

CONSULTATIVE GROUP ON INTERNATIONAL AGRICULTURAL RESEARCH

SCIENCE COUNCIL

WORKPLAN 2006-2007

October 2005

The Science Council (SC) of the CGIAR initiated its activities in January 2004 in accordance with the outlines in the working group report approved at AGM 2002 and reaffirmed at AGM 2003.¹ During its first two years of operation the Council has helped the CGIAR develop a more cohesive and more sharply focused research program by working in the following areas: identifying research priorities, assuring good science, enhancing impact, and mobilizing agricultural science for the benefit of poor people and the environment.

The SC consists of the Council Chair and six members, plus the Chair of SPIA. The Council organizes its work into four panels that focus on priorities and strategies (SPPS), ex-post impact assessment (SPIA), monitoring and evaluation (SPME), and the mobilization of science (SPMS). Each panel has two SC members and two panel members (except for SPIA which, in addition to the Chair, has two panel members). The Council has held two annual meetings, making decisions in open sessions and keeping short closed sessions for housekeeping matters.

The SC focuses its activities on the following five key elements:

- Identify a set of key medium term **CGIAR System Priorities** that focus on problems for which the CGIAR is likely to have the greatest impact. After more than two years of work, including wide consultation, the SC has presented at ExCo-8 (May 2005) a draft version of the CGIAR 2005-15 System Priorities. A final version will be considered at ExCo-9 (October 2005) and is expected to be endorsed at the Annual General Meeting of the CGIAR in December 2005, with implementation starting in early 2006. A transitional period of three years (2006-2008) will allow Centers to align their research portfolios and CGIAR Members their funding allocations to the proposed System Priorities.
- Implement new **monitoring and evaluation** processes that give more emphasis to self-evaluation and Board accountability. The Council, in collaboration with the CGIAR Secretariat, has prepared a document, *Monitoring and Evaluation in the CGIAR System*, which represents completion of a lengthy process to streamline the Center review process. This process establishes a continuum of evaluations starting

¹ Its first Workplan and Budget was approved at ExCo-6 (May 2004).

from center self-assessment and ending in an external review of center programs and management. The new CGIAR Performance Measurement System would be an input to the M&E process. The M&E document, endorsed at ExCo-8, proposes that the Center Boards would assume the main responsibility for oversight, and the EPMRs would focus on auditing the internal evaluation processes, the Board's governance function, and the Centers' strategic directions.

- **Measure performance** in terms of progress towards achieving the goals of the CGIAR, on the basis of Medium-Term Plans (MTPs) and logframes. The CGIAR Performance Measurement constitutes a key element of linking the evaluation of MTPs and the evaluation of Centers. The SC has collaborated in the preparation and evaluation of indicators for several elements of the proposed system (quality and relevance of staff, quality and relevance of programs, outputs, outcomes, and impacts).
- **Improve the quality** of Center, Systemwide & Ecoregional (SWEPs), and Challenge Programs (CPs) MTPs and logframes as a basis for better planning and performance appraisal (linked to System Priorities). To accomplish this SC is improving the review of the Centers' research agenda. The Council is making a major effort to carefully review the Centers' Medium-Term Plans, including logframes and annual output targets. Several CPs and SWEPs will be evaluated in the near future.
- **Mobilize global science** around the mission of the CGIAR and promote scientific partnerships of the Centers with global scientific capacity located in advanced research institutes, universities, strong national research institutes and the private sector. To accomplish this key activity the SC has assessed the current pattern of Centers' partnerships, and has prepared a publication Science for Agricultural Development to be launched at AGM05 highlighting advances and trends in agricultural science for development.

SC STANDING PANELS' WORK PLANS FOR 2006-2007

The main focus of the SC proposed work during the next two years will be on alignment of the system's research portfolio with to the new CGIAR System Priorities, improving the quality of external evaluations of Centers, CPs and SWEPs, assessing the impact of policy-oriented research, and improving collaborative options for mobilizing new science and technology to augment CGIAR research. The following four sections of this document specify activities to be carried out during 2006 and 2007 by each Panel of the Council.²

Standing Panel on Priorities and Strategies (SPPS)

The main focus of SPPS during 2006-07 will be the follow up and implementation of

² For more details of the strategy of each Standing Panel, its ongoing activities and recent publications see www.sciencecouncil.cgiar.org

the new CGIAR System Priorities, including refining the scope of research of the twenty System Priorities and progressive alignment of the current portfolio of the Centers.

