

SCIENCE COUNCIL OF THE CGIAR

**Report to the CGIAR Annual General Meeting 2008**

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The SC serves the CGIAR primarily through: (i) monitoring and evaluating the relevance and quality of Center and Challenge Program research and related activities, (ii) assessing the impacts of completed research in terms of CGIAR goals, (iii) identifying CGIAR system priorities and research strategies, and (iv) mobilizing global science and building effective partnerships with research organizations and universities in developed and developing countries to support the CGIAR research program. Working effectively through its standing panel and portfolio arrangements, and underpinned by regular formal and ad hoc virtual meetings, the Council has made significant progress in 2008 in many areas. The two meetings of the SC held this year (in Kenya and Belgium) were very productive. In addition to receiving updates from the its ongoing activities, the meetings provided a stimulating environment for discussions around key technical presentations in areas such as agricultural research challenges in SSA, land degradation in Africa, global agricultural science and technology indicators, CGIAR intellectual property capacity, the food crisis and payment for environmental services.

In addition to finalizing a number of strategic and impact assessment studies in 2008 (ethics, biosafety, biofuels, policy-oriented research impacts, post-green revolution impacts in South Asia), the Council was able to advice ExCo in areas related to: the annual review of Medium Term Plans for 2009-2011, Challenge Program reviews and Phase II assessments (for Generation and Water & Food CPs), new Challenge Program proposals (Climate Change, High Value Crops, Oasis), future of the Systemwide and Ecoregional Programs, the CGIAR Performance Measurement System. The SC would briefly like to highlight some of its key areas of work in this report to the CGIAR.

**Monitoring and Evaluation**

In 2004 the SC began commenting on **Medium Term Plans** (MTPs) in terms of the relevance of the Plans to contribute to CGIAR goals, the focus on research to produce IPGs, on the clarity of the impact pathways and the associate activities of capacity strengthening, advocacy to enhance outcomes and on the quality of the logframes to monitor progress toward described outputs. In the SC's view there has been a positive improvement in the Plans over the past four years as seen in the current documents. Most now provide clear rationale for the research and how it will contribute to IPGs, impact pathways and associated capacity strengthening. Increasingly, MTPs are being used by Centers and CPs for their internal monitoring of research. The MTPs are now submitted on-line and the System's database (CGMap) allows analysis of collective components of research on priority research areas thereby facilitating efforts towards further system coherence. It also facilitates the use of the MTP by the centers for their internal planning and monitoring. More and more MTPs are therefore developing into internal management tools.

The SC has been able to get all **external reviews** back to a regular schedule from a backlog created during the transition from TAC to SC. The *EPMRs of ICRISAT, IRRI and BIOVERSITY* are being implemented and will be completed in 2009. As concluded by the EP MR meta-review in 2007 and a post-review survey conducted by the SC earlier this year, the peer reviews systems of the EP MRs is a very effective means for monitoring and guiding the research relevance and quality of the Centers.

With the Generation CP review being completed in the first half of 2008, all **Challenge Programs** have had their first mid-term review. While there are differences among the CPs in terms of progress, all of

them are successful in strengthening partnerships with external research institutes be it partners in national research institutes (Sub Saharan Africa) or advanced research institutes (Generation Program, Harvest Plus). They are all very positive but may be further improved. One overarching lesson from all reviews is the need for greater focus in the 2<sup>nd</sup> phase to increase the likelihood of success within the timeframes of the CPs. The SC assessed the proposal for a new CGIAR Challenge Program on Research on High Value Crops (Fruits and Vegetables) concluding that ExCo should not endorse the establishment of the program.

The SC has prepared **commentaries on the new Strategic Plans** of the World Agroforestry Center, CIFOR and IWMI. These Centers have acknowledged the usefulness of such commentaries.

The first phase of the **Review of CGIAR Social Science research** has been completed. The study is assessing social science needs and capacity as well as the output of social science based research in the CGIAR. The 1<sup>st</sup> phase, undertaken by Professor Chris Barrett aimed at collecting adequate data on the current status of the social research in the CGIAR, its relevance to CGIAR priorities and the quality of the research. This phase also aimed at developing a “normative” framework for social science research around which more detailed analyses could be made in the following phase. The 2<sup>nd</sup> phase of the review (to conclude by mid 2009) will focus on social science research support for productivity growth and poverty reduction via technological innovation; institutional innovation and policy analysis; and social science research for informing agricultural and rural development policy.

