

# SCIENCE COUNCIL OF THE CGIAR

*Rudy Rabbinge, Chair, Science Council*

## **Report to ExCo-13**

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The Science Council recently held its Eighth Meeting in Rome from the 27-31 August, the venue shared between the FAO and Bioversity International. This allowed us to build both on the helpful FAO-CGIAR Meeting held earlier in 2007, and to uphold the Science Council's wish to keep closely in touch with the work of the Centers. The Science Council had three main concerns at the recent meeting. Firstly, there is the continuing need to air important trends and issues and to see how these may be addressed - by the Science Council in the first instance - but by the CGIAR as a whole. The meeting allowed scope for the Science Council to hear presentations from external experts on emerging opportunities (biofuels, and the assessment of international scientific spillovers). This is a trend that the SC hopes to continue as it keeps the research priorities of the CGIAR under review. Secondly, was to engage thoroughly in the major tasks of the Science Council. Much of the work of the Council in the last nine months, particularly the major effort in monitoring and evaluation of Centers and Programs, contributes substantially to the current ExCo Agenda. Thirdly, is the need to look ahead; to plan for the implementation of research priorities and the mobilisation of the required science, to examine impacts, to identify key constraints and new studies, and to draft the Science Council's new plan of work for the coming biennium. This report therefore provides highlights from the breadth of Council activities.

### ***Monitoring and Evaluation***

The Science Council's Standing Panel on Monitoring and Evaluation (SPME) continues to oversee the conduct of the annual review of Center MTPs, the External Program and Management Reviews (EPMRs) of Centers and the External Review of Challenge Programs. The Panel continues the process of improving the MTP and of integrating the various elements of the monitoring and evaluation processes to maximise efficacy. The just completed meta-study of past EPMRs provides useful recommendations for this.

This year, in order to overcome a back-log, the Council has considered an unprecedented number of **EPMRs** (and those of CIAT, CIP, IITA and WARDA as well as the External Review of two challenge programs-- Water and Food CP and HarvestPlus CP - will be considered at this meeting). Only three EPMRs are planned for 2008-09. The relatively large number of EPMRs conducted in the recent past is a useful resource, along with the meta-study, to extract issues of importance at the System level. SPME intends to do this and bring them to the attention of members through publishing the key issues in the CGIAR newsletter. Also SPME will use the recommendations from the meta-study to update the Terms of Reference and Guidelines for the EPMRs.

Over the last few years the SC has placed high importance on ensuring that Centers develop high quality MTPs as a basis for monitoring the relevance of science. The MTPs are public documents that link the planning of the Center to the System Priorities. The SC goal has been, through its commentary, to help the Centers to improve the quality of the public planning document. The assumption by the SC is that a quality MTP is essential for internal monitoring of performance and helpful for external monitoring. Increasingly Centers are using the MTP for internal management

purposes. Now that many Centers have developed a useful MTP for internal and external purposes, the SC is working with others to simplify the means of reporting. Such means include:

1) An online tool for both submitting the 3 year rolling MTP on an annual basis by all Centers and for use internally (drilling down to Center projects etc). This tool is being developed by the Knowledge Management Group and led by Bioversity with inputs from SPME.

2) Reducing the frequency of an in-depth review and the development of a full SC commentary (to every three years) for those MTPs of adequate standard. This year the SC has identified a number of Centers whose MTPs are of such a standard. The SC still intends to monitor the implementation of SPs during the transitional period of completing the framework plans (which need to be reflected in the MTPs). It will also assess MTPs when the Center/CP has gone through an external review or has completed a new Strategic Plan.

3) Decoupling the planning of output targets in the MTP with the monitoring of the targets met in the Performance Measurement System for outputs. The SC is recommending discontinuing the measurement of the attainment of outputs as an indicator in the PMS. Rather, it recommends that monitoring of the achievement of output targets will become a self-monitoring process by the Centers, facilitated by the on-line MTP tool mentioned above.

The SC anticipates that, with the considerable improvement in the MTPs, more of the SC's effort on monitoring the relevance of science will shift to commentary on the Strategic Plans of the Centers (including seeing that they align with the System Priorities).