1. *Strategies for Implementation of New CGIAR Priorities (new activity)*. This is the major responsibility of the SPPS on behalf of the Council. CGIAR Priorities are reviewed at roughly five year intervals (with a ten year horizon). In 2005 the Council completed a substantial consultative process which has led to the identification of new CGIAR Priorities for the period 2005-2015. Assuming endorsement by ExCo and investors at AGM05, the SPPS will move to development of strategies for implementation of the priority research by the Centers and their partners. To accomplish this task it is likely that studies, particularly in refining the scope of research for poverty alleviation, the definition and niche for international public goods research within priority areas, the challenges of devolution of research to regions with strong and weak NARS (including technical and institutional options), as well as the identification of post-harvest research with international public good characteristics will be prepared.³ These studies will be the basis for further discussions at CGIAR-wide stakeholder interactions to be organized (one for each one of the five System Priority Areas) during 2006 and 2007.

2. *Enhancing CGIAR Social Science Data Availability for Research for Development (new activity)*. Data for research are potentially an international public good when made readily available and clearly documented. Discussions related to the development of substantive priorities under CGIAR Priority Area 5, namely “Science and technology policy and institutions”, “Making international and domestic markets work for the poor”, “Rural institutions and their governance” and “Reducing rural poverty and vulnerability”, clearly suggest that there is much to be gained in fostering both collaborative activities amongst Centers and ARIs’ direct contribution to and participation in the CGIAR research agenda. A study is proposed to guide the means through which this may be done. The output would be a report on the best means to compile, cross reference and manage existing CGIAR social science data sets which bear on these topics, including addressing the intellectual property and ethical standards to be implemented in the sharing of such research data with research institutes outside the CGIAR in the future.

3. *Food Safety (ongoing activity)*. The issue of food safety in CGIAR research was identified in the previous SC workplan. The importance of such a study is raised by the greater emphasis placed on market exploitation of agricultural products in the

³ The recent process of consultation leading to the formulation of research priorities confirmed the potential value of post harvest research as it relates to value-added for lower-income producers and to health and food safety. However, some of the research activities on post harvest are of very local application and benefit. It was considered therefore that an expert study on post harvest issues was required to define clearly IPG-related avenues for research was required before such research could be recommended to the CGIAR as a priority. This study would be conducted in 2006 and the report would be delivered to the SC in 2007.

Priorities for Research, but also touches areas such as the use of marginal water, pesticides and farming practices. Since the potential areas for consideration and research are potentially broad, the study (held over from 2005) includes a workshop convened with IFPRI and other competent agencies to define the appropriate scope for a desk study (by a consultant) on issues related to food safety. The workshop will be held in 2006 with the final draft of the study considered by the SC in 2007.

4. Genomics Research in the CGIAR (ongoing activity). The purpose is to define a strategy and cost effective means to service genomics research in the CGIAR. The study has commenced with a scan of industry practices and will continue with the convening of CGIAR-wide Genomics Task Force to develop an agreed strategy. The consultant will report to the SC in 2006 and a workshop on implementation issues, linking Centers to other regional genomics initiatives and potential suppliers will be held in 2007.

5. Ethics and CGIAR (ongoing activity). The work is currently in the anticipated second phase of three. In the biennium 2004-5, the SPPS convened a study by an expert Ethicist to identify ethical issues that affect the working of the CGIAR. The expert consultant reported to the SC in 2004 and the SC agreed that two areas were relevant for further examination: "Ethics in CGIAR Research" and "Ethics in relation to the mission of the CGIAR". Each will be addressed by a study by an expert panel. The panel study of "Ethics in CGIAR Research" has commenced and will report to the SC in 2006. The second panel study is expected to follow in late 2006 and to report to the SC in 2007, when the major costs for the second panel study will be met.

6. CGIAR Research Strategies for IPG in a Context of IPR (ongoing activity). Activities to date have followed the workplan for 2004-5; namely the convening of three studies on (i) Center needs in relation to intellectual property and international public good research (conducted jointly with the CGIAR's Genetic Resources Policy Committee), (ii) sources of IP for IPG and humanitarian research, (iii) means of accessing IP and relations with the private sector. The three reports were provided for the discussion of the SC in 2005. As intended, a workshop including external experts will be conducted in concert with the GRPC representatives in 2006 to synthesize the reports and formulate joint recommendations to the CGIAR in this area.

7. Animal and Fish Genetic Resources Conservation (ongoing activity). The SPPS is concluding its current study of animal and fish genetic resources by the development of a Commentary on the joint consultants' report delivered in 2005. Arising from the recommendations of the SC commentary is a novel inter-center interaction across these fields in collaboration with the FAO.