The SC has assessed the status of CGIAR **System wide and ecoregional programs** (SWEPs). The Council recommended continuation of the following five programs: Rice Wheat Research Consortium; Sustainable Agricultural Development in Central Asia and the Caucasus; Collective Action and Property Rights; Systemwide Genetics Resource Program; and the Systemwide Livestock Program. The Council provided several suggestions to either improve or discontinue the other SWEPs as well as a rationale for the creation of future programs organized under three potential mechanisms (coordination programs, NRM initiatives, and short term systemwide research task forces).

The SC contributes to the CGIAR **Performance Measurement System** (PMS) in those aspects related to outputs, outcomes and impacts. The Council participated actively in a joint workshop organized with the CGIAR Secretariat in Washington DC in July 2008. The aim of the workshop was to suggest ways to simplify and streamline the current PMS while improving its credibility and utility. The workshop recommended the development of indicators for actual impact as well as for capacity strengthening and data bases as additional indicators of public goods outputs.

As requested by ExCo, the SC is preparing a proposal for **PM indicators for Challenge Programs**. Annual performance is currently monitored through CP progress report to ExCo and the MTP assessment by the SC to ExCo. The SC will, in collaboration with the CGIAR Secretariat and in consultation with the CP coordinators, prepare a proposal for an integrated M&E system for the CPs, including annual indicators, to be submitted for ExCo’s endorsement in early 2009.

The SC is also developing **Guidelines in the Use of the PMS indicators**. The Guidelines aim at clarifying: what the indicators are actually measuring; caveats and qualifiers to making direct links between performance and resource allocation; and indication of good and bad use (misuse). The SC suggests that it would be useful to have a workshop with CGIAR donors where the use of the PMS could be discussed.

## **Impact Assessment**

Two major initiatives have recently been completed. The first is the preparation of a document that provides **strategic guidance for conducting impact assessment** (IA) of international agricultural research, a joint publication between the Standing Panel on Impact Assessment (SPIA) and the Center

IA experts that identifies ‘good practices’ in IA. The second is a critical assessment of the **impact of the CGIAR and its partners in South Asia** during the post Green Revolution period. The report describes the major productivity, social and environmental impacts occurring during this period and concludes that national and international systems have responded well to the changing needs of South Asia.

Seven Center case studies (CIFOR, IRRI, BIOVERSITY, IFPRI, ILRI, ICARDA, WORLDFISH) conducted within the overall **policy-oriented research impact assessment** initiative have been completed, abridged versions of which are incorporated into the final synthesis report. This fulfils a long-standing demand from donors to expand the coverage of impact assessment to policy research, a key area of investment growth within the CGIAR over the past two decades. The studies provide good evidence of the value of selected CGIAR policy oriented research activities in influencing national policy and management practices leading to impacts on the ground.

A study has been initiated to enhance System and Center level *ex post* IAs that specifically target **social and environmental indicators**, i.e., those more closely aligned with CGIAR goals. The study is exploring both quantitative and qualitative indicators and will be conducted in two phases. Drawing on an inventory of CGIAR and others case studies, and considering different disciplinary perspectives, Phase I is exploring methods and appropriate indicators, and will identify promising integrated economic, social and environmental approaches.

SPIA and the Center Impact Assessment Focal Points recently held a *meeting on “Defining and Refining Good Practices in IA”* focusing on information exchange, new methods in IA, and clarifying IA purposes and evaluation concepts. The meeting was held in Brasilia in November 2008, just prior to an EMBRAPA-organized international workshop on IA.

SPIA is making a concerted effort to publish, in addition to full length reports and concise ‘impact briefs’ from its studies, journal articles in the mainstream agricultural research and evaluation literature. Since January 2008, SPIA members have authored or co-authored four articles in various refereed journals, based on results from earlier impact studies. This enhances exposure and the credibility of the SC’s efforts amongst the global scientific community.

### **Strategic Studies**

A study on **ethics and the mission of the CGIAR** examining the ways and means by which the CGIAR approaches its mission through agricultural research was finalized. This is the third and final study of a series of ethics studies initiated by the SC six years ago. The Panel that conducted the study sought to clarify the values underlying CGIAR research goals and the choices and means for implementation of activities. The SC has published the reports of the ethics studies and its recommendations in one volume.

