

# SCIENCE COUNCIL OF THE CGIAR

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**Report to ExCo-10**

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I am pleased to report that we have just concluded our Fifth Meeting of the Council and that we have made significant progress in every one of our four main areas of work (Priorities and Strategies, Monitoring and Evaluation, Impact Assessment and Mobilizing Science). Some notable achievements are highlighted below.

## **Priorities and Strategies**

As a follow up to the recent approval of 20 CGIAR System Research Priorities at AGM05 we want to make sure that these priorities are implemented in the most effective way. A working document on **Implementation of CGIAR Priorities** has been prepared by the Council and circulated for discussion at this meeting. The Centers are now beginning a 3-year process of adjusting their research portfolio to reflect the system priorities starting with their forthcoming MTPs to be submitted by June 15 2006. The paper focuses on key issues for a strategic implementation to increase impact, focus on IPGs, improve coordination, encourage partnerships and fuel innovation. This will complement the activities of the soon to be established ExCo ad hoc committee on coordinated funding.

The Council is also in the process of preparing framework plans for each priority based on the information in the forthcoming MTPs which will lead to identification of the gaps to be filled with new CGIAR skills or external expertise. Progress has been made in assessing a current picture of Center Project allocations to the Priorities and identifying general principles for the implementation process. The framework plans would be different for each priority and not a "one size fits all" approach. Following the development of a framework plan it would be possible to estimate minimum budget requirements and the probable trajectory for research (to be provided as an annotated matrix to the ad-hoc Committee on coordinated funding).

**CGIAR Research strategies for IPGs in the context of IPR.** Three papers were commissioned and prepared by Jan Chojecki on "Access to IP by CGIAR Scientists", Gary Toenniessen and Debbie Delmer on "Humanitarian use licenses" and Victoria Appolonio-Henson on "IP Management in the CGIAR". An overview and summary of these papers are being prepared. The CGIAR IP Guidelines will be updated based on the papers. These will include stewardship guidelines and advice on the liability for the Centers and NARS. Other issues in this area include the need to develop patent databases especially of what is coming off patent in the near future. Corporate memory should be enhanced by CAS-IP assisting Centers in sharing knowledge on IPRs.

A **Food Safety Study** is being commissioned which will focus on both health and trade aspects including the biological issues affecting food safety for small holders seeking market access for fruit and vegetables. This will be followed by a workshop with IFPRI (on the basis of their earlier work in this area) to link policy and biological approaches.

**Animal and Fish Genetic Resources** SC is following up the recommendations contained in its Commentary to the joint study report on Animal and Fish Genetic Resources, and will convene a meeting of concerned CGIAR Centers and Programs and FAO on this subject. This will also allow advancement of the framework planning in relation to Priorities for these two areas. A meeting will be organized at FAO in 2006 with IPGRI, ICARDA, WorldFish and FAO.

**Genomics Research in the CGIAR** Peter Langridge completed the study on enhancing the delivery of genomics research outcomes entitled "Genomics Research in the CGIAR: Effective means of establishing platforms for genetic research." The report represents the views of the biotechnology focal points in all the Centers although there will be some variation in application in relation to long generation species (e.g. livestock and trees). Outsourcing of sequencing, marker production was highlighted as something that is common in industry that could be further used in the CGIAR especially where equipment is currently underutilized. Currently, the needs are in relation to plants but scientific progress in the international community in forest trees and fish are likely to extend the need for genetic technologies for all species in the future. Although it was noted that an earlier configuration of the Task Force had lapsed, provision of a challenging workplan, time bound delivery dates and the renewed professionalism brought by the Genomics-related Challenge Programs should re-invigorate the proposed Task Force's role in planning for acquiring genetic technologies. Further discussion will be held with ILRI and ICRAF to ensure that needs of those working with long generation species were taken into account. The paper will be presented to the Alliance to promote the proposed mechanisms and particularly to gain the appropriate authority for the Genomics Task Force to take on the suggested role.

