
Respondent Total	12	20	9	2	6	5	7	6	2	1	6	76

6f. In your opinion, should the Science Council have the financial resources for necessary analytic support to help ensure the scientific quality of CGIAR research?

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	85% (11)	70% (14)	100% (9)	100% (2)	83% (5)	60% (3)	86% (6)	83% (5)	50% (1)	100% (1)	83% (5)	81% (62)
No	8% (1)	15% (3)	0% (0)	0% (0)	0% (0)	20% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	6% (5)
Don't know	8% (1)	15% (3)	0% (0)	0% (0)	17% (1)	20% (1)	14% (1)	17% (1)	50% (1)	0% (0)	17% (1)	13% (10)
Respondent Total	13	20	9	2	6	5	7	6	2	1	6	77

General results indicated that the status and contribution of the SC has, in the eyes of a majority of CGIAR stakeholders, declined in recent years. While there are expectations from many that the Science Council (SC) will improve the situation, others prefer to postpone judgment at this early point in time. Specific comments included the following.

- Some Board of Trustees members argued that the TAC's mandate and funding arrangements, not its scientific quality, have been the cause of change in the TAC's performance in the past. Many Center Directors, OECD donors, members of the System Review Team, and others did cite declining scientific quality as a concern. Center Directors noted that that declining quality of TAC resulted from the fact that TAC membership screening criteria were based first on the member's representational value and second by scientific quality. OECD donors reiterated the importance of this issue and pointed out the difficulty the TAC has faced while attempting to remain at the forefront of science and development while also maintaining itself as regionally and gender representative. Non-OECD donors/members added that the declining quality of the TAC resulted from politicization of the TAC to reflect donors' views, and further argued that there exists an overarching issue in whether quality is reflected in the terms of academic brilliance and novelty, or in terms of its relevance and its value to poor people.
- Additional comments from Board members indicated cautious support for the new/transformed SC membership, provided that the SC operates under strict guidelines and maintains a strategic focus on quality assurance and foresight. Center directors were cautiously optimistic, though some noted that outcomes are crucially dependent on the membership in the new SCI. This view was shared by OECD donors and other donors/members, while members of the System Review Team were more doubtful. Other donors/members suggested that the CGIAR might want to request the International Council for Science (ICSU) or a similar group to nominate members to the SC.

- In their comments, Board members explained that the TAC's role in priority setting has declined in the past decade as priorities were set by funders in negotiations with donors, which did not charge the TAC with additional priority-setting tasks. As some Board members described it, TAC recommendations are irrelevant if the donors do not fund them, and the TAC's role in priority setting has been usurped by the donors to meet their own agendas. A member of the System Review Team similarly points to the restricted donor funding in reducing the TAC's role in priority setting.
- Some Directors and System Review Team members argued that the SC should take a lead role in priority setting only if it is not donor driven and if the advice is provided independently. System Review Team members points out that SC priority setting is dependent on its composition and whether it can develop new working arrangements. The members suggested, for example, inputs from the Centers combined with small sub-panels of specialists to prepare for a group of strategists to make final recommendations to the CGIAR funders/stakeholders.
- On the issue of funding resources for the SC, Center Directors commented that resources should be linked to performance and that the SC's advice and guidance should lead to better funding and impact-oriented projects only if its membership carries the required scientific excellence.

6g. Who should the Science Council report to? Rank in order of priority (1 = Highest; 2 = High; 3 = Medium; 4 = Low).

	Center DG	Board of Trustees	OECD Donor	Other Donor/ Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Represent- ative	TOTAL
<b>CGIAR Chairman</b>												
Highest	17% (2)	29% (5)	13% (1)	0% (0)	17% (1)	50% (2)	43% (3)	50% (3)	0% (0)	0% (0)	33% (2)	28% (19)
High	0% (0)	29% (5)	13% (1)	100% (1)	33% (2)	25% (1)	29% (2)	17% (1)	0% (0)	0% (0)	33% (2)	22% (15)
Medium	75% (9)	29% (5)	50% (4)	0% (0)	50% (3)	0% (0)	29% (2)	17% (1)	100% (1)	100% (1)	0% (0)	38% (26)
Low	8% (1)	12% (2)	25% (2)	0% (0)	0% (0)	25% (1)	0% (0)	17% (1)	0% (0)	0% (0)	33% (2)	13% (9)
Respondent Total	12	17	8	1	6	4	7	6	1	1	6	69
<b>The Executive Council</b>												
Highest	46% (6)	35% (7)	22% (2)	100% (2)	50% (3)	60% (3)	0% (0)	60% (3)	100% (1)	0% (0)	43% (3)	40% (30)
High	54% (7)	40% (8)	56% (5)	0% (0)	33% (2)	0% (0)	57% (4)	20% (1)	0% (0)	100% (1)	57% (4)	41% (31)
Medium	0% (0)	20% (4)	22% (2)	0% (0)	17% (1)	40% (2)	43% (3)	20% (1)	0% (0)	0% (0)	0% (0)	17% (13)
Low	0% (0)	5% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	1% (1)
Respondent Total	13	20	9	2	6	5	7	5	1	1	7	75

(Continued on next page)

(Continued)	Center DG	Board of Trustees	OECD Donor	Other Donor/ Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
<b>The CGIAR Director</b>												
Highest	0% (0)	7% (1)	0% (0)	0% (0)	33% (2)	0% (0)	0% (0)	20% (1)	50% (1)	0% (0)	0% (0)	7% (5)
High	8% (1)	27% (4)	25% (2)	0% (0)	17% (1)	0% (0)	0% (0)	40% (2)	50% (1)	0% (0)	33% (2)	19% (13)
Medium	15% (2)	27% (4)	25% (2)	50% (1)	17% (1)	40% (2)	14% (1)	20% (1)	0% (0)	0% (0)	50% (3)	24% (17)
Low	77% (10)	40% (6)	50% (4)	50% (1)	33% (2)	60% (3)	86% (6)	20% (1)	0% (0)	100% (1)	17% (1)	50% (35)
Respondent Total	13	15	8	2	6	5	7	5	2	1	6	70
<b>Membership at large</b>												
Highest	46% (6)	40% (8)	78% (7)	50% (1)	0% (0)	20% (1)	67% (4)	0% (0)	0% (0)	100% (1)	20% (1)	39% (29)
High	31% (4)	30% (6)	0% (0)	0% (0)	50% (3)	60% (3)	17% (1)	60% (3)	50% (1)	0% (0)	20% (1)	30% (22)
Medium	23% (3)	5% (1)	0% (0)	0% (0)	0% (0)	0% (0)	17% (1)	0% (0)	0% (0)	0% (0)	20% (1)	8% (6)
Low	0% (0)	25% (5)	22% (2)	50% (1)	50% (3)	20% (1)	0% (0)	40% (2)	50% (1)	0% (0)	40% (2)	23% (17)
Respondent Total	13	20	9	2	6	5	6	5	2	1	5	74

**7. In your opinion, who/what primarily drives the CGIAR Centers' research agenda? (Rank in order of priority)**

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
<b>Developed countries</b>												
High	31% (4)	60% (12)	33% (3)	50% (1)	83% (5)	60% (3)	29% (2)	33% (2)	50% (1)	0% (0)	33% (2)	45% (35)
Medium	23% (3)	25% (5)	11% (1)	0% (0)	17% (1)	20% (1)	29% (2)	33% (2)	50% (1)	0% (0)	50% (3)	25% (19)
Low	46% (6)	15% (3)	56% (5)	50% (1)	0% (0)	20% (1)	43% (3)	33% (2)	0% (0)	100% (1)	17% (1)	30% (23)
Respondent Total	13	20	9	2	6	5	7	6	2	1	6	77
<b>Developing countries</b>												
High	67% (8)	32% (6)	44% (4)	0% (0)	0% (0)	20% (1)	14% (1)	40% (2)	0% (0)	0% (0)	50% (3)	34% (25)
Medium	25% (3)	32% (6)	33% (3)	100% (2)	17% (1)	60% (3)	43% (3)	20% (1)	100% (2)	100% (1)	17% (1)	35% (26)
Low	8% (1)	37% (7)	22% (2)	0% (0)	83% (5)	20% (1)	43% (3)	40% (2)	0% (0)	0% (0)	33% (2)	31% (23)
Respondent Total	12	19	9	2	6	5	7	5	2	1	6	74
<b>Scientific considerations</b>												
High	8% (1)	40% (8)	33% (3)	100% (2)	17% (1)	40% (2)	57% (4)	40% (2)	0% (0)	100% (1)	33% (2)	35% (26)
Medium	75% (9)	45% (9)	44% (4)	0% (0)	67% (4)	20% (1)	29% (2)	40% (2)	50% (1)	0% (0)	50% (3)	47% (35)
Low	17% (2)	15% (3)	22% (2)	0% (0)	17% (1)	40% (2)	14% (1)	20% (1)	50% (1)	0% (0)	17% (1)	19% (14)
Respondent Total	12	20	9	2	6	5	7	5	2	1	6	75

**8. The External System Review recommended that the CGIAR’s committee structure be streamlined and that a representative executive body be established in order to enhance efficiency and “enable the System to address the current and anticipated needs of the CGIAR and its stakeholders.”** In your opinion will the newly created 21 member Executive Council (which reports to and carries out responsibilities delegated to it by the CGIAR membership) speed up CGIAR decision making and implementation?

8a. Decision making?

	Center DG	Board of Trustees	OECD Donor	Other Donor/ Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	85% (11)	71% (15)	33% (3)	50% (1)	33% (2)	40% (2)	43% (3)	50% (3)	50% (1)	0% (0)	67% (4)	58% (45)
No	8% (1)	0% (0)	22% (2)	0% (0)	33% (2)	20% (1)	0% (0)	0% (0)	50% (1)	0% (0)	0% (0)	9% (7)
Don't know	8% (1)	29% (6)	44% (4)	50% (1)	33% (2)	40% (2)	57% (4)	50% (3)	0% (0)	100% (1)	33% (2)	33% (26)
Respondent Total	13	21	9	2	6	5	7	6	2	1	6	78

Most respondents believed that the Executive Council (ExCo) could potentially increase the efficiency of decision making in CGIAR. Board members and Center Directors alike expressed support for the ExCo in so far as it would help to improve understanding of the issues faced by the Centers, and would be in a position to address such issues in a more efficient manner than the plenary. Directors also commented that the System would benefit from the turnover and exposure of more members to the ExCo over time through membership rotation.

However, improvements in decision-making speed have yet to occur, according to some respondents. Going by decisions reached after MTM 01 and AGM 01, some Directors pointed out the lacking evidence of increased decision-making speed. Moreover, Board members and Center Directors commented that decision-making speed is dependent on the ExCo undertaking the following: (a) conducting wide-ranging consultations with stakeholders, building consensus, and presenting issues and options for decisions by the Group in the AGM; (b) recognizing that the ExCo’s role is only to implement decisions made by members between AGMs; (c) addressing and disposing of small or trivial issues and tasks; (c) limiting its role so that it does not become a scientific manager and attempt to directly oversee activities Systemwide, since it does not possess to the competence to do so; and (d) seeking clarification of the ExCo’s representative nature and the degree of authority it has to make decisions on behalf of the System. A number of critical issues for the ExCo were raised by non-CG scientists, donors, private sector representatives, members of the System Review Team, TAC, and other respondents, as follows.