The SC convened a **biosafety** workshop in April 2008 at IRRI to discuss, among others, how CGIAR Centers can best work with NARS to ensure timely delivery of research products to target farmers and the need for a CGIAR biotechnology research network. The Workshop Proceedings will be published by October 2008 as a timely update on biotechnology in the CGIAR.

Earlier SC studies of intellectual property (IP) had noted the need to enhance awareness in the CGIAR of **stewardship and liability** issues and to incorporate such understanding into the formulation of comprehensive guidelines for IP at the system level. In consultation with CAS-IP and the PSC, the SC is initiating a study (to be completed in early 2009) to provide guidance on product stewardship procedures that reflect regulatory requirements, guidelines for Centers wishing to use third party IP for technologies/products that are compatible with an IPG nature, and a description of ‘liability’ for use by CGIAR Centers and NARS partners.

A **SC position paper on biofuels** published in May 2008 draws attention to the critical issues surrounding biofuels, food security and the environment, highlighting the positive and negative consequences likely to emerge from different biofuels policies. A biofuels policy statement has been proposed. As biofuels production draws on the same resources that agriculture, livestock, forestry and fisheries sectors now depend, it is incumbent on the CGIAR and other international agencies to offer R&D guidance and appropriate advice for government policy on biofuels.

### **Mobilizing Science**

ExCo requested SC to develop a **plan for mobilizing science**, including how the CGIAR can best link with GFAR, ARIs and other partners. The Council has developed a draft proposal for such a plan and is circulating this draft within the CGIAR community and beyond, in order to finalize the plan by early 2009. The draft plan defines the role of the SC as one of a facilitator and catalyst for the CGIAR and potential partners. One element of this plan is the organization of a Science Forum 2009.

The SC is preparing **Science Forum 2009**, to be hosted jointly by the SC and Wageningen University and Research Center, and held on June 16-17 2009 in Wageningen, the Netherlands. The Science Forum will be organized as a two-day open meeting between scientists of the CGIAR and ARIs and stakeholders from the North and South. The Forum will be forward-looking and is intended to highlight a number of critical areas where innovative partnerships could operate to capture new areas of science, particularly in disciplines beyond conventional agriculture, for the benefit of improving food security, enhancing nutrition, protecting natural resources and reducing poverty. It is intended that the Forum will facilitate the CGIAR and its current and prospective research partners, both in the private sector and in public institutions, to build on assessments of needs and gaps in food security and poverty and environmental hot spots that may be addressed through medium to long term research; identify new roles of advanced science to contribute to these challenges; and identify areas of potential research collaboration. A secondary objective would be to explore modalities for research collaboration, identify factors that limit effective collaborative engagement and explore mechanisms to overcome these obstacles. At AGM08 the SC will seek feedback on a proposal detailing the Forum's objectives and draft program.

### **Science Council Membership**

The SC welcomed three new members to the Council this year: Dr. *Gebisa Ejeta* (from Ethiopia, currently a Professor of Plant Breeding and Genetics at Purdue University), Dr. *Jeff Sayer* (from the UK, currently at the International Union for the Conservation of Nature) and Dr. *Derek Byerlee* (from Australia, recently retired from the World Bank) as the incoming SPIA Chair.

The SC acknowledges the significant contributions of SC Members Dr. *Jim Ryan* (SPIA Chair) and Dr. *Mariza Barbosa* who have ended their terms with the Council as of September 2008.

### **The Science Council in the new CGIAR**

The SC has shifted attention to the issues of strategic studies and mobilizing science not neglecting the important tasks of monitoring and evaluation and impact assessment. The need for an independent external scientific and technical body has become also very clear in the change management discussions. The SC is convinced that such functions have to be maintained in the future and is very willing to contribute with its experience and expertise to the new CGIAR.