**Ethics in the CGIAR Study Final Report.** Professor Peter Sandoe reported on the completed panel study and noted that Centers and the System need to embrace ethics and ethical guidelines both because it is inherently correct to do so and because of the potential liability Centers face without them. Careful balancing of ethical concerns is required and the scientific process involves an obligation to identify possible costs and benefits of research to assist choices over its utility, conduct of the research and dissemination of resulting technologies. The report covers participation and communication with stakeholders, dissemination, research on human subjects, research on animals, IPRs, Biodiversity, Biosafety and Risks, Good Scientific Practice, and Handling and Receiving Funding. The report lays out the principles for the ethical review of CGIAR Research and will be finalized to include CGIAR guidelines as annexes and existing CGIAR policies regarding IPR, biodiversity and biosafety as annexes. The SC will communicate the report and annexes to the Alliance suggesting the Alliance develop a plan for implementation – on the basis that first hand engagement with the process of developing ethical guidelines would provide a sense of ownership and allow best choice (e.g. of regional differences, accommodation of practices that suited both large and small Centers etc.). This would be followed by final endorsement

by the SC. A further study on Ethics and the CGIAR Mission will be commissioned to address issues such as the trade offs in doing international public goods research, intergenerational benefits versus needs for short term impacts, and biodiversity.

## **Monitoring and Evaluation**

The **EPMRs** of CIFOR, ICRAF and Worldfish have been completed and are being presented at this meeting. The reviews of ILRI, IWMI and ICARDA have been initiated and will be completed by the end of 2006.

A brief **follow up review of IRRI upland rice** research activities has been completed. Both the last EPMR and the Council questioned whether IRRI's investment in rice research in the uplands was justified as previous such research by IRRI had shown very limited success. The follow-up review team came to a very clear conclusion that IRRI should continue to invest in research on rice in the uplands. The panel concluded that there were clear indications that investments in upland rice research in Asia would pay off handsomely in the not too distant future. The SC feels that the follow-up review does not provide convincing analysis of the impact the research will have on people's livelihoods in the uplands. The SC view remains that IRRI could better use its resources in the rainfed lowlands to meet the CGIAR goals. The report does not provide the necessary comparative analysis of research investment in the uplands versus investment in the lowland rainfed areas in terms of poverty impacts. The SC believes that there remains a pressing need for IRRI to follow the recommendation of the 6<sup>th</sup> EPMR to "include the results of ex-ante impact studies in unfavorable environments in its priority setting exercises." Neither the fact that research is ongoing nor promises and assumptions are sufficient to justify continuing with this research from a strategic point of view. However, should IRRI decide to follow the advise of the panel, the Council would like IRRI to monitor outcomes carefully in order to provide sound evidence of impact in the uplands for the next EPMR. The report and full SC Commentary will be submitted to ExCo in the near future.

A **follow up review of CIMMYT EPMR** as approved at ExCo-8 is being organized to be conducted by mid 2006.

A **follow up review of the inception phase of the SSA CP** (as approved at AGM04) is underway. The report from this review will be sent to ExCo with SC commentary by the end of July 2006.

Based on the lessons learned during the 2005 cycle of **Medium Term Plan review** (ExCo-9 Item 3.b), the SC will coordinate in collaboration with Centers and the CG Secretariat the improvement of guidelines for preparation of MTPs, specifically focusing on a better definition of research output targets.

During the pilot phase of the CGIAR **performance measurement** (PM) system, the Council, through a task force involving members of SPME and SPIA and SC Secretariat staff, contributed to drawing lessons on PM system elements (output, outcome, impact, quality of research staff, and quality and relevance of programs). The SC submitted recommendations for implementing PM in 2006 and has continued to provide support to the PM system by

assessing output targets and reviewing impact submissions. SPIA is currently evaluating Center submissions for both the 3a and 3b impact indicators. Indicator 3a is based on an annual submission describing the nature and extent of Center impact assessment activities, outputs and innovations. For indicator 3b, a once-every-three-year evaluation, SPIA is using 6 external peer reviewers to assess 30 studies submitted by the Centers.