- First, a number of OECD donors, System Review Team members, TAC members, and the private sector representatives noted that the size of the ExCo—21 members—was too large for effective decision making and could possibly become an additional bureaucratic layer. Related to membership were remarks from NARS representatives calling for strict guidelines for selecting people of genuine merit to the committee. OECD donors suggested that half of the membership in a smaller ExCo should be drawn from or elected by developing country NARs.
- Second, many noted that the lack of incentives or sanctions in the System may limit the ownership and implementation of ExCo decisions by the Systems’ members. Related to this, System Review Team members argued that even with the ExCo, the System has demonstrated an increasing inability to take difficult decisions, an issue that cannot be resolved simply by creation of an ExCo.
- Third, they argued that some donors, particularly mid-sized donors, may feel a growing distance from decision-making in the CGIAR as a result of the ExCo. And while the previous methods of decision making may have been relatively inefficient, they could nonetheless contribute to maintaining the long-term engagement of a large number of donors.
- Finally, TAC members feared the loss of constructive, informal decision making and “deal making” that occurs during the annual and mid-term meetings should the CGIAR change its decision-making processes with the ExCo.

#### 8b. Implementation?

	Center DG	Board of Trustees	OECD Donor	Other Donor/ Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	69% (9)	43% (9)	33% (3)	0% (0)	50% (3)	25% (1)	43% (3)	33% (2)	50% (1)	100% (1)	60% (3)	47% (35)
No	8% (1)	19% (4)	22% (2)	0% (0)	17% (1)	25% (1)	14% (1)	0% (0)	50% (1)	0% (0)	0% (0)	15% (11)
Don't know	23% (3)	38% (8)	44% (4)	100% (1)	33% (2)	50% (2)	43% (3)	67% (4)	0% (0)	0% (0)	40% (2)	39% (29)
Respondent Total	13	21	9	1	6	4	7	6	2	1	5	75

The issue of whether the ExCo will contribute to implementation generated responses that addressed the potential nature of relationships between the ExCo and the Centers. Board members, Center Directors, OECD donors, and others all noted that while faster decision making may lead to

faster implementation, outcomes will depend on whether ExCo decisions are consensus-based, whether ExCo decision-making processes appear transparent, whether resources were forthcoming, and whether the ExCo, the Center directors and staff are in agreement over decisions. Comments from other respondents argued similar points, such as the fact that the ExCo has no formal role in implementation and that implementation is dependent on the Centers and their perceptions of and interactions with the ExCo. On the issue of resources, TAC members pointed out that the donors have made it increasingly difficult for the CGIAR to exercise any central influence over allocations, and unless ExCo decisions or CGIAR policy making is backed with financial control, ExCo influence over implementation will be difficult.

8c. Will the (few) new Challenge Programs be sufficient to open up the CGIAR System to obtain/produce the best science, whether inside or outside the System?

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	31% (4)	35% (7)	22% (2)	100% (1)	0% (0)	40% (2)	0% (0)	33% (2)	50% (1)	100% (1)	83% (5)	33% (25)
No	15% (2)	30% (6)	56% (5)	0% (0)	50% (3)	60% (3)	71% (5)	33% (2)	0% (0)	0% (0)	0% (0)	34% (26)
Don't know	54% (7)	35% (7)	22% (2)	0% (0)	50% (3)	0% (0)	29% (2)	33% (2)	50% (1)	0% (0)	17% (1)	33% (25)
Respondent Total	13	20	9	1	6	5	7	6	2	1	6	76

The issue of CPs generated extensive comment. Members of the Board of Trustees and Center Directors stated that the CPs will improve research by making it more goal- and result-oriented, by opening the CGIAR to partnerships in scientific excellence, and by attracting additional funding. However, there was extensive skepticism made in comments from many respondents. According to some Board members, the success of the CPs are dependent on the content of the activities, the partnerships and linkages made beyond the System, and the efforts made to manage these relationships. Many respondents, including Board members, Directors, and donors, argued that (a) the “best science” may not be the most relevant science to the CGIAR; (b) the modalities of existing partnerships should be reviewed before moving ahead; (c) the CPs represent a necessary, but not sufficient, means of opening the CGIAR, and that other partnerships with private and public advanced research organizations will also contribute significantly; and (d) managing and implementing CPs may require significant allocation of resources for overhead costs such as meetings, coordination activities, oversight bodies, and competitive bidding. Some Board members pointed to the Intergovernmental Panel on Climate Change (IPCC) as a model for successful partnerships, while Directors offered the CGIAR’s Systemwide and eco-regional programs as examples of far less successful partnerships. Other concerns were given as follows:

- Some Directors, TAC members, and others argued that CPs are simply a reorganization and renaming of existing programs, a point also taken up by non-CG scientists. In effect, they argued that the CPs may not result in producing better science than the status quo.
- Directors commented that the “best science” is not the main issue for the CGIAR. Rather, the issue is setting priorities for research and improving decision-making processes that reward Centers conducting good science in high-priority areas and penalize Centers and programs that do not.
- Donors cited problems in the strategic nature of current CPs and argue that the current crop and degree of “capture” by the Centers will not bring about change in practices unless they are managed independently and described more in terms of time-bound outputs. They believed that the CPs consist primarily of re-named existing activities, overlapping and duplicate research, and fail to identify the underlying science, e.g., functional genetics.
- Donors argue that in the past, Centers have developed partnerships to further their research objectives without the CPs. Thus, the outcomes of a formalized approach to partnerships may not have the intended benefits if they limit the Centers’ ability to flexibly pursue research alliances.
- TAC members, NARS representatives, and others argued that the success of the CPs depends on the capacity of the Centers and their staff.

9. Who should be responsible for managing the process of designing a forward-looking, strategic vision for the CGIAR System? (choose one)

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
CGIAR Chair	0% (0)	18% (3)	0% (0)	50% (1)	33% (2)	0% (0)	43% (3)	20% (1)	0% (0)	0% (0)	0% (0)	15% (10)
Membership 50+ members	0% (0)	0% (0)	0% (0)	50% (1)	0% (0)	0% (0)	14% (1)	20% (1)	0% (0)	0% (0)	0% (0)	5% (3)
CGIAR Director/Secretariat	0% (0)	0% (0)	11% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	50% (1)	0% (0)	0% (0)	3% (2)
Science Council	50% (5)	24% (4)	56% (5)	0% (0)	33% (2)	50% (1)	0% (0)	20% (1)	0% (0)	0% (0)	83% (5)	35% (23)
Executive Council (subset of members)	40% (4)	35% (6)	22% (2)	0% (0)	33% (2)	0% (0)	43% (3)	20% (1)	50% (1)	0% (0)	0% (0)	29% (19)
Center Directors Committee	10% (1)	24% (4)	11% (1)	0% (0)	0% (0)	50% (1)	0% (0)	20% (1)	0% (0)	0% (0)	0% (0)	12% (8)
Committee of Board Chairs	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	17% (1)	2% (1)
System Office	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)
Respondent Total	10	17	9	2	6	2	7	5	2	0	6	66

In addition to the responses given above, there were nine responses in which more than one category was chosen. Two chose “All of the Above,” one with the modification that the Chair should lead. The following combinations were also chosen by one respondent each:

- CGIAR Director/Secretariat, Science Council, CDC and CBC;
- CDC and CBC;
- CGIAR Chair, CDC, System office;

- CGIAR Chair & Science Council;
- ExCo, with representatives of Centers and CTAS/stakeholders;
- ExCo and Membership both; and
- Membership, SC, CDC and CBC, collaboratively.

Looking to CGIAR’s vision for 2020, respondents offered a variety of means through which to manage the vision design process. Some Board of Trustees members felt that the design of the CGIAR’s vision should be the central mission of the ExCo, while a member of the System Review Team argued that, in principle, vision design should be undertaken by the TAC or SC, with the Centers providing their own visions within this framework and donors indicating their priorities for global research and willingness to commit funding. Center Directors felt that the design process was the responsibility of the membership as a whole and should be undertaken collectively in the System. Directors, members of the System Review Team, and TAC members felt that management of the process should be designated to a smaller technical body that would provide the resources and information needed by the membership as a whole.

**10. In light of the important role played by Center Boards, the External System Review recommended that more attention be paid to Center governance.**

10a. In your opinion, which Center Boards have the right balance of scientific and managerial excellence? (As respondents chose more than one option, percentages are calculated using the total number of responses per category.)

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Total respondents	13	18	7	4	6	4	4	5	2	1	5	69
Don't Know	77% (10)	67% (12)	71% (5)	100% (4)	100% (6)	50% (2)	100% (4)	100% (5)	100% (2)	0% (0)	60% (3)	77% (53)
CIAT	0% (0)	11% (2)	14% (1)	0% (0)	0% (0)	50% (2)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	7% (5)
CIFOR	0% (0)	11% (2)	0% (0)	0% (0)	0% (0)	25% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	4% (3)
CIMMYT	8% (1)	22% (4)	14% (1)	0% (0)	0% (0)	50% (2)	0% (0)	0% (0)	0% (0)	100% (1)	40% (2)	16% (11)
CIP	0% (0)	11% (2)	0% (0)	0% (0)	0% (0)	25% (1)	0% (0)	0% (0)	0% (0)	0% (0)	20% (1)	6% (4)
ICARDA	8% (1)	6% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (1)	20% (1)	6% (4)
ICLARM	8% (1)	6% (1)	0% (0)	0% (0)	0% (0)	25% (1)	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)	6% (4)
ICRAF	0% (0)	17% (3)	0% (0)	0% (0)	0% (0)	25% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	6% (4)

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(Continued)	Center DG	Board of Trustees	OECD Donor	Other Donor/ Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
ICRISAT	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)	1% (1)
IFPRI	23% (3)	11% (2)	0% (0)	0% (0)	0% (0)	25% (1)	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)	10% (7)
IITA	8% (1)	6% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	3% (2)
ILRI	8% (1)	11% (2)	14% (1)	0% (0)	0% (0)	25% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	7% (5)
IPGRI	15% (2)	17% (3)	0% (0)	0% (0)	0% (0)	50% (2)	0% (0)	0% (0)	0% (0)	0% (0)	20% (1)	12% (8)
IRRI	0% (0)	11% (2)	0% (0)	0% (0)	0% (0)	50% (2)	0% (0)	0% (0)	0% (0)	100% (1)	20% (1)	9% (6)
ISNAR	8% (1)	6% (1)	0% (0)	0% (0)	0% (0)	50% (2)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	6% (4)
IWMI	8% (1)	22% (4)	0% (0)	0% (0)	0% (0)	25% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	9% (6)
WARDA	0% (0)	6% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	1% (1)

Some members of the Board of Trustees noted that while some Boards demonstrated a capacity to give excellent advice, this was not a sufficient condition for the Board possessing the “right balance” of scientific and managerial excellence. Respondents noted their inexperience with most Centers except the few with which they were directly involved.

OECD donors commented that a fundamental problem exists in the structure, composition, and mandates of the Boards and their competence to handle a changing agenda. The Boards, some donors felt, have been dominated by experts in the physical/natural sciences, but are generally weak on management, social sciences, and fiscal skills. This has resulted in “science” Boards rather than Boards of independent legal entities with the

ability to address financial and managerial issues and forge a constructive relationship with Center directors. Members of the System Review Team offered similar comments and noted the following:

- Many board members fail to play an active role in meetings and allocate insufficient time to their position beyond meeting attendance. As a result, many board members do not have opportunities to interact and dialogue with management on strategic issues, and instead simply “react” to management proposals and/or formalistic matters;
- Many board members are often unwilling to take tough decisions, instead waiting (unrealistically) for donors to do so;
- Some members from the South are less outspoken because they want to be sure of re-election for a second term; and
- The success of a Board is highly dependent on the role played by and attitude of its chair.