In a joint SPME/SPIA Performance measurement workshop held prior to SC8 (held with CGIAR Secretariat and Center representatives), **the indicators of the PMS dealing mainly with relevance and quality of science** were examined for utility and possible simplification. One major decision was to recommend the discontinuation of the PM indicator for assessing outputs (described above). The workshop agreed to continue with the other indicators but make improvements to them, (e.g. the simplification of the evaluation of the quality and extent of impact assessment). The SC will improve the indicator for outcomes; reconsider the indicators for publications (so that they would cover both broad reach for relevance and high quality, which currently is not sufficiently covered); design an indicator for capacity building; and, communicate more effectively the rationale of the indicators and what is expected as good performance. In addition, the SC, through SPIA and SPME will provide users of the PM with a guide to the purpose, strengths and weaknesses of the PMS for research relevance and to avoid misconceptions and mis-interpretations (see below under impact assessment). For instance, CGIAR science is undertaken to have impact, and the SC notes that the indicators for publications, in particular, need to measure both outputs, relevance in an IPG context (which may be judged, for instance, through broad relevance and utility to national programs) and quality (which may be judged by peer scientists). Their production should not become or be perceived as an end-point by themselves. There is also a wish to link the EPMRs, particularly the EPMR follow-up, better to the PMS.

*In summary:* the SC has agreed to recommend de-coupling of the MTP from the PMS and to move the SC emphasis to the Strategic Plans while assessing the MTPs only periodically and on a "need to" basis. In its MTP Commentary, the SC has identified MTPs that require less intensive review in the following year and those that continue to require a close assessment. The SC believes that the overall PMS should be made simpler with better communication of what is expected from Centers as "best practice" performance. The SC will continue to discuss with the CGIAR Secretariat and the Centers how to improve all components of the PMS.

The Council and the CGIAR Secretariat are in the process of developing a paper on **lessons learned from the Challenge Programs that will be available for ExCo. The paper was delayed (i.e. not presented at SC08) in order to benefit from the just completed external reviews of two of the CPs.** It

is believed that the paper and the lessons will be in time to inform full-proposal development and selection.

SWEPs were developed for a number of purposes – as means to engage in ecoregional NRM research, to maximise synergies across CGIAR expertise (such as crop-livestock interactions through the System-wide livestock program) and to produce communities of practice (such as with CAPRI – the group established to synthesise experiences in common property research). They were largely successful in creating cross-system efforts and in partnerships. Some continue to perform strongly whilst others have mutated towards new goals or funding has diminished to a point where some are probably unsustainable. At a time when the System is re-orienting to new research Priorities it is apposite to re-examine the different SWEPs (both as vehicles for the conduct of research and in terms of subject matter) for their utility to contribute to a new and more integrated CGIAR portfolio. **Following up on the meta-study of the systemwide and ecoregional programs (SWEPs)** completed in February 2007 and using that as source of analysis, the Council is preparing a more complete typology of SWEPs and analysis of their current agendas so as to consider their utility for implementing the SPs in the context of CPs and framework plans. This will help identify relevant and viable SWEPs.

At SC7 the Council approved, in principle, a **Social Science Stripe Review** to be conducted in 2008. This decision was reaffirmed by the current EPMR Reports, almost all of which highlighted the deficiencies in social science studies in the Centers reviewed. The intent is to conduct the study in two phases; first to collect information about the current status of social sciences and social scientists at the CGIAR Centers - drawing as much as possible from existing information such as recent EPMRs and CCERs - and, on the basis of these data and analyses, refine the Terms of Reference for a proposed second phase that would focus on clearly defined functional areas and themes. The study will also consider the interactions between the social scientists and the natural scientists and their synergies, and the relevance of the current social science portfolio and capacities for the agreed System Priorities. The appointed Panel Chair will work on both phases of the Review and will interact with the SC after the first phase to develop the more focused orientation and Terms of Reference for the second phase.

#### *Science Council observations arising from its monitoring function*

**MTPs** – Many Centers now have quality MTPs that are useful for internal self monitoring. The SC will reduce the frequency of its detailed commentary on the MTPs of several Centers (whilst maintaining the review of SP research), while continuing commentary on those that are not yet adequate for planning.

The SC will spend more effort on review and comment on the Strategic plans of Centers as new ones are being developed.

**CIAT EPMR** – the Science Council notes with concern the lack of effective and anticipatory CGIAR oversight of Centers' financial management. The SC believes that the CGIAR cannot afford recurrent crises such as that involving CIAT and requires installing measures that should go beyond the current annual flagging of Centers that are not in a 'healthy' financial position. If CIAT was living beyond its means since 2002, as stated by the Panel and agreed by the Center, the CGIAR System should not wait for, and rely on, external reviews to tackle such situations (c.f. CIMMYT, ICRAF in the recent past). The SC suggests that the CGIAR Scoping Team assess the need to create an appropriate mechanism to better anticipate and deal with finance, management and governance crises.