## Annex

### Recent Science Council reports, commentaries, studies

Documents available at [www.sciencecouncil.cgiar.org](http://www.sciencecouncil.cgiar.org)

#### 2008

- Policy-Oriented Agricultural Research Impacts: Evidence and Insights from 7 Case Studies (October 2008)
- Policy-Oriented Agricultural Research Impacts: Evidence and Insights from 7 Case Studies (Brief N. 23)
- The Impact of the In-Trust Agreements on CGIAR Germplasm Exchange and the Role of Bioversity International in establishing the Agreements (Brief N. 24)
- Policy and Practice in Indonesian Pulp & Paper Sector: assessing influence of CIFOR's research (Brief N. 25)
- Barley fertilization policy change in Syria: the role of ICARDA's policy-oriented research (Brief N. 26)
- Assessing IFPRI's impact: the case of the Mexican PROGRESA-Oportunidades program (Brief N. 27)
- Changing Dairy Marketing Policy in Kenya: assessing the impact of the smallholder dairy project (Brief N.28)
- Pesticide use in the Philippines: assessing contribution of IRRI's research to reduced health costs (Brief N.29)
- Community-Based Fisheries Management in Bangladesh – assessing the policy influence of the WorldFish Center (Brief N. 30)
- Ethical Challenges for the CGIAR: Report of Three Studies
- Ethical Challenges for the CGIAR (Brief N. 31)
- Generation CP External Review (October 2008)
- The global food crisis and the need for a comprehensive international research strategy: a perspective from the Science Council (August 2008)
- Biotechnology, Biosafety and the CGIAR (September 2008)
- SC Report to ExCo-15 (September 2008)
- SC Commentary to Co-Hort Challenge Program proposal for Phase II (September 2008)
- Ethics and the CGIAR Mission (September 2008)
- SC Commentary on CIFOR's new Strategic Plan (September 2008)
- SC Commentary on ICRAF's new Strategic Plan (July 2008)
- SC-10 End of Meeting Report (September 2008)
- Bio-fuels Research in the CGIAR: a Perspective from the Science Council (May 2008)
- Impact of Agricultural Research in South Asia since the Green Revolution (Brief N. 21)
- Impacts of Agricultural Research in South Asia since the Green Revolution (August 2008)
- Strategic Guidance for *ex post* Impact Assessment of Agricultural Research (Brief N. 22)
- Strategic Guidance for *ex post* Impact Assessment of Agricultural Research (July 2008)
- SC Commentary on CGIAR Climate Change Challenge Program proposal (April 2008)
- SC Commentary on CGIAR Oasis Challenge Program proposal (April 2008)
- SC Commentary on Generation Challenge Program External Review (April 2008)
- SC Commentary to Water & Food Challenge Program proposal for Phase II (April 2008)
- SC Report to ExCo-14 (April 2008)
- Land Decline in Land-Rich Africa, a creeping disaster in the making (March 2008) – a joint publication with the Center for Development Research (ZEF) of the University of Bonn, Germany

#### 2007

- Food Safety in the CGIAR (December 2007)
- SC Report to AGM07 (November 2007)
- Brief - Update of CGIAR Center-CSO Partnerships ongoing study (November 2007)
- Science, Technology and Skills. Background paper for the 2008 World Development Report of the World Bank. Joint publication of the University of Minnesota and the SC of the CGIAR. (October 2007)
- 2008 World Development Report of the World Bank - Chapter 7 'Innovating Through Science and Technology' (October 2007)
- SC Report to ExCo-13 (October 2007)
- SC-8 End of Meeting Report (October 2007)
- SC Commentary on Center and CP MTPs 2008-2010 (September 2007)
- SC Commentary to Harvest Plus Challenge Program External Review (September 2007)
- SC Commentary to Water & Food Challenge Program External Review (September 2007)
- SC assessment of new CGIAR Challenge Program (Cycle 2) Concept Notes (May 2007) and Pre-proposals (September 2007)

- SC Commentary to CIAT EPMR (September 2007)
- SC Commentary to CIP EPMR (September 2007)
- SC Commentary to IITA EPMR (September 2007)
- SC Commentary to WARDA EPMR (September 2007)
- SC Commentary to EPMR Meta Analysis (September 2007)
- SC End of 8<sup>th</sup> Meeting Report (August 2007)
- SC Report to ExCo-12 (May 2007)
- SC Commentary to ILRI EPMR (May 2007)
- SC Commentary to IWMI EPMR (May 2007)
- SC Commentary to the external review of the Systemwide Program on Participatory Research and Gender Analysis – PRGA (May 2007)
- SC Assessment CGIAR Performance Measurement System (May 2007)
- SC-7 End of Meeting Report (April 2007)
- SC Commentary to the Follow-up to ICRAF EPMR (February 2007)
- Report of the Biosafety Panel to the CGIAR SC on Biosafety Policy and Practices of the CGIAR Centers (May 2007)
- Advancing Impact Assessment of International Agricultural Research– Synthesis Report (May 2007)