10b. In your opinion, which Centers have a Board that is effective in governing that Center? (As respondents chose more than one option, percentages are calculated using the total number of responses per category)

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
<b>Total responses</b>	<b>12</b>	<b>20</b>	<b>7</b>	<b>1</b>	<b>6</b>	<b>4</b>	<b>4</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>5</b>	<b>67</b>
Don't Know	75% (9)	55% (11)	57% (4)	100% (1)	100% (6)	50% (2)	100% (4)	80% (4)	100% (2)	0% (0)	60% (3)	69% (46)
CIAT	25% (3)	15% (3)	0% (0)	0% (0)	0% (0)	25% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	10% (7)
CIFOR	8% (1)	5% (1)	14% (1)	0% (0)	0% (0)	25% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	6% (4)
CIMMYT	17% (2)	20% (4)	43% (3)	0% (0)	0% (0)	25% (1)	0% (0)	0% (0)	0% (0)	100% (1)	40% (2)	19% (13)
CIP	0% (0)	10% (2)	0% (0)	0% (0)	0% (0)	25% (1)	0% (0)	0% (0)	0% (0)	0% (0)	20% (1)	6% (4)
ICARDA	0% (0)	5% (1)	29% (2)	0% (0)	0% (0)	25% (1)	0% (0)	0% (0)	0% (0)	0% (0)	20% (1)	7% (5)
ICLARM	25% (3)	10% (2)	29% (2)	0% (0)	0% (0)	25% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	12% (8)
ICRAF	8% (1)	5% (1)	29% (2)	0% (0)	0% (0)	25% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	7% (5)

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(Continued)	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
ICRISAT	0% (0)	5% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)	3% (2)
IFPRI	25% (3)	30% (6)	43% (3)	0% (0)	0% (0)	25% (1)	0% (0)	0% (0)	0% (0)	100% (1)	20% (1)	22% (15)
IITA	8% (1)	0% (0)	0% (0)	0% (0)	0% (0)	25% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	3% (2)
ILRI	0% (0)	5% (1)	29% (2)	0% (0)	0% (0)	25% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	6% (4)
IPGRI	17% (2)	15% (3)	0% (0)	0% (0)	0% (0)	25% (1)	0% (0)	0% (0)	0% (0)	100% (1)	20% (1)	12% (8)
IRRI	17% (2)	15% (3)	29% (2)	0% (0)	0% (0)	25% (1)	0% (0)	0% (0)	0% (0)	100% (1)	20% (1)	15% (10)
ISNAR	0% (0)	5% (1)	0% (0)	0% (0)	0% (0)	25% (1)	0% (0)	20% (1)	0% (0)	0% (0)	0% (0)	4% (3)
IWMI	8% (1)	15% (3)	29% (2)	0% (0)	0% (0)	25% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	10% (7)
WARDA	0% (0)	5% (1)	0% (0)	0% (0)	0% (0)	25% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	3% (2)

Some members of the Board of Trustees expressed a level of distrust in boards that bring in “high-fliers” as Chair instead of developing a sensible internal succession plan. In light of this, there exists some distrust of the boards for CIMMYT, ILRI, WARDs, IITA, and, potentially, CIFOR. Center directors noted that good governance was closely related to the issue of whether the Centers have adequate representation of the various stakeholder groups—especially developing country NARS—to be able to establish meaningful priorities. Members of the System Review Team noted that over the last 10–15 years, some Boards have avoided addressing difficult issues facing the Centers and instead prioritized finding financial solutions, leaving the difficult issues for the donors.

11a. In your opinion, who drives the strategic vision of the Centers?<sup>1</sup>

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Center Boards	82% (9)	70% (14)	100% (9)	0% (0)	33% (2)	0% (0)	0% (0)	50% (3)	50% (1)	100% (1)	50% (3)	58% (42)
Center Directors	18% (2)	30% (6)	0% (0)	100% (2)	67% (4)	100% (3)	100% (7)	50% (3)	50% (1)	0% (0)	50% (3)	42% (31)
Respondent Total	11	20	9	2	6	3	7	6	2	1	6	73

11b. Does the current practice of autonomous Center Boards ensure forward-looking, strategic visions for the Centers?

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	46% (6)	62% (13)	44% (4)	0% (0)	17% (1)	40% (2)	43% (3)	67% (4)	50% (1)	100% (1)	67% (4)	50% (39)
No	38% (5)	29% (6)	44% (4)	100% (2)	67% (4)	60% (3)	57% (4)	33% (2)	50% (1)	0% (0)	17% (1)	41% (32)
Don't know	15% (2)	10% (2)	11% (1)	0% (0)	17% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	17% (1)	9% (7)
Respondent Total	13	21	9	2	6	5	7	6	2	1	6	78

1. For this question, four respondents marked both “Center Boards” and “Center Directors,” indicating that the two work collaboratively. These responses are not included in the figures given above.

11c. Should investors in the System nominate Center Board members to ensure quality (instead of the current Board nomination process)?

	Center DG	Board of Trustees	OECD Donor	Other Donor/ Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	23% (3)	43% (9)	11% (1)	50% (1)	67% (4)	17% (1)	14% (1)	17% (1)	100% (2)	0% (0)	80% (4)	35% (27)
No	77% (10)	48% (10)	89% (8)	50% (1)	33% (2)	67% (4)	57% (4)	67% (4)	0% (0)	100% (1)	0% (0)	56% (44)
Don't know	0% (0)	10% (2)	0% (0)	0% (0)	0% (0)	17% (1)	29% (2)	17% (1)	0% (0)	0% (0)	20% (1)	9% (7)
Respondent Total	13	21	9	2	6	6	7	6	2	1	5	78

While some respondents remarked that autonomous Center boards contributed to forward-looking, strategic visions, many felt that this was not a sufficient practice. Some respondents argued that while investors should have some input in the board nomination process, a more balanced approach was desirable. Board of Trustees members and Center Directors both recognized the vested and narrow interests of investors/donors that could potentially lead to promotion of specific projects over the interest and mandate of a Center. They felt that investors should instead work to continually ensure the System's quality through the CGIAR nomination process. However, donors pointed out the need for CGIAR nominations to carry more weight, e.g., trustees should form a special category in which the role of members would be more than perfunctory.

**12. The External System Review called for the Centers to pursue meaningful collaborative partnerships with strong developing country NARS in areas of strategic research and to build the capacity of the weaker developing country NARS.**

12a. Do you agree with this recommendation?

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	100% (13)	100% (21)	100% (9)	100% (2)	100% (6)	100% (6)	86% (6)	100% (6)	100% (2)	100% (1)	100% (5)	99% (77)
No	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	14% (1)	0% (0)	0% (0)	0% (0)	0% (0)	1% (1)
Don't know	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)
Respondent Total	13	21	9	2	6	6	7	6	2	1	5	78

12b. In your opinion, are the CGIAR Centers doing enough in this area?

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	46% (6)	14% (3)	22% (2)	0% (0)	0% (0)	40% (2)	14% (1)	17% (1)	0% (0)	0% (0)	40% (2)	22% (17)
No	54% (7)	81% (17)	56% (5)	100% (1)	67% (4)	40% (2)	86% (6)	83% (5)	100% (2)	100% (1)	60% (3)	70% (53)
Don't know	0% (0)	5% (1)	22% (2)	0% (0)	33% (2)	20% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	8% (6)
Respondent Total	13	21	9	1	6	5	7	6	2	1	5	76

The External System Review's recommendation regarding developing country NARS was strongly supported by all respondents. Comments were as follows:

- Center Directors, OECD donors, and others note that capacity development requires a long-term perspective and is always subject to resource availability.
- Center Directors noted the need for all Centers to strengthen collaborative partnerships and capacity building, and that regional bottom-up priority-setting exercises currently being undertaken are intended to provide the basis for this.
- Center Directors and other respondents argued for increased collaboration with and support for stronger NARS.

13a. Should Center collaboration with private companies increase substantially beyond the current level?

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	75% (9)	48% (10)	67% (6)	100% (2)	67% (4)	67% (4)	71% (5)	33% (2)	100% (2)	0% (0)	50% (3)	60% (47)
No	17% (2)	24% (5)	22% (2)	0% (0)	17% (1)	17% (1)	0% (0)	50% (3)	0% (0)	100% (1)	33% (2)	22% (17)
Don't know	8% (1)	29% (6)	11% (1)	0% (0)	17% (1)	17% (1)	29% (2)	17% (1)	0% (0)	0% (0)	17% (1)	18% (14)
Respondent Total	12	21	9	2	6	6	7	6	2	1	6	78

Should the CGIAR System contract out more research to others?

13b. To private companies

	Center DG	Board of Trustees	OECD Donor	Other Donor/ Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	54% (7)	42% (8)	43% (3)	100% (2)	67% (4)	80% (80)	83% (5)	33% (2)	50% (1)	0% (0)	20% (1)	51% (37)
No	38% (5)	32% (6)	57% (4)	0% (0)	17% (1)	20% (1)	0% (0)	33% (2)	50% (1)	100% (1)	60% (3)	33% (24)
Don't know	8% (1)	26% (5)	0% (0)	0% (0)	17% (1)	0% (0)	17% (1)	33% (2)	0% (0)	0% (0)	20% (1)	15% (11)
Respondent Total	13	19	7	2	6	5	6	6	2	1	5	72

13c. To advanced countries' NARS

	Center DG	Board of Trustees	OECD Donor	Other Donor/ Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	69% (9)	95% (18)	86% (6)	100% (2)	83% (5)	100% (5)	67% (4)	80% (4)	100% (2)	100% (1)	80% (4)	85% (60)
No	23% (3)	0% (0)	14% (1)	0% (0)	0% (0)	0% (0)	0% (0)	20% (1)	0% (0)	0% (0)	20% (1)	8% (6)
Don't know	8% (1)	5% (1)	0% (0)	0% (0)	17% (1)	0% (0)	33% (2)	0% (0)	0% (0)	0% (0)	0% (0)	7% (5)
Respondent Total	13	19	7	2	6	5	6	5	2	1	5	71

## 13d. To developing countries' NARS

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	92% (12)	95% (18)	86% (6)	100% (2)	83% (5)	80% (4)	83% (5)	100% (6)	100% (2)	100% (1)	100% (6)	92% (67)
No	0% (0)	5% (1)	14% (1)	0% (0)	0% (0)	20% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	4% (3)
Don't know	8% (1)	0% (0)	0% (0)	0% (0)	17% (1)	0% (0)	17% (1)	0% (0)	0% (0)	0% (0)	0% (0)	4% (3)
Respondent Total	13	19	7	2	6	5	6	6	2	1	6	73

Comments on contracting to NARS and private companies generated extensive comment. Center Directors pointed out just how important private sector collaboration is—whether with domestic or multinational firms—given the rapid decline of public sector agricultural research expenditures in many developing countries. They also noted that as Center resources remain limited and demands on the Centers increases, research outsourcing is becoming more and more common, and is a valuable means of ensuring quality science and expanding critical mass. OECD donors recognized the benefits to developing countries of well-organized, complementary, and sequential collaborations between the CGIAR, private sector, and NARS.

Respondents noted specific areas with potential for private sector collaboration and contracting, including (a) hybrid seed and seed development; (b) genomics, biotechnology, and transgenic crop research; (c) water; (d) animal vaccines; (e) bio-pesticides; and (f) research tools and equipment for molecular biology and information technology. Generally, a number of common concerns were raised by respondents such as:

- The need for greater information exchange between the private sector and Centers and closer examination of key issues to foster collaborations and contracting;
- The need to balance private sector contracting with the Centers' objectives and to maintain independence from private sector interests; and
- The need to support private sector activities that extend and complement CGIAR research and technological outputs by bringing outputs to farmers and other user, e.g., through production, marketing, and distribution of improved seed, vaccines, and diagnostic tools.