The **CGIAR Training study** final report has been completed by Elliot Stern. The report addresses a number of issues regarding collaboration among Centers. Data recording, at least defining a common minimum dataset, e-learning, integration of training with research and system level training services were highlighted as areas where the Centers should improve their collaboration. Regarding data collection, the report highlights the importance of knowing who the Centers are training and to recording even informal training. He felt that certain services were still needed at the Center level. The report found that there were few incentives in place for Center researchers to increase and improve their training involvement. The SC accepts the report and considers that training remains relevant to the implementation of the System Priorities. Centers' training should be built around their research strength and should be aligned with the System Priorities. There remains a need to better assess NARS training needs and often NARS require enhanced capacity both to articulate their needs and to participate in collaborative research. The SC also considers that the imperative to show more impact may have been influencing the recent shift of resources in training to regions and to in-country training. The report concludes that the CGIAR is well placed to combine research with capacity strengthening, which should be continued and improved. The report will be published shortly with a full SC Commentary.

## **Impact Assessment**

**Impact of the CGIAR on Poverty Alleviation.** A peer reviewed book that comprises a set of case studies and synthesis for the overall study is being revised. The SC Standing Panel on Impact Assessment (SPIA) is expecting to receive in April from IFPRI's Publication Review Committee a revised draft of the book manuscript and corresponding response from the authors to SPIA's rejoinders to earlier comments on external peer reviews. SPIA will then prepare a Foreword for the book.

**CGIAR and NARS Research in Africa: Evidence of Impact To-date.** The first phase of this study entailed a comprehensive collection, synthesis and assessment of the available evidence on the impacts of new technologies and improved policies as a result of CGIAR and partner agricultural research in sub-Saharan Africa. This meta-analysis uses the 'best evidence' method to evaluate adoption rates and costs and benefits of the research conducted by the NARS/CGIAR partnership in Africa. The study concludes that the discounted benefits of the evaluated productivity enhancing investments of the partnership exceed the present value of its cost under the 'projected to' scenarios but not for the scenario which only calculates the specific years for which the authors conducted the study. Other innovations, however, have been forthcoming but not evaluated, and therefore the study's estimates of benefits are very conservative ones. The consultants' report has been externally peer reviewed and a final 'green cover' report is nearing completion; an 'impact brief' is also under preparation.

**Scoping study on the impacts of CGIAR policy-oriented research.** Work on the scoping study began in earnest in August. TOR and a plan of action were prepared at that time and SPIA began interacting with two experts in this area, Dr. Ammar Siamwala (Thailand) and Dr. Carol Weiss (USA). An inventory of CGIAR impact assessments of policy-oriented research (POR) was compiled and a classification of CGIAR POR was used to analyze the current policy-oriented portfolio. The inventory identified relatively few ex post impact assessments (epIA) that had been developed. Most of the studies do not go beyond measures of uptake or influence, and the few studies that do investigate social or economic benefits focus on country-specific research and technical assistance. In December 2005, SPIA held a small workshop to discuss preliminary analysis and results of the scoping study and to explore opportunities for strengthening epIA of POR in the CGIAR by undertaking a second phase to this study. The second phase would likely involve a series of case study epIA in cooperation with CGIAR Centers to document more rigorously the impact pathways and to the extent possible the impacts of POR in the CGIAR.

**NRM Research Ex-post Impact Assessment Study.** A final draft 'green cover' for the study has been completed and sent to Green Ink for editing and printing. Eight short Briefs are also being prepared which will highlight the individual Center case studies. The full length book manuscript is expected to be submitted to CABI (ed. by Herman Waibel and David Zilberman) in mid 2006 with a SPIA Foreword.

Several other SPIA initiatives are being undertaken:

- **South Asia Research IA** study which will examine both positive and negative impacts on the poor, including economic and non-economic ones, stemming from CGIAR research. Tentatively, SPIA plans to hold a planning meeting in the latter half of 2006 involving key economists familiar with the GR literature. It was noted by a SP member that it would be highly valuable to trace impacts on health and nutrition, in particular how diets have changed for the better or worse, but that methodologically this was a daunting task.
- SPIA, in conjunction with ICRAF, is organizing a two-day CGIAR **IA focal point meeting** in October in Nairobi to discuss a range of IA-related topics of relevance to both SPIA and IA focal points, and should provide an opportunity for Centers to share their experiences and future plans for IA related work. The last such meeting was held in 2000 and was deemed highly successful. A major focus of the meeting will be the PM exercise, in particular the criteria and indicators used in 3a and 3b impact indicators, and in that context the development of Strategic Guidelines for IA.
- SPIA decided to drop the **Participatory Research impact** study from its agenda given the major methodological challenges involved in rigorously documenting impacts in this area, notably the difficulty in constructing an adequate counterfactual. Instead, it proposes that a literature review of studies that have been conducted on the added value of PR approaches be included in the planned evaluation of the Systemwide Program on PRGA by SPME.