Standing Panel on Monitoring and Evaluation (SPME)

The main focus of SPME work during 2006-07 will be to implement the new CGIAR M&E system approved in 2005 through improving the CGIAR performance measurement system, monitoring the use of the Center Commissioned External

Reviews (CCERs), as well as streamlining of seven new EPMRs to be commissioned during the biennium.

1. *Meta-analysis of SWEPs (new activity)*. In collaboration with the CGIAR Secretariat and the Alliance Executive, the SC will conduct a meta-analysis of existing CGIAR system wide and ecoregional programs (SWEPs). This activity will be based on past SWEP external reviews and relevant CCERs to draw lessons on programmatic and management aspects of the SWEPs and guide their future monitoring and evaluation. The analysis is further expected to guide the effective use of different instruments for implementing of the new CGIAR System Priorities.

2. *External Review of the Systemwide Program on Participatory Research and Gender Analysis (PRGA) (new activity)*. TAC and subsequently SC have reviewed all the Systemwide programs that were initiated through an approval process involving TAC, except the PRGA. SPME will organize this external review, which will look at the relevance, quality, efficiency and effectiveness of the program research and the added value from the Systemwide partnership. This activity complements the SPIA activity 2. and will be done in consultation with SPIA. While the PRGA review focuses on a single program which aims at developing and promoting methodologies and organizational approaches for gender-sensitive participatory research, the SPIA activity assesses the impacts of participatory research in a wider CGIAR context. The review is scheduled to start mid-2006 and be completed in spring 2007.

3. *Follow up Reviews of IRRI, CIMMYT and SSA CP (new activity)*. As requested by CGIAR Members the SC will conduct the following follow-up reviews in 2006, coordinated by SPME⁴:

- IRRI upland rice research strategy follow-up review. The SC was requested at AGM04 to establish an independent panel to study the situation of upland rice in Asia and IRRI's potential contribution to solving researchable issues vis-à-vis the potential contribution of NARS or other parts of the CGIAR System. This activity has been initiated in 2005 and will be finalized in early 2006 by a panel composed of two international experts (on rice and on agricultural economics);
- CIMMYT research strategy follow-up review. ExCo-8 (May 2005) recommended that, pending the CGIAR approval, the SC and the CG Secretariat commission a focused review to be conducted in May/June 2006 by the EPMR Panel Chair and a governance/finance expert.
- SSA Challenge Program onsite review. The CGIAR approved at AGM04 the CP, in principle, for a 5-year period, subject to a successful assessment of its 18-month inception phase, expected to be implemented in 2005. The CGIAR requested FARA to provide to ExCo every 6 months a progress report on actions taken, including the development of a logframe; and to provide to SC, 12 months after the start of the inception phase, a detailed report on the pilot sites work plan and priorities. The Council will commission a review in

⁴ Two Challenge Program External Reviews (to be defined) will be conducted in 2007.

2006 and advise the membership through ExCo-11 (October 2006) on the adequacy of programs, including an assessment of a detailed plan for the additional sites, contributions to international public goods, with a focus on validity and rigor of science.

4. External Program and Management Reviews (EPMRs) (ongoing activity). The SC exercises its M&E responsibility through commissioning EPMRs of each Center approximately every five years. These reviews, which are jointly organized by the SC and the CGIAR Secretariat have five main objectives: (i) assess relevance and quality of research; (ii) assess effectiveness and appropriateness of governance and management; (iii) enhance accountability to investors and other stakeholders of the CGIAR System; (iv) recommend research program and management adjustments; and (v) provide guidance for strategic and operational planning.⁵

The following EPMRs are planned for 2006-2007:

- CIFOR (2nd), ICRAF (3rd) and WorldFish (3rd) will be completed in 2006
- ICARDA (5th), ILRI (2nd) and IWMI (3rd) will be initiated in 2006
- CIAT (6th), IITA, WARDA and CIP have been scheduled to be initiated in 2007
- Reviews of the first **Challenge Programs** will be considered to commence in 2007

5. Science Tracking and Medium-Term Plans (ongoing activity). SPME will facilitate the SC's monitoring of Center and CP Medium Term Plans for the evaluation of the CGIAR research agenda and for performance measurement purposes. Subsequently it will engage in the analysis of program alignment with System Priorities, synergies and efficiencies. SPME will work in collaboration with the CGIAR Secretariat and CIAT for developing on-line reporting that will allow easy aggregation and monitoring of research over time.