Though some members of the Board of Trustees noted that there has been insufficient exploitation of opportunities to collaborate with or contract to the private sector, others believed that the private sector is not often in a position to undertake research at costs lower than those faced by the

Centers. Board members, Center Directors, NARS representatives, and most others offered cautionary comments in working with the private sector, including:

- Concerns that private sector collaboration could potentially bias the types or public nature of research undertaken by the Center or divert Centers from their objectives;
- Consideration of collaboration and contracting on a case-by-case, Center-specific basis;
- Concerns that limited areas of overlap exist between the private sector and Centers that do not warrant substantial increases in research outsourcing, particularly in Centers such as IFPRI, ISNAR, IPGRI, CIFOR, and Centers with a significant integrated natural resource management (INRM) focus, according to Center Directors;
- Concerns that the CGIAR's role is to produce what private companies, universities and NARS are unable to produce, and that private sector collaboration should be limited to prevent these goals from being altered, according to non-CG scientists;
- A need for a well-articulated model and strong, formal agreements for collaborations or contracts with the private sector to protect the interests of poor people and developing countries, and for contracting to be carried out only through competitive processes, according to OECD donors and members of TAC. By way of example, members of TAC offered the Cooperative Research Centre in Australia as a potential model;
- Recognition of the need to address IPR issues relevant to private sector collaborations and outsourcing, according to non-CG scientists, OECD donors, and members of the System Review Team;
- Concerns that collaboration and contracting should be undertaken selectively, i.e., with private companies that take responsibility on development issues (perhaps for image-building purposes), according to members of the System Review Team; and
- A desire by OECD donors and others to promote collaborations and contracting that emphasize private companies and NARS in developing countries, at least where capacity exists.

On the issue of biotechnology and transgenic crop research, feedback from many respondents indicated that the optimal route of future research will occur where the private sector targets developed countries and developing country commercial farmers, while the Centers target low-resource farmers of developing countries. There was recognition from the System Review Team and others that the private sector is currently conducting far more research than the public sector in certain fields (e.g., applied plant genomics), and that the Centers should access these emerging technologies to promote their objectives of poverty reduction in developing countries. The example of "Golden Rice," among others, was raised by Center Directors. To this end, OECD donors, and NARS representatives and others suggested more partnerships with major multinational "life sciences" companies.

**14. Some scientists and development practitioners worry that CGIAR Centers are “crowding out” developing country NARS’ research that is best conducted at the national level. Do you agree?**

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	8% (1)	19% (4)	33% (3)	100% (2)	50% (3)	40% (2)	0% (0)	50% (3)	50% (1)	0% (0)	50% (3)	28% (22)
No	92% (12)	67% (14)	67% (6)	0% (0)	17% (1)	40% (2)	71% (5)	50% (3)	0% (0)	100% (1)	33% (2)	59% (46)
Don't know	0% (0)	14% (3)	0% (0)	0% (0)	33% (2)	20% (1)	29% (2)	0% (0)	50% (1)	0% (0)	17% (1)	13% (10)
Respondent Total	13	21	9	2	6	5	7	6	2	1	6	78

In responses to the questions above, members of the Board of Trustees, Center Directors, and others believed that NARS-CGIAR partnerships are well planned and implemented so as to avoid crowding out. Moreover, few believed that the magnitude of either CGIAR or NARS expenditure on research in developing countries or the types of commodity and systems research pursued by either were large enough to cause crowding out, or that the spectrum of research mandates was large enough. In general, most respondents argued that many NARS have, in fact, been strengthened by their partnerships with the Centers and that crowding out of developing country NARS research was not a major issue for the CGIAR. NARS representatives remarked that Centers do not possess the readiness, energy, or capacity to crowd out NARS research. A number of additional comments and observations on this topic were offered, as follows:

- Where NARS are weak, they may be more susceptible to crowding out than stronger NARS (comments from Center Directors).
- Where Centers are doing research in developing countries, governments often limit funding to their own NARS. This may be true particularly for countries that host Centers. This argues for Center collaboration with NARS being tied to the condition that national research budgets are maintained or increased (comments from Board members and OECD donors).
- To a certain extent, the CGIAR has helped to slow down a general process of withdrawal of support for agricultural research in developing countries. However, this does not imply that funding for agricultural research would otherwise go to developing country NARS if it did not go to the CGIAR. It would most likely go to some other non-agricultural research activity. Thus, to the extent the CGIAR is able to make a case for developing country agricultural research, NARS benefit as well (comments from Center Directors).

- In the future, partnerships with weaker NARS could include financial support from the CGIAR, while partnerships with stronger NARS could rely only on government funding (comments from OECD donors).
- In many cases the Centers pay lip service to NARS collaboration while failing to involve NARS adequately (comments from members of the private sector).

Critically, comments were offered on the issue of the allocation of roles and responsibilities between the CGIAR Centers and NARS, as follows:

- Some Centers place undue emphasis on promoting their finished germplasm, rather than helping NARS scientists more efficiently produce their own material (comments from Board members).
- The CGIAR Centers should focus on strategic research and encourage NARS to address national priorities and research: agronomic trials and varietal development by conventional breeding can be done by NARS while the CGIAR focuses on other issues (comments from NARS representatives).
- The CGIAR Centers that still work in germplasm have a tendency to pursue too much downstream research and do not concentrate on their core competency—maintaining the germplasm they have in trust and accumulating related knowledge. This leads to a decline of competencies by the Centers, which are not always “top level” in their core competencies (comments from non-CG scientists).
- The CGIAR does contribute to both brain drain from and unfair competition with the NARS (comments from OECD donors).
- Financial constraints on the Centers—income forgone and risks incurred in delivery/quality—do not provide incentives to the Centers to take risks. Hence, collaborative programs or CPs should be independently managed (comments from OECD donors).

OECD donors further commented on the need of the CGIAR to focus on international public goods generation. They argued that donor emphasis on nearer term measurable impacts, particularly associated with bilateral and regional funding pockets, is pushing the Centers into areas where the international research contribution is less clear than a localized development outcome. While this situation may not be ideal, it is hard to fashion a remedy as long as insufficient “core” funding is available, as Centers are forced to carry out development projects (or research that is mostly adaptive) to maintain their fundamental research strengths and overall program coherence. While some donors recognized the key role of core funding, they also admitted that shorter term projects are, by necessity, becoming the “patches” that help keep core programs in tact. A significant question for donors, they stated, is to what extent restricted funding is matched using World Bank funds, since preferential matching of less restricted funding or funding focusing on international public goods generation is preferable to the current “market-driven” system. They noted that matching development project funding, as is now the case with almost everything that is “agreed agenda,” is not a strategic means for focusing World Bank resources. They stated that World Bank funds are the most important in the System,

since they are not only unrestricted by Center, but in the System as a whole, and that decisions on the use of those funds should be reflected in the analytical and deliberative processes involving the SC and the donors.

**15. Some people have suggested to the meta-evaluation team that “knowledge of germplasm and germplasm research appropriately sensitive to agro-ecological conditions” is the core competency of the CGIAR. Do you agree?**

	Center DG	Board of Trustees	OECD Donor	Other Donor/ Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	50% (6)	62% (13)	88% (7)	100% (2)	67% (4)	83% (5)	71% (5)	67% (4)	100% (2)	100% (1)	50% (3)	68% (52)
No	33% (4)	19% (4)	13% (1)	0% (0)	17% (1)	17% (1)	14% (1)	33% (2)	0% (0)	0% (0)	17% (1)	19% (15)
Don't know	17% (2)	19% (4)	0% (0)	0% (0)	17% (1)	0% (0)	14% (1)	0% (0)	0% (0)	0% (0)	33% (2)	13% (10)
Respondent Total	12	21	8	2	6	6	7	6	2	1	6	77

**16. In the meta-evaluation team’s consultations, some people have expressed the view that the CGIAR is drifting from its core competencies [germplasm research] when it embarks on research related to global issues that extend well beyond “agro-ecologically sensitive germplasm research,” such as climate change, natural resource management, and HIV/AIDS. In their view, these other issues are best addressed by the developing countries’ NARS.**

Do you agree with the view that the CGIAR should primarily focus on its “core competency” (as defined here)?

	Center DG	Board of Trustees	OECD Donor	Other Donor/ Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	31% (4)	30% (6)	44% (4)	100% (2)	67% (4)	67% (4)	14% (1)	33% (2)	0% (0)	100% (1)	33% (2)	38% (30)
No	69% (9)	65% (13)	44% (4)	0% (0)	33% (2)	33% (2)	71% (5)	67% (4)	100% (2)	0% (0)	33% (2)	55% (43)
Don't know	0% (0)	5% (1)	11% (1)	0% (0)	0% (0)	0% (0)	14% (1)	0% (0)	0% (0)	0% (0)	33% (2)	6% (5)
Respondent Total	13	20	9	2	6	6	7	6	2	1	6	78

**17. What are the *chief* accomplishments that have been achieved through widening the scope of CGIAR activities beyond traditional varietal improvement research? For each noted accomplishment, where available, please provide evidence in support of your assessment.**

*Comments from members of the Board of Trustees*

- Development of more sustainable cropping systems; greater understanding of improved farming techniques
- Enhanced contributions from livestock in crop/livestock systems to soil fertility and income generation
- Movement into marginal and low-productivity areas for cereal cultivation, e.g., drought resistance in maize for South Africa
- Promotion of improved agronomic techniques e.g., contour plowing, zero tillage, and bed and farrow systems
- Integrated pest management
- Integrated natural resource management and NRM research
- Greater understanding of post-harvest processing (Inter-Center Working Group)
- Greater understanding of indigenous knowledge; participative farmer research
- Greater understanding of enabling environments
- Epidemiology and control of major livestock diseases of trade
- Diagnostic tools for trypanosomes and identification of genes for parasite resistance in livestock

- Feeding systems and marketing considerations in small holder dairying
- Greater understanding of role of water conservation
- Giant clam culturing in Asia
- Fish stock assessments and aquaculture impacts
- Policy analysis that is driving innovative research and positively affecting government policies, e.g., 2020 Vision series, management of shared resources, and poverty mapping, e.g., IFPRI's work on policy research

*Comments from Center directors*

- Germplasm research, disease prevention, and biodiversity work
- Biotechnology breakthroughs: apomixis research; NERICA, etc.
- Advancing techniques for managing soil nutrients; zero tillage systems ( Rice-Wheat Consortium)
- Development of the new rices in West Africa employing modern molecular science
- Advancing IPM research
- Advancing INRM research
- Development of field level water saving techniques for rice production
- Guidelines for fertilizer selection
- Research and partnerships on aquaculture, aquatic resources; work on fish and fisheries by ICLARM
- Research on forest resources systems and agroforestry; work on forestry and agroforestry by CIFOR and ICRAF
- Policy work, e.g., major support for international debate and national advice by IFPRI, ISNAR
- Added synergies from complementarities among and between Centers
- Support to organization, management, and training of NARS, particularly NAROs/NARIs, from IPGRI, IRRI, CIMMYT, ICRISAT, ICARDA, IITA, and others
- Deepened and extended the reach of the CGIAR including into the Pacific and Caribbean regions
- Simple cost-benefit analysis software, enabling for rapid comparison of crop and fertilizer management options
- A wider range of partners and sources of funding
- Interdisciplinary research
- Greater impacts through uptake pathway development; more relevancy
- Policy reform: IPGRI's work on international genetic resources policy, IFPRI's work on food policy
- Promoting awareness: raising issues like agroforestry, fisheries, plight of NARS, genetic resources, etc.; giving "legitimacy" to areas beyond varietal improvement, e.g., INRM research
- Support, duplication, and strengthening of some of FAO's work in food and hunger problems
- Undertaking research more efficiently than UNDP, FAO, and regional development banks, especially for Centers like ISNAR, IFPRI