- **SPIA briefs.** In collaboration with the CGIAR Secretariat, SPIA has produced briefs from two studies: “Research Benefits Found to Heavily Outweigh Costs” and “How important are ex post impact assessment results for donor decisions?”.

## **Mobilizing Science**

The following activities have recently been completed on mobilizing science:

The Report of the **Survey of CGIAR Center’s on-going scientific collaboration** was completed in March 2006 and has been printed. The report draws on the results of a two phase survey of center collaborations undertaken during 2004-05. The Survey created a pool of useful information on CGIAR collaborations in terms of the number, location and type of partners. This information is presented in the report and a number of further studies on specific partnerships are expected to follow-up these initial survey findings.

The **Science for Agricultural Development 2005**, Science Council publication was completed in December 2005 and it was launched and distributed at the AGM in Morocco. The aim of the publication is to enhance knowledge about recent trends, current status and emerging issues related to global agricultural research. It is also intended that it will help shape global perspectives and priorities about agricultural science and technology as well as mobilize the scientific community to contribute to the CGIAR mandate. It was the first of a proposed biennial series to be produced by the SC with the next report scheduled for 2007.

A one-day **Science Forum** was held during the stakeholder meeting of the CGIAR AGM05 to discuss the role scientific research can play in supporting development and poverty reduction with a focus on the new CGIAR priorities. The SC and the CGIAR Secretariats jointly organized five parallel sessions on the theme *CGIAR Priorities: Science for the Poor*. A report including the background papers and a summary of the discussions has been completed and is currently being printed.

A number of new activities are also underway on mobilizing science:

A **Study of Centers’ collaboration, related to mobilizing agricultural science, with selected civil society organizations** (CSOs) is being initiated as a follow-up to the CGIAR Center Collaboration Survey conducted in 2005. The study will be the first of several to explore collaboration options between Centers and relevant stakeholders. The survey highlighted the disparity between the high number of center collaborations between centers and CSOs and the limited number that were listed in the phase two submissions as being highly relevant. A number of case studies are to be selected to investigate the collaboration process with CSOs in further detail in order to elucidate the opportunities and challenges for enhanced collaboration with CSOs for mobilizing science. The study is intended to fill a gap in information on the characteristics of successful CSO-Center collaboration at the system level that was identified by the survey.

A **Study of Centers’ activities on planning for delivering research results** will be undertaken within the context of Centers’ strategies to mobilize agricultural science. The Council’s Work Plan 2006-2007 established that it would be developing strategic elements to

help mobilize science around CGIAR goals by improving CGIAR research collaboration options. This study will identify successful center approaches to planning for delivering research results through effective collaborations. The study will focus on selected center case studies identified through the collaboration survey recently completed.

### **Science Council Secretariat**

The new Staffing Plan has recently been completed by hiring two Junior Professionals that will start in the second semester of 2006. One new administrative staff member has also joined the secretariat (after a competitive process within FAO) to occupy a post that has been vacant for some time.

The SC Secretariat is also collaborating with the other units of the System Office, especially with the CGIAR Secretariat. A workshop was held for the first time in 18 years between both Secretariats to discuss ways for enhancing collaboration. Many areas were discussed including MTP reviews, EPMRs and Performance Measurement. A joint research-assistant appointment is planned to start in the second semester of 2006.

### **Conclusion**

The separate activities listed above combine to make a substantial work program that covers many important issues for the CGIAR. A number of other activities will be reported in detail as separate items in the agenda. Overall the SC is pleased to report significant progress in all the main areas of its work and it looks forward to contributing further to ensuring the CGIAR achieves its mission by helping to focus on both the quality and relevance of its scientific research. The SC is particularly committed to assisting the CGIAR with the alignment of its research programs to the System Priorities and their implementation as we begin the decade for which they have been approved.

Let me finish by thanking you again for your continued support to the Science Council.