6. Performance Monitoring of CGIAR Centers (ongoing activity). SPME will assist SC to prepare improved guidelines on indicators of Outputs, Outcomes, Quality of Research Staff and Quality and Relevance of Programs. These indicators will be monitored through the overall SC effort on a yearly basis.⁶

Standing Panel on Impact Assessment (SPIA)

Among several initiatives, SPIA will focus its activities during 2006-07 to assess the impacts of policy-oriented research activities and those of CGIAR + partner research in Africa and South Asia.

⁵ As stated in the recently approved policy document on CGIAR M&E System, the M&E of Centers will rely heavily on the oversight by the Board of Trustees, including self-assessment through performance measurement and Center commissioned external reviews.

⁶ The SPME will work with a focal group from the Centers to further refine the MTP guidelines in 2006 for monitoring performance. Once a jointly owned set of PM criteria are established, and there is common understanding of how the research performance indicators are aligned with the MTP, monitoring of the indicators should be feasible at a low cost and drawing on SC and SC Secretariat expertise.

1. CGIAR Agricultural Research Impacts in South Asia (new activity).⁷ South Asia is the region of the world containing the greatest number of poor people. Despite its status as the epi-center of the Green Revolution, it continues to be a region with high levels of malnutrition and hunger. Agricultural research has had highly successful productivity effects in the region, but poverty persists to a degree uncharacteristic of any other region that benefited strongly from the GR. This study would analyze the poverty-alleviating impacts and their pathways on different target groups of specific CGIAR technologies in this context, and would improve understanding of the opportunities and impediments to agricultural technology enhancement as a strategy for poverty alleviation. This study would enhance the understanding of who benefits, who loses, and under what conditions and what this may mean for CGIAR research design.

2. Scoping Study: Impacts of Participatory Research in the CGIAR (new activity).⁸ Participatory approaches are often asserted as an effective means for fostering relevance in agricultural development efforts, including research. Yet, the application of participatory methods may also impose costs, such as increased field presence, and identified preferences may be especially localized. As a result, the appropriate domains for the application of participatory approaches remain unclear in the context of international public goods oriented research. Yet, participatory research (PR) is widely used by the CGIAR and its partners. This scoping study will assess whether it would be worthwhile to conduct an in-depth assessment of the impacts of PR in the CGIAR. It will review the wealth of literature that has been produced inside and outside the system on PR pros and cons and will formulate a set of recommendations on whether to proceed with an in-depth study, including specifying a number of methodological issues to be resolved before doing so.

3. Internal CGIAR Demands for Impact Related Information (new activity).⁸ Key stakeholders and CGIAR staff are frequently emphasizing the need for evaluation that not only responds to external investor demands for accountability, but which also satisfies internal demands for “learning” oriented feedback. *Ex-post* impact assessment (epIA), as one form of *ex-post* evaluation, has also been subject to these demands, yet clear means by which epIA can contribute to internal information needs have not been systematically identified.⁹

To help identify the most effective means for epIA, among other evaluation

⁷ This study was proposed in the 2004-05 Workplan and while some planning occurred in 2005, it was deferred due to time constraints.

⁸ This study was proposed in the 2004-05 Workplan but deferred due to time and budget constraints.

⁹ To date, no systematic analysis has been performed of the information that agricultural researchers can and want to use from evaluation of past actions. The results of this activity should lead to identification of a set of “best bet” evaluation and impact assessment approaches that generate relevant feedback for input into research operations and management. This project complements the work being undertaken by the CGIAR ILAC Group and it will be organized in collaboration with it.

approaches, to inform internal decisions, SPIA will undertake a study with the following objectives:

- To characterize and explore the current application of information regarding past research outcomes in CGIAR research management decisions.
- To identify current sources of feedback and unfulfilled decision needs for information regarding past research outcomes.
- To identify options for selecting and adjusting evaluation processes so that they contribute effectively to research and planning and management.

4. CGIAR Research Impacts in Africa (ongoing activity).¹⁰ During 2005 SPIA has been assembling a comprehensive collection 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. The preliminary evidence so far reveals significant heterogeneity in documented impact efficacy for different types of research undertakings. In addition to conducting a full meta-evaluation of the economic rates of returns from the collected set of impact studies, an explanatory typology for adoption and impact potential in the African context will be developed. Deriving such systematic typology will be accomplished via content analysis of the extensive empirical body of literature regarding factors affecting the adoption of agricultural innovations in different African settings. The prevalence of different observed constraints for different types of research outputs would be quantified and related to characteristics of the adoption environment, the research process, the research output, and the dissemination means. The result will be a systematic review and synthesis of the factors constraining adoption and impact of agricultural innovations in the African context.