*Comments from NARS representatives*

- Training for southeast Asia (IRRI)
- Use of GIS as a tool for crop management and IPM, e.g., cassava measuring in Africa
- Farmer participatory research

*Comments from non-CG scientists*

- Greater integration of research beyond the enhancement of production and productivity of a particular crop, e.g., social forestry
- Major advances in decreasing food insecurity in Africa due to agroforestry-based NRM research; improvements in NRM in other regions
- Major decreases in pesticide use in rice through IPM
- Raising competence within NARS
- Boosted appreciation for the potential returns to investment in national and international research
- Better understanding of rural policy issues

*Comments from OECD donors*

- Watershed management, sustainable use of hillsides and agroforestry
- Greater access to information on technology for development and for poor countries
- NARS staff capacity building
- Recognition that even the finest germplasm research needs to be combined with other aspects of agricultural / natural resource production systems for an effective developmental impact
- A gradual recognition that rural livelihoods are complex and that effective research needs both good diagnosis and holistic response (ICRAF)
- Policy responses (CIFOR, IFPRI, and ISNAR)

*Comments from others*

- Integrated natural resource management strategy
- Inclusion of and focus on people
- Farmer-designed research on ecosystems
- NRM research and more effective links with NARS and development activities
- WARDA's malaria work
- ICRAF's managed fallows
- IIMI's database work
- IFPRI's 20/20 vision and mobilization of donor attention

*Comments from members of the Private Sector*

- Policy work

*Comments from members of the System Review Team*

- Focus on impact
- Training
- Providing the scientific basis for IPM and biological control, e.g., cassava mealy bug in Africa
- The role of fish and vegetables in human nutrition
- Food policy research; sociological considerations vis-à-vis poor farmers
- Social science research related to health and agriculture
- Policy research (IFPRI's 2020 Vision) and complementarities with FAO
- Policy research (CIFOR ) and its influence on the global forestry agenda

*Comments from members of TAC*

- Water, forestry, fisheries, natural resource management
- Policy and social science research: CIFOR on forestry policy and IFPRI on food policy

**18. There is wide agreement that CGIAR research before 1985 on improved varieties of wheat, rice, and maize has generated large social gains. Some people have expressed their view to the meta-evaluation team that since the mid-1980s, the results have been significantly less.**

18a. In your opinion, in recent years has the impact of CGIAR germplasm research increased, remained about the same, or decreased? (Choose one)

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Decreased	0% (0)	47% (9)	14% (1)	0% (0)	80% (4)	17% (1)	14% (1)	33% (2)	0% (0)	100% (1)	40% (2)	30% (21)
Remained about the same	64% (7)	32% (6)	57% (4)	100% (2)	20% (1)	83% (5)	71% (5)	50% (3)	100% (2)	0% (0)	60% (3)	54% (38)
Increased	36% (4)	21% (4)	29% (2)	0% (0)	0% (0)	0% (0)	14% (1)	17% (1)	0% (0)	0% (0)	0% (0)	17% (12)
Respondent Total	11	19	7	2	5	6	7	6	2	1	5	71

18b. In some people's opinion, the gains that have occurred in recent years could have been achieved as well or nearly as well by NARS or the private sector, even in the absence of the CGIAR institutions. Do you agree?

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	0% (0)	0% (0)	14% (1)	0% (0)	0% (0)	25% (1)	14% (1)	17% (1)	0% (0)	0% (0)	0% (0)	6% (4)
No	100% (13)	90% (18)	86% (6)	0% (0)	60% (3)	75% (3)	86% (6)	83% (5)	100% (2)	100% (1)	100% (1)	88% (58)
Don't know	0% (0)	10% (2)	0% (0)	0% (0)	40% (2)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	6% (4)
Respondent Total	13	20	7	0	5	4	7	6	2	1	1	66

18c. What evidence can you point to in support of your assessment?

Many respondents argued that Center germplasm remains the basis of many varietal releases in developing countries, either directly or when used as parents. In the absence of this, they believed that germplasm progress would have been considerably slower in developing countries. Extensive evidence was provided by respondents, including the following:

- Positive impacts in beans, based on the use of CGIAR research and knowledge acquired in Africa and Latin America, particularly with ICRISAT’s rescue of bean crops in post-genocide Rwanda.
- Positive impacts in roots and tubers.
- Positive impacts in wheat, including new variety adoption, yields, quality, disease resistance, drought, and heat tolerance from CIMMYT.
- Positive impacts in livestock.
- Positive impacts sometimes masked decline in the resource base, primarily in soils.
- Positive impacts from wheat transformations, drought resistance, and QPM from CIMMYT maize research.
- Variable impact in rice and other crops: impacts have increased in some crop-specific Centers (WARDA with up-land rice), remained about the same in other Centers (IRRI with irrigated rice), and possibly decreased in other Centers (e.g., those working on millet, root crops, groundnuts), according to members of the Board of Trustees. They attribute decreasing impacts to Center research that covers too many thematic fields and issues, as well as the failure of some developing country NARS to use the Centers’ results and further develop varieties for location-specific use.
- Increasing impacts from Centers *other than* CIMMYT and IRRI.
- Increasing impacts from private sector use of CGIAR germplasm.
- Generally decreasing impacts resulting from the absence of a holistic approach to research and the CGIAR’s shortcomings in addressing whole biophysical systems (including natural resources) and socio-economic systems.
- Generally decreasing impacts as the number and quality of actors—private firms, NARS—increases over time.

Center Directors offered additional evidence of the positive impacts of the CGIAR’s germplasm research, citing low food prices globally, continued land saving through intensification, systems diversification, poverty reductions, and increased food security despite continued rapid population growth. They add that CGIAR germplasm research has generated many new, though possibly less visible, impacts by extending beyond wheat, maize, and rice to include other food crops, forages, fish, trees, and livestock as well as maintenance research. They argue that the CGIAR remains essential since (a) it is not efficient for each NARS to address all germplasm research when the CGIAR can provide a collective service to them; (b) many of these crops are of little or no interest of the private sector; (c) many NARS would pull out of researching such crops if they no longer received backstopping from the Centers; and (d) the synergies generated by CGIAR-NARS collaboration are themselves what make the research gains possible.

Center Directors also noted that earlier germplasm research generated significant advances in more favorable areas (e.g., crops such as maize and rice, longstanding subjects of research), but as research moves into more difficult areas (e.g., sorghum, millet, cassava, and other crops grown on more marginal land), results may take longer to achieve and impact more difficult to assess. Evidence of these issues are contained a recent study by R.E. Evenson, “Crop Genetic Improvement and Agricultural Development,” (May 2000) commissioned by the CGIAR. The study concludes that “consumers benefit most and poor consumers benefit most of all from agricultural research. Farmers are consumers, too, and for the world’s smallest farm producers the total producer and consumer gains are large...the provisional findings provide support for the proposition that [International Agricultural Research Centers (IARCs)] investments have had impacts in all of the study crops. These impacts have been large, partly because of high ‘leverage’ through IARC-NARS joint production. The placing of crop germplasm improvement at the core of IARC programs appears to have a very strong justification.” Additional conclusions from the study lend further support to the importance of CGIAR germplasm research.

However, members of the System Review Team argue that social gains of the past were overestimated.

There was general agreement among respondents of the importance of complementarities between the CGIAR and NARS, and that many gains achieved by the CGIAR could not have been undertaken by the NARS alone. Members of the Board felt that since 1985, CGIAR-NARS partnerships have strengthened NARS and helped them become much better trained and competent, and that the CGIAR will continue to have a major research and coordination/facilitating role for at least another 10-20 years. Many respondents, including OECD donors and members of the System Review Team, also recognized that many NARS in developing countries were too weak—whether from lacking resources, limited capacity, inefficiency, corruption, or donor distrust—to undertake a germplasm research similar to that of the CGIAR. Rather, many Centers fulfill the research roles of NARS as their resources and/or capacity decrease.

Board members, Center Directors, and many others were far more skeptical about the claim that the private sector could have achieved similar gains in the absence of the CGIAR. Board members commented that the private sector’s profit motive is not always conducive to producing the “best” varieties essential to agricultural growth and poverty reduction in developing countries. Many Board members, Center Directors, OECD donors, and others recognized that the private sector will not undertake germplasm research in the absence of markets and significant consumer purchasing power. Some believed that the private sector would do this work for a fee, but that private sector research costs would be far in excess of Center costs. OECD donors further noted that since most CGIAR crops are open-pollinated, the potential role of the private sector in breeding remains somewhat limited, even in the most commercialized agricultural systems.

However, many respondents noted the growing capacity of the private sector to conduct research and generate new gains in agriculture as farms become larger, developing countries become more market-oriented, and national policies stimulate easier borrowing for private companies. Members of the System Review Team note that in some areas, the private sector could have done work on wheat, groundnut, and maize and, to some extent, rice. In some cases, the private sector has had access to genetic material from or via the Centers, but in general, private companies (and NARS) in China, India, Brazil, and some other countries require very limited input from the Centers, if at all.

Still, OECD donors commented that few NARS or companies have an economic basis, even through national public support, to take on global or regional breeding efforts that generate international public goods. They believe that experience to date suggests that clearly international programs such as the CGIAR's enjoy a comparative advantage over a single-nation entity serving a wide region, though exceptions may apply in specific research targeting the needs of a region with a number of smaller national programs. Still, they claim that even where these national programs coordinate well through a network or other means, the underpinning investment by Centers provides a stable platform upon which other collaboration often rests.

**19. Some people have expressed to the meta-evaluation team that the World Bank and some other donors' financing of overhead costs of Centers has ensured stability of the System and enabled the CGIAR to focus on a longer-term research agenda. Others have indicated that the way the Bank's (and some other donors') contributions are allocated has created disincentives to increase efficiency within the System.** In your opinion, to what extent has the financing of overhead costs of Centers by the World Bank and some other donors resulted in:

19a. Creating stability, to enable focus on long-term research?

	Center DG	Board of Trustees	OECD Donor	Other Donor/ Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
To a significant extent	83% (10)	75% (15)	83% (5)	50% (1)	100% (6)	67% (4)	100% (6)	83% (5)	0% (0)	100% (1)	50% (3)	77% (56)
To some extent	17% (2)	25% (5)	17% (1)	0% (0)	0% (0)	17% (1)	0% (0)	17% (1)	100% (2)	0% (0)	50% (3)	21% (15)
Not at all	0% (0)	0% (0)	0% (0)	50% (1)	0% (0)	17% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	3% (2)
Respondent Total	12	20	6	2	6	6	6	6	2	1	6	73

19b. Disincentive to increase efficiency?

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
To a significant extent	0% (0)	5% (1)	17% (1)	50% (1)	17% (1)	17% (1)	0% (0)	17% (1)	50% (1)	0% (0)	20% (1)	11% (8)
To some extent	18% (2)	42% (8)	50% (3)	50% (1)	67% (4)	50% (3)	67% (4)	17% (1)	0% (0)	100% (1)	40% (2)	41% (29)
Not at all	82% (9)	53% (10)	33% (2)	0% (0)	17% (1)	33% (2)	33% (2)	67% (4)	50% (1)	0% (0)	40% (2)	47% (33)
Respondent Total	11	19	6	2	6	6	6	6	2	1	5	70

19c. Disincentive to mobilize alternative sources of funding?

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
To a significant extent	0% (0)	5% (1)	17% (1)	50% (1)	0% (0)	17% (1)	0% (0)	0% (0)	50% (1)	0% (0)	40% (2)	10% (7)
To some extent	25% (3)	42% (8)	33% (2)	50% (1)	60% (3)	50% (3)	80% (4)	50% (3)	50% (1)	100% (1)	60% (3)	46% (32)
Not at all	75% (9)	53% (10)	50% (3)	0% (0)	40% (2)	33% (2)	20% (1)	50% (3)	0% (0)	0% (0)	0% (0)	43% (30)
Respondent Total	12	19	6	2	5	6	5	6	2	1	5	69

## 19d. Other.

Members of the Board of Trustees noted that some inertia is evident in the System because of overhead financing from the World Bank and other donors, particularly where larger, older Centers gained advantage from this arrangement relative to smaller, younger Centers. Others felt that funding was insufficient to ensure the stability of long-term research for the CGIAR.

Center Directors commented that efficiency gains can be generated by having Centers compete for resources, but such gains may be offset if Centers are forced to divert attention to fundraising rather than science. Moreover, Directors noted the lack of alternative funding sources to support what the CGIAR System was designed to do and that Centers may be forced to pursue activities outside their core competencies in order to access alternative sources while funding their own institutional bureaucracies.

According to Board members, financing of overhead costs of Centers by the World Bank and some other donors has also resulted in:

- Financial stability and a buffer in situations where restricted funding are more than 50 percent of funding and where grants are for approximately three years, thereby compensating for the general decline in unrestricted funding.
- Funding of less glamorous research in areas that donors find unfashionable but that developing countries need.
- Attraction of good staff, but a decline in the movement and mobility of scientists in and out of the System.
- An ability to generate programs for competitive funding from non-System donors.
- A trend towards special project funding.
- Incentives for shaping a thematically well-balanced research program.

Center Directors made the following comments:

- The major problem with incentives has been the refusal of donors to pay adequate levels of overhead on projects because of the presence of unrestricted core. The fact that donors frequently cannot pay for either overhead or the direct cost of scientists working on restricted projects they fund is an obvious financial problem, especially as the availability of unrestricted funds is decreasing steadily. It is also critically important that donors understand that Centers, for the same core funding problem reason, need to have special/restricted core project funds that pay for the real core program of the Center, not for additional activities. While new thrusts are important, there needs to be a better balance of financing—the medium-term plan first, and then when this is substantially satisfied, additional activities.
- It should be noted that the World Bank and some other donors' financing is not simply of "overhead costs," but is more broadly "unrestricted" funding. Restricted or targeted funding also supports "overhead costs." The key difference is that restricted or targeted funding is restricted or targeted to specific research areas and is short term in nature (three to five years). Consequently it does not provide a reliable means of supporting the critical mass needed for long-term research. The unrestricted funding is key to providing the Centers with flexibility to maintain long-term research programs and fusing together the diverse short-term grants into an integrated program.

- Without unrestricted core funding, the Centers would become little more than consulting companies. The percentage of such funding provided, however, is quite low and does not act as a disincentive to look elsewhere. On the contrary— it allows some breathing space to enable Centers to look elsewhere.

OECD donors noted that the overhead funding allows for long-term and more comprehensive problem-solving, thereby reducing the need to keep asking a variety of donors to buy into a patchwork of projects. However, they argue that it could be used more strategically if it reflected System priorities and strategies, and not the so-called market of donors made up of bilateral, regional, and global funding. Members of the System Team Review noted that the overhead funding has allowed for the creation of an international community focused on agricultural research in developing countries, as well as an image of the CGIAR to some outsiders (e.g., NGOs) that the CGIAR is ruled by the World Bank to some extent. They also commented that while the overhead funding contributes to long-term research, such research must be accompanied by realistic “grading” of the quality and direction of that research, where a “passing grade” should be essential for continuance of the core funding. Members of the TAC commented that the overhead funding has also resulted, to a significant extent, in misallocations due to the matching funds formula.

**20. In your opinion, to whom are the Centers currently accountable for their results and impact?** From the following, select two and rank them in importance (1 = Most accountable, 2 = Accountable).

	Center DG	Board of Trustees	OECD Donor	Other Donor/ Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Represent- ative	TOTAL
<i>Center Boards</i>												
Most accountable	43% (3)	23% (3)	25% (1)	0% (0)	0% (0)	33% (1)	71% (5)	75% (3)	50% (1)	100% (1)	100% (2)	43% (20)
Accountable	57% (4)	69% (9)	75% (3)	100% (1)	100% (3)	67% (2)	29% (2)	25% (1)	50% (1)	0% (0)	0% (0)	55% (26)
(3, added by respondent)	0% (0)	8% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	2% (1)
Respondent Total	7	13	4	1	3	3	7	4	2	1	2	47
<i>Donors</i>												
Most accountable	58% (7)	90% (18)	57% (4)	100% (2)	67% (4)	100% (5)	67% (4)	25% (1)	100% (2)	0% (0)	75% (3)	71% (50)
Accountable	42% (5)	10% (2)	43% (3)	0% (0)	33% (2)	0% (0)	33% (2)	75% (3)	0% (0)	100% (2)	25% (1)	29% (20)
Respondent Total	12	20	7	2	6	5	6	4	2	2	4	70

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(Continued)	Center DG	Board of Trustees	OECD Donor	Other Donor/ Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Represent- ative	TOTAL
<i>Developing countries</i>												
Most accountable	67% (6)	27% (3)	80% (4)	0% (0)	0% (0)	50% (1)	0% (0)	20% (1)	0% (0)	0% (0)	0% (0)	36% (15)
Accountable	33% (3)	73% (8)	20% (1)	0% (0)	100% (3)	50% (1)	100% (2)	80% (4)	100% (1)	0% (0)	100% (4)	64% (27)
Respondent Total	9	11	5	0	3	2	2	5	1	0	4	42
<i>Scientific community</i>												
Most accountable	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (2)	0% (0)	0% (0)	33% (1)	11% (3)
Accountable	100% (5)	67% (4)	100% (2)	100% (1)	100% (1)	100% (3)	100% (3)	0% (0)	100% (1)	0% (0)	67% (2)	81% (22)
(3, added by respondent)	0% (0)	17% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	4% (1)
(4, added by respondent)	0% (0)	17% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	4% (1)
Respondent Total	5	6	2	1	1	3	3	2	1	0	3	27
<i>No one</i>												
Most accountable	0% (0)	0% (0)	0% (0)	0% (0)	100% (2)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	67% (2)
Accountable	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)	0% (0)	33% (1)
Respondent Total	0	0	0	0	2	0	0	0	1	0	0	3

In addition to the responses presented here, approximately one-third of respondents chose more than two categories to rank. Percentages were calculated on the basis of total respondents (51) who chose only two categories and ranked them. Calculation of responses that precisely followed the question is as follows:

*To Center Boards:* Most accountable: 18% (9); Accountable: 31% (16); **Total: 49% (25)**

*To donors:* Most accountable 61% (31); Accountable: 25% (13); **Total: 86% (44)**

*To developing countries:* Most accountable: 16% (8); Accountable: 27% (14); **Total: 43% (22)**

*To the scientific community:* Most accountable: 4% (2); Accountable: 14% (7); **Total: 18% (9)**

*To no one:* Most accountable: 4% (2); Accountable: 0% (0); **Total: 4% (2)**

## 21. Some people expressed their view to the meta-evaluation team that the CGIAR System is greater than the sum of its independent Centers because of the role played by the Systemwide units, such as the CGIAR Secretariat.

21a. Do you agree?

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	67% (8)	43% (9)	86% (6)	50% (1)	50% (3)	50% (3)	43% (3)	50% (3)	100% (2)	0% (0)	50% (3)	54% (41)
No	25% (3)	33% (7)	14% (1)	50% (1)	50% (3)	50% (3)	43% (3)	50% (3)	0% (0)	100% (1)	50% (3)	37% (28)
Don't know	8% (1)	24% (5)	0% (0)	0% (0)	0% (0)	0% (0)	14% (1)	0% (0)	0% (0)	0% (0)	0% (0)	9% (7)
Respondent Total	12	21	7	2	6	6	7	6	2	1	6	76

Comments from members of the Board of Trustees, Center Directors, and others overwhelmingly emphasized the fact the Centers, inter-Center programs, and the TAC have played a far more primary role than the CGIAR Secretariat in contributing and adding value to the System.

**21b. In your opinion, to whom is the CGIAR Secretariat most accountable? (select the three most important, ranking them, 1 = Most accountable, 2 = Very accountable, 3 = Accountable).**

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
<i>Chair</i>												
Most accountable	92% (11)	53% (10)	71% (5)	100% (2)	100% (6)	100% (3)	80% (4)	75% (3)	50% (1)	100% (1)	50% (2)	74% (48)
Very accountable	8% (1)	32% (6)	14% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	25% (1)	14% (9)
Accountable	0% (0)	16% (3)	14% (1)	0% (0)	0% (0)	0% (0)	20% (1)	25% (1)	50% (1)	0% (0)	25% (1)	12% (8)
Respondent Total	12	19	7	2	6	3	5	4	2	1	4	65
<i>The New Executive Council</i>												
Most accountable	33% (3)	29% (4)	20% (1)	0% (0)	0% (0)	0% (0)	67% (2)	50% (1)	100% (2)	0% (0)	67% (2)	35% (15)
Very accountable	44% (4)	43% (6)	60% (3)	100% (1)	50% (1)	100% (2)	33% (1)	0% (0)	0% (0)	0% (0)	33% (1)	44% (19)
Accountable	22% (2)	29% (4)	20% (1)	0% (0)	50% (1)	0% (0)	0% (0)	50% (1)	0% (0)	0% (0)	0% (0)	21% (9)
Respondent Total	9	14	5	1	2	2	3	2	2	0	3	43
<i>Donors at Large</i>												
Most accountable	11% (1)	19% (3)	67% (2)	0% (0)	0% (0)	67% (2)	0% (0)	25% (1)	100% (1)	0% (0)	0% (0)	20% (10)
Very accountable	33% (3)	63% (10)	0% (0)	100% (1)	50% (2)	33% (1)	100% (3)	50% (2)	0% (2)	0% (0)	100% (4)	53% (26)
Accountable	56% (5)	19% (3)	33% (1)	0% (0)	50% (2)	0% (0)	0% (0)	25% (1)	0% (0)	100% (1)	0% (0)	27% (13)
Respondent Total	9	16	3	1	4	3	3	4	1	1	4	49

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(Continued)	Center DG	Board of Trustees	OECD Donor	Other Donor/ Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Represent- ative	TOTAL
<i>Developing Countries at Large</i>												
Most accountable	0% (0)	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	4% (1)
Very accountable	20% (1)	43% (3)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (2)	50% (1)	0% (0)	50% (1)	33% (8)
Accountable	40% (2)	43% (3)	0% (0)	0% (0)	100% (1)	0% (0)	100% (2)	0% (0)	50% (1)	0% (0)	50% (1)	42% (10)
(3, added by respondent)	40% (2)	14% (1)	0% (0)	100% (1)	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	21% (5)
Respondent Total	5	7	1	1	1	1	2	2	2	0	2	24
<i>CG Centers</i>												
Most accountable	40% (2)	29% (2)	0% (0)	0% (0)	0% (0)	50% (1)	0% (0)	0% (0)	0% (0)	0% (0)	33% (1)	18% (6)
Very accountable	40% (2)	14% (1)	60% (3)	0% (0)	0% (0)	0% (0)	100% (3)	0% (0)	100% (2)	0% (0)	33% (1)	35% (12)
Accountable	20% (1)	57% (4)	40% (2)	0% (0)	100% (4)	0% (0)	0% (0)	100% (2)	0% (0)	0% (0)	33% (1)	41% (14)
(3, added by respondent)	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)	50% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	6% (2)
Respondent Total	5	7	5	1	4	2	3	2	2	0	3	34
<i>World Bank and donor countries' top management</i>												
Most accountable	14% (1)	23% (3)	40% (2)	0% (0)	0% (0)	0% (0)	50% (2)	33% (1)	50% (1)	0% (0)	0% (0)	22% (10)
Very accountable	29% (2)	8% (1)	40% (2)	50% (1)	100% (4)	33% (1)	0% (0)	67% (2)	0% (0)	100% (1)	50% (1)	33% (15)
Accountable	57% (4)	69% (9)	20% (1)	50% (1)	0% (0)	67% (2)	50% (2)	0% (0)	50% (1)	0% (0)	50% (1)	46% (21)
Respondent Total	7	13	5	2	4	3	4	3	2	1	2	46

In the responses to question 21b, many respondents chose more than three categories to rank. A total of 45 respondents provided responses that precisely followed the instructions. The percentages given below are calculated as a proportion of this total.