5. Policy-oriented Research Impacts (ongoing activity). Policy-oriented research comprises a growing share of the CGIAR research portfolio, yet may be the area of System activities with the least compiled evidence of impact. During 2005 SPIA will finalize compiling an inventory of relevant studies, defining terminology and exploring the methodological issues involved in documenting the impact of “policy-relevant” research in the CGIAR. As a follow up, beginning in early 2006, SPIA will assess the impacts/influence of CGIAR policy-oriented research possibly through a series of Centre case studies.

6. CGIAR Performance Measurement (ongoing activity). SPIA has prepared guidelines on indicators of Center impact that it would monitor on a yearly basis. Those guidelines have been revised in the light of SPIA’s internal assessment of the Centers’ submissions for 2005. SPIA, supported by consultants will carry out in 2006 the first full scale application of the guidelines and criteria for judging Centers’ performance in the area of impact assessment.

¹⁰ A report including an inventory of evidence of impact in SSA and a more in-depth analysis of impact studies that meet specific criteria for metrics assessed will be completed by December 2005.

7. Dissemination and Communication of Assessment Results (ongoing activities):

- **CGIAR Impact Website:** A System level website to disseminate IA findings to broader audiences and to build an IA 'community of practice' in the CG has now been established. SPIA is facilitating the site's implementation, as its mandate includes providing CGIAR Members with information on the impacts of past CGIAR outputs and facilitating exchange of experience from impact studies. SPIA will continue to maintain and improve the site's functionality, and ensure that Center staff begins to feed information into the site as well.
- **Improved communication of results:** SPIA will produce brief synopses of CGIAR IA concepts and findings that are concise and attractive to external audiences. Briefs will be translated into French and Spanish, and will be made easily accessible through the 'Impact of the CGIAR' website.
- **Impact Assessment Focal Point Meeting:** The last SPIA sponsored IA focal point meeting (attended by all Centers) was held in Rome in 2000 and deemed highly successful in identifying System-level IA needs and opportunities, showcasing current IA work of the Centers and sharing experiences and expectations. Recently, there have been calls, particularly from the CGIAR IA focal points, to have another such meeting, on a regular basis. Many of these IA focal points are relatively new to the CGIAR and seek opportunities to share experiences and learn from one another. SPIA proposes to have such a meeting in mid 2006 and has agreed to facilitate the planning and organization with another Center, yet to be identified.

Standing Panel on Mobilizing Science (SPMS)

The main focus of SPMS during the next two years will be to develop strategic elements to help mobilize science around CGIAR goals.

1. Strategic Elements for Mobilizing Global Agricultural Science (new activity). The Panel will identify innovative ways by which advanced research institutes, strong national agricultural research institutes, national councils for science & technology, international and national private sector companies and other organizations mobilize agricultural science. This will be done utilizing the results from the ongoing SPMS activities listed below with the objective of improving scientific partnerships and promoting other organizations work on CGIAR related goals.

2. Improving CGIAR Science & Technology Collaboration Options (ongoing activity). During 2006 and 2007 the information collected from the Centers during a survey conducted in 2005 will be finalized including recommendations to promote Centers' external scientific collaboration. The follow up to be done during 2006 will include: finalizing the analysis of survey results in a report; improve the concept and develop a common definition of partnership in the CGIAR specifying a typology of research partnerships; and explore with Centers and relevant stakeholders specific collaboration options.

3. *Science for Agriculture Development Publication (ongoing activity)*. During 2005 SPMS has been developing the “Science for Agricultural Development” publication to be launched at AGM05. This volume includes sections on the contribution of agriculture development to meeting the MDGs, turning research outcomes into impacts, changing research needs given advances in technology, emerging research trends, the evolution of national agricultural research systems, and trends in global agricultural research spending. The preparation of the next such publication (proposed for launching at AGM07) will be the major focus of the Panel during late 2006 and 2007. The main task will be to identify the next main technical themes to be included and to find the best expertise in the selected areas to contribute to the next volume. The publication will continue to include a section on trends in research for agriculture development.

4. *Science Forum 2007 (ongoing activity)*. The SC would like to set aside (every other year) time for science discussions at the annual meetings of the CGIAR. That has resulted in this year first “Science Forum” at the AGM 2005. SPMS proposes to organize a second Forum at AGM07 organized around the themes of the next “Science for Agricultural Development” publication.