*To the Chair:*

Most accountable: 64% (29); Very accountable: 18% (8); Accountable: 7% (3); **Total: 89% (40)**

*To the New ExCo:*

Most accountable: 11% (5); Very accountable: 22% (10); Accountable: 18% (8); **Total: 51% (23)**

*To the Donors at Large:*

Most accountable: 11% (5); Very accountable: 33% (15); Accountable: 20% (9); **Total: 64% (29)**

*To Developing Countries:*

Most accountable: 0% (0); Very accountable: 2% (1); Accountable: 7% (3); **Total: 9% (4)**

*To CGIAR Centers:*

Most accountable: 4% (2); Very accountable: 9% (4); Accountable: 22% (10); **Total: 26% (16)**

*To the World Bank and Donor Countries' Management:*

Most accountable: 13% (6); Very accountable: 22% (10); Accountable: 29% (13); **Total: 64% (29)**

**22. Of the major activities of the CGIAR Centers, in your opinion, at what level do benefits primarily accrue and how are the other levels affected?** (For each level, mark either 1, 2, or 3.)

22a. Germplasm enhancement

	Center DG	Board of Trustees	OECD Donor	Other Donor/ Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
<i>National level (to individual developing countries)</i>												
Primary benefits	67% (8)	56% (9)	75% (6)	100% (1)	50% (3)	60% (3)	25% (1)	67% (4)	100% (2)	100% (1)	50% (1)	62% (39)
Some benefits	33% (4)	38% (6)	25% (2)	0% (0)	50% (3)	40% (2)	50% (2)	17% (1)	0% (0)	0% (0)	0% (0)	32% (20)
Little benefits	0% (0)	6% (1)	0% (0)	0% (0)	0% (0)	0% (0)	25% (1)	17% (1)	0% (0)	0% (0)	50% (1)	6% (4)
Respondent Total	12	16	8	1	6	5	4	6	2	1	2	63
<i>Regional level</i>												
Primary benefits	33% (4)	41% (7)	63% (5)	0% (0)	33% (2)	40% (2)	67% (4)	17% (1)	100% (2)	0% (0)	50% (3)	43% (30)
Some benefits	42% (5)	53% (9)	25% (2)	100% (1)	50% (3)	40% (2)	17% (1)	83% (5)	0% (0)	100% (1)	50% (3)	46% (32)
Little benefits	25% (3)	6% (1)	13% (1)	0% (0)	17% (1)	20% (1)	17% (1)	0% (0)	0% (0)	0% (0)	0% (0)	11% (8)
Respondent Total	12	17	8	1	6	5	6	6	2	1	6	70
<i>Global level</i>												
Primary benefits	67% (8)	20% (3)	29% (2)	50% (1)	17% (1)	33% (2)	83% (5)	40% (2)	50% (1)	0% (0)	25% (1)	39% (26)
Some benefits	17% (2)	33% (5)	43% (3)	0% (0)	17% (1)	50% (3)	0% (0)	40% (2)	50% (1)	0% (0)	25% (1)	27% (18)
Little benefits	17% (2)	47% (7)	29% (2)	50% (1)	67% (4)	17% (1)	17% (1)	20% (1)	0% (0)	100% (1)	50% (2)	33% (22)
Respondent Total	12	15	7	2	6	6	6	5	2	1	4	66

22b. Training

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
<i>National level (to individual developing countries)</i>												
Primary benefits	100% (12)	82% (14)	88% (7)	100% (2)	67% (4)	100% (6)	80% (4)	100% (5)	50% (1)	100% (1)	50% (3)	84% (59)
Some benefits	0% (0)	18% (3)	13% (1)	0% (0)	17% (1)	0% (0)	20% (1)	0% (0)	50% (1)	0% (0)	33% (2)	13% (9)
Little benefits	0% (0)	0% (0)	0% (0)	0% (0)	17% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	17% (1)	3% (2)
Respondent Total	12	17	8	2	6	6	5	5	2	1	6	70
<i>Regional level</i>												
Primary benefits	0% (0)	33% (6)	38% (3)	0% (0)	17% (1)	20% (1)	80% (4)	33% (2)	0% (0)	0% (0)	25% (1)	26% (18)
Some benefits	100% (12)	67% (12)	63% (5)	100% (1)	67% (4)	60% (3)	20% (1)	50% (3)	100% (2)	100% (1)	50% (2)	68% (46)
Little benefits	0% (0)	0% (0)	0% (0)	0% (0)	17% (1)	20% (1)	0% (0)	17% (1)	0% (0)	0% (0)	25% (1)	6% (4)
Respondent Total	12	18	8	1	6	5	5	6	2	1	4	68
<i>Global level</i>												
Primary benefits	0% (0)	7% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	2% (2)
Some benefits	33% (4)	33% (5)	33% (2)	50% (1)	33% (2)	50% (3)	0% (0)	25% (1)	50% (1)	0% (0)	25% (1)	32% (20)
Little benefits	67% (8)	60% (9)	67% (4)	50% (1)	67% (4)	50% (3)	100% (5)	75% (3)	50% (1)	100% (1)	75% (3)	67% (42)
Respondent Total	12	15	6	2	6	6	5	4	2	1	4	63

## 22c. NARS Capacity building through collaborative research

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
<i>National level (to individual developing countries)</i>												
Primary benefits	100% (11)	88% (15)	100% (8)	100% (2)	50% (3)	100% (6)	83% (5)	83% (5)	50% (1)	100% (1)	67% (4)	86% (61)
Some benefits	0% (0)	12% (2)	0% (0)	0% (0)	33% (2)	0% (0)	0% (0)	17% (1)	0% (0)	0% (0)	33% (2)	10% (7)
Little benefits	0% (0)	0% (0)	0% (0)	0% (0)	17% (1)	0% (0)	17% (1)	0% (0)	50% (1)	0% (0)	0% (0)	4% (3)
Respondent Total	11	17	8	2	6	6	6	6	2	1	6	71
<i>Regional level</i>												
Primary benefits	8% (1)	29% (5)	25% (2)	0% (0)	0% (0)	17% (1)	0% (0)	40% (2)	0% (0)	0% (0)	0% (0)	16% (11)
Some benefits	83% (10)	65% (11)	63% (5)	100% (2)	50% (3)	83% (5)	50% (3)	60% (3)	50% (1)	100% (1)	80% (4)	69% (48)
Little benefits	8% (1)	6% (1)	13% (1)	0% (0)	50% (3)	0% (0)	50% (3)	0% (0)	50% (1)	0% (0)	20% (1)	16% (11)
Respondent Total	12	17	8	2	6	6	6	5	2	1	5	70
<i>Global level</i>												
Primary benefits	0% (0)	14% (2)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	3% (2)
Some benefits	42% (5)	21% (3)	17% (1)	50% (1)	0% (0)	67% (4)	0% (0)	33% (1)	0% (0)	0% (0)	40% (2)	27% (17)
Little benefits	58% (7)	64% (9)	83% (5)	50% (1)	100% (6)	33% (2)	100% (6)	67% (2)	100% (1)	100% (1)	60% (3)	69% (43)
Respondent Total	12	14	6	2	6	6	6	3	1	1	5	62

22d. Crop-based or thematic research networks (such as INGER)

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
<i>National level (to individual developing countries)</i>												
Primary benefits	67% (8)	47% (7)	43% (3)	50% (1)	33% (2)	50% (3)	33% (1)	20% (1)	0% (0)	0% (0)	67% (4)	46% (30)
Some benefits	17% (2)	33% (5)	43% (3)	50% (1)	50% (3)	50% (3)	67% (2)	60% (3)	100% (2)	0% (0)	33% (2)	40% (26)
Little benefits	17% (2)	20% (3)	14% (1)	0% (0)	17% (1)	0% (0)	0% (0)	20% (1)	0% (0)	100% (1)	0% (0)	14% (9)
Respondent Total	12	15	7	2	6	6	3	5	2	1	6	65
<i>Regional level</i>												
Primary benefits	55% (6)	76% (13)	63% (5)	0% (0)	50% (3)	60% (3)	100% (3)	75% (3)	0% (0)	0% (0)	20% (1)	59% (37)
Some benefits	45% (5)	24% (4)	38% (3)	100% (1)	50% (3)	20% (1)	0% (0)	25% (1)	100% (2)	100% (1)	80% (4)	40% (25)
Little benefits	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	20% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	2% (1)
Respondent Total	11	17	8	1	6	5	3	4	2	1	5	63
<i>Global level</i>												
Primary benefits	36% (4)	15% (2)	25% (2)	50% (1)	0% (0)	33% (2)	33% (1)	25% (1)	0% (0)	100% (1)	0% (0)	23% (14)
Some benefits	45% (5)	31% (4)	50% (4)	0% (0)	60% (3)	50% (3)	0% (0)	50% (2)	50% (1)	0% (0)	20% (1)	38% (23)
Little benefits	18% (2)	54% (7)	25% (2)	50% (1)	40% (2)	17% (1)	67% (2)	25% (1)	50% (1)	0% (0)	80% (4)	38% (23)
Respondent Total	11	13	8	2	5	6	3	4	2	1	5	60

## 22e. Natural resources management research

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
<i>National level (to individual developing countries)</i>												
Primary benefits	69% (9)	31% (5)	50% (4)	100% (2)	50% (3)	80% (4)	60% (3)	50% (2)	0% (0)	0% (0)	33% (2)	50% (34)
Some benefits	23% (3)	50% (8)	25% (2)	0% (0)	17% (1)	20% (1)	0% (0)	25% (1)	50% (1)	100% (1)	33% (2)	29% (20)
Little benefits	8% (1)	19% (3)	25% (2)	0% (0)	33% (2)	0% (0)	40% (2)	25% (1)	50% (1)	0% (0)	33% (2)	21% (14)
Respondents Total	13	16	8	2	6	5	5	4	2	1	6	68
<i>Regional level</i>												
Primary benefits	23% (3)	72% (13)	38% (3)	100% (2)	0% (0)	80% (4)	20% (1)	50% (2)	0% (0)	100% (1)	40% (2)	45% (31)
Some benefits	62% (8)	22% (4)	50% (4)	0% (0)	50% (3)	0% (0)	80% (4)	25% (1)	50% (1)	0% (0)	60% (3)	41% (28)
Little benefits	15% (2)	6% (1)	13% (1)	0% (0)	50% (3)	20% (1)	0% (0)	25% (1)	50% (1)	0% (0)	0% (0)	14% (10)
Respondents Total	13	18	8	2	6	5	5	4	2	1	5	69
<i>Global level</i>												
Primary benefits	23% (3)	14% (2)	43% (3)	50% (1)	17% (1)	40% (2)	20% (1)	75% (3)	0% (0)	0% (0)	20% (1)	27% (17)
Some benefits	23% (3)	36% (5)	43% (3)	0% (0)	33% (2)	40% (2)	40% (2)	0% (0)	50% (1)	0% (0)	40% (2)	31% (20)
Little benefits	54% (7)	50% (7)	14% (1)	50% (1)	50% (3)	20% (1)	40% (2)	25% (1)	50% (1)	100% (1)	40% (2)	42% (27)
Respondents Total	13	14	7	2	6	5	5	4	2	1	5	64

## 22f. Policy research

	Center DG	Board of Trustees	OECD Donor	Other Donor/ Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
<i>National level (to individual developing countries)</i>												
Primary benefits	77% (10)	50% (8)	88% (7)	50% (1)	0% (0)	50% (3)	80% (4)	50% (2)	50% (1)	0% (0)	50% (3)	57% (39)
Some benefits	23% (3)	19% (3)	13% (1)	50% (1)	67% (4)	33% (2)	0% (0)	25% (1)	0% (0)	0% (0)	33% (2)	25% (17)
Little benefits	0% (0)	31% (5)	0% (0)	0% (0)	33% (2)	17% (1)	20% (1)	25% (1)	50% (1)	100% (1)	17% (1)	19% (13)
Respondents Total	13	16	8	2	6	6	5	4	2	1	6	69
<i>Regional level</i>												
Primary benefits	23% (3)	25% (4)	25% (2)	50% (1)	33% (2)	50% (3)	0% (0)	25% (1)	0% (0)	0% (0)	20% (1)	25% (17)
Some benefits	31% (4)	75% (12)	50% (4)	50% (1)	33% (2)	50% (3)	100% (5)	50% (2)	50% (1)	100% (1)	80% (4)	57% (39)
Little benefits	46% (6)	0% (0)	25% (2)	0% (0)	33% (2)	0% (0)	0% (0)	25% (1)	50% (1)	0% (0)	0% (0)	18% (12)
Respondents Total	13	16	8	2	6	6	5	4	2	1	5	68
<i>Global level</i>												
Primary benefits	54% (7)	64% (9)	29% (2)	50% (1)	50% (3)	67% (4)	20% (1)	40% (2)	50% (1)	100% (1)	40% (2)	50% (33)
Some benefits	23% (3)	7% (1)	43% (3)	0% (0)	50% (3)	0% (0)	20% (1)	20% (1)	0% (0)	0% (0)	20% (1)	20% (13)
Little benefits	23% (3)	29% (4)	29% (2)	50% (1)	0% (0)	33% (2)	60% (3)	40% (2)	50% (1)	0% (0)	40% (2)	30% (20)
Respondents Total	13	14	7	2	6	6	5	5	2	1	5	66

**23. While applauding the CGIAR’s past achievements and emphasizing the continuing need for the CGIAR, the External System Review stated that “the System needs to be changed substantially to meet the challenges of a changing world.”**

In your opinion, have the recent changes that have emerged from the Change Design and Management Team and the Task Force processes gone far enough?

	Center DG	Board of Trustees	OECD Donor	Other Donor/Member	System Review Team	Other	TAC	Non-CG Scientist	Private Sector	GFAR	NARS Representative	TOTAL
Yes	15% (2)	20% (4)	38% (3)	0% (0)	0% (0)	33% (2)	29% (2)	33% (2)	50% (1)	0% (0)	17% (1)	22% (17)
No	54% (7)	60% (12)	38% (3)	100% (2)	83% (5)	33% (2)	43% (3)	50% (3)	50% (1)	100% (1)	33% (2)	53% (41)
Don't know	31% (4)	20% (4)	25% (2)	0% (0)	17% (1)	33% (2)	29% (2)	17% (1)	0% (0)	0% (0)	50% (3)	25% (19)
Respondent Total	13	20	8	2	6	6	7	6	2	1	6	77

Members of the Board of Trustees, Center Directors, OECD donors, and other all recommend that the CPs be evaluated in the near future to assess their impacts, though additional comments are mixed on this topic.

Views vary widely on recent changes emerging from the Change Design and Management Team (CDMT) and task force processes. Some respondents, including members of the private sector and some OECD donors, favor the view that recent changes in the CGIAR have not gone far enough. They believe that only marginal changes have been introduced, thus representing a missed opportunity to really make a difference by, for example, rationalizing Centers. They also believe that CPs will divert existing funds from much-needed areas of research, will not lead to consolidation of Centers, and will ultimately make the CGIAR System even weaker. Others, including some members of the Board of Trustees, Center Directors, OECD donors, and others are more favorably disposed to giving the recent changes a chance to succeed before evaluating their impact or introducing new changes. They believe that changing such a complex system requires time and recognition of the benefits of learning-by-doing. In their view, the reforms provide a good start, and while more could have been done, time will tell if the changes have gone far enough.

## General comments

### *Comments from members of the Board of Trustees*

- The challenge programs, the high-profile change, will probably be detrimental to the Centers core competencies of germplasm enhancement and conservation.
- The first draft of the change policy was correct when it proposed global and regional Centers. What was wrong was the naming of the Centers that made regional Centers seem less important. Centers that felt they would become regional resisted change. Instead, commodity-based Centers are needed that are responsible for strategic, long-term breeding and genetic conservation, as well as adaptive research Centers that support NARS in a multi-commodity approach. The current system results in Centers promoting their own commodity for the same niche rather than giving farmers choices. For example, in rain-fed rabi cropping, ICRISAT promotes chickpea and sorghum, ICARDA hathyrus, and CIMMYT maize.
- The CGIAR has made a substantial contribution in producing new varieties that have been widely adopted by farmers. What is of concern is the cost to NARS that have become CGIAR clients or proxy employees rather than collaborators. Adaptive Centers would need a better mode of working with NARS and should provide early generation germplasm for selection under local conditions rather than pure-line varieties, single-cross hybrids, or genetically narrow open-pollinated varieties. Commodity-based Centers could concentrate on strategic breeding beyond the scope of most NARS, e.g., development of marker-assisted selection, transgenics, wide crosses, and screening very large germplasm collections for novel traits.
- Change design alone cannot solve all problems. CG should build on this initiative and take other steps for follow up.
- One hopes that decision making is moved to those who know where the problems lie and are able to do something about it, and that they receive trust from the donors, who should look to whether results are achieved in the short, medium, and long term, and not earmark to the degree it is being done today.
- Reforms put on the way should be intensified. Decision makers should not hesitate to consider a reduction of the number of Centers in order to concentrate efforts on a limited number of issues and problems. Germplasm research should be given priority. Most other researchable issues should be left to NARS.
- Streamlining governance is good, but there are still too many research entities. Adding half-funded Systemwide activities adds to the problem – it does not solve it.
- There are many “loose ends” still to tie up in the CGIAR, much inertia to overcome, and a need to ensure fuller cooperation and integration among all the players.
- Changes in the CGIAR did not meet the changing needs of developing country NARS.

### *Comments from Center Directors*

- Maybe the changes have not gone far enough from an organizational optimization point of view, but they represent a reasonable compromise between many divergent interests and may be the only ones that could enjoy a consensus. In an international organization complete harmony is rare, but there are very few that have the harmony and dedication of the members of the CGIAR. When the investment in agricultural research in the industrialized world fell, the CGIAR (almost) held its own for developing country research. It is

unfortunate that in-fighting in the World Bank on grant money affects the CGIAR. World Bank support is important, a clear signal of the importance of agricultural research and agriculture for development. The World Bank could make similar and more funds available through other mechanisms and as restricted funds, with suggestions, conditionality, or earmarking for lender spending with the CGIAR. The World Bank is now a 15 percent donor to the CGIAR (i.e., the vast majority of funding is provided by others), but it could be a 30-40 percent financier through smart use of lending programs. Some task managers at the Bank are very creative with this, others are not. The Bank and the CGIAR together could achieve much more if key people within the Bank and regional development banks increasingly look at the CGIAR as an important partner for rural development, and not a favored child for grant funding.

- No review has ever looked at the real and possible role of the Boards. Most Board members could at best be technical consultants to the Center directors. Boards are too large, too many Board hoppers, too old, not responsible managers.
- With current and projected funding, there should be a consolidation of Centers and programs. There is no evidence that this will happen. Instead of maintaining a smaller number of high-performing Centers, the CGIAR will probably through reduced funding and the CPs (not as originally proposed, but as now being processed, much like the failed Systemwide programs of the 1990s) bring the performance of the entire System to a much lower level.

*Comments from NARS representatives*

- The Centers are repositories of ideas, including the germplasms of various genetic resources, but their role can be expanded by dovetailing the needs and problems of developing countries, as demonstrated in the vision documents of institutions such as the Central Research Institute for Dryland Agriculture (CRIDA) in Hyderabad, India.
- There is no denying the fact that the private sector has played a great role in promoting the CGIAR set up. The role of Rockefeller Foundation in development of CIMMYT and the contribution of the latter to the development of international agriculture can hardly be over emphasized. However, the participation of the private sector at the CGIAR level is viewed differently by various groups in developing countries. In India, for example, the participation of the private sector in publicly funded research is not pronounced. Requisite awareness in this regard is to be created so as to enhance the credibility of role of the private sector in publicly funded research organizations. Since the Centers are science-based organizations, many are of the view that the proposed broad-basing should be limited to keeping the private sector companies as guest members only and not as full-fledged members.

*Comments from non-CG scientists*

- The CGIAR continues to be the most effective global undertaking on research. Its maintenance and enhancement is essential for eliminating hunger and poverty while protecting the environment in the developing world.
- The dancing around the issue of rationalizing the number of Centers represents a lost opportunity, especially when much of the hard work had been done.

*Comments from others*

- The Centers should be at the center. Unfortunately, the CGIAR Secretariat was able to undo progress made by the Committee of Board Directors (CBD) and Center Directors Committee (CDC), which was largely endorsed by the Stonning Meeting and was representative of

the System. Individuals in the CGIAR Secretariat should stop manipulating efforts (e.g., the Winkel panel, CDMT report, and ExCo) to ensure their jobs at the World Bank: being in the same job for 15-20 years is against the World Bank's rotation policy.

*Comments from members of the private sector*

- The CGIAR has been a self-evaluating system with a reasonable track record of achievements. Too frequent change may cause destabilization. The current big changes should therefore be assessed carefully and adjustments made along the way.

*Comments from members of the System Review Team*

- Need for more central executive capacity.
- Need for reorganizing Centers in Africa to face the African challenge.
- Need for capacity to question the existence of some Centers (evolution of ICRISAT, merging ISNAR and IFPRI on agriculture).
- Need to concentrate on its strength, which is in plant breeding for the poor farmers of developing countries. Work in sociology and ecology should be made by other organizations specifically designed and organic.

*Comments from members of TAC*

- The CGIAR should be given a chance instead of introducing new reforms.
- There should be concern over the decreased role and attention paid to the Impact Assessment and Evaluation Group and Standing Panel on Impact Assessment (SPIA) and issues relating to their work.
- The CGIAR needs a more profound change than consolidation, management reviews, etc. Rather, the System deserves a real change in terms of culture, vision, mission, and other functions.