A second aspect of this issue, and particularly in the case of CIAT, is that some Reviews find a linkage between Centers having drifted from their mission and having depleted reserves, thus exacerbating their financial crisis. Thus the SC sees an important linkage between the funding of priority research

and Center health. The SC recognises and welcomes the work of the Ad-Hoc Committee of ExCo for its efforts and its analyses of this key strategic funding challenge for the CGIAR.

**CP SSA MTP**—The SC remains concerned about the lack of focus in the MTP for the CP SSA on the proof of concept research for the innovative systems described as the R4D approach. The earlier external review, discussed at SC 07, laid out the key changes needed in the CP SSA. These changes are not yet seen in the MTP. The SC recognises the efforts by FARA to comply with the EPMP and SC commentary, but a discovery of great concern to the SC is that the scientific-basis to demonstrate the “proof of concept” is still lacking. The SC welcomes the fact that the new Coordinator of the SSA-CP could be present as an observer at the recent SC meeting to enhance the discussion and exchange. It seems clear to all parties that additional focus is required and the SC looks forward to discussions with Members on how this novel program might be viewed in the future.

**Regional Plans** – the Alliance has submitted two documents to the Science Council, termed as CGIAR Regional Plans for Collective Action (one for West and Central Africa, and one for Eastern and Southern Africa). These are largely process documents (as in years’ past). There is some evidence that the planning has been useful to determine boundaries and overlaps in regional research. To avoid the escalating transaction costs, the SC suggests that the broad planning phase be brought to a close and that the Centers begin implementation. (The SC sees the CIMMYT–IRRI aligned program as a good model for action.) The SC will in future focus its evaluation on the concrete regional projects that are subsequently developed through its annual review of the MTPs of contributing CGIAR Centers. The SC views some of the proposed coordination mechanisms to be somewhat cumbersome and costly. Nevertheless, the SC acknowledges that to design and initiate research proposals has resource implications for the regional consortia, such as the support of a research coordinator, but otherwise encourages that costs should be kept to the practical minimum.

### *Impact assessment*

The Standing Panel on Impact Assessment (SPIA) leads the Science Council’s assessments of the impact of the CGIAR at the system level. The Science Council, acknowledging feedback from Centers and donors, has noted some mis-interpretations of the **3a impact indicator** of the CGIAR Performance Measurement System, so the title of this indicator has been changed to reflect more accurately what it actually measures – commitment to documenting impacts and building an impact assessment culture. Some had inappropriately interpreted this indicator to reflect the size of the actual impact of Center research. The results of this year’s PM exercise, including Center scores, the weights and scoring method used, have been documented and shared with Center IA focal points in the interest of transparency and feedback. Some further suggested changes are being considered and will be discussed with IA focal points. However, it has been agreed that no major changes in the 3a impact indicator itself should take place for the 2008 exercise.

A two-page draft **SPIA strategy** has been developed that envisions making the CGIAR a leader in design and conduct of *ex post* impact assessment, building investors’ confidence in their past and future investments in the CGIAR and institutionalizing IA as an essential part of research management and planning. SPIA’s mandate is to provide quality and timely information to CGIAR members by partnering with Centers. SPIA strives to achieve that by maintaining its independence, objectivity and the quality of its work through peer-review processes, development of new methodologies and broadening the scope of IA. It should be noted that SPIA’s predecessor, IAEG, was set up to report directly to the CGIAR (for independence), as SPIA still endeavours to do at AGM.

There has been progress with several impact studies: the seven Center case study draft reports of the **Policy-oriented Research Impact Assessment (PORIA) study** are expected by the end of September. The Science Council hopes to present some of the key findings of the PORIA study at an AGM07

luncheon session, if possible. SPIA is considering alternative workshop formats to discuss the PORIA case studies and several strategies to publish the final papers.

The study leader has submitted an annotated outline for the **South Asia Impact Assessment** study which is being reviewed by SPIA. The study is timely in that it provides an excellent opportunity for the SC to present an objective and convincing rejoinder to the IAASTD report.

Preparation of the **Strategic Guidelines for Impact Assessment (SGIA) report** is underway. A third draft will be circulated to interested donors and research managers for their input, and the document finalized by teleconference, between Center impact assessment focal points and the drafting team, by the end of the year.

SPIA is planning to organize another Impact Assessment Focal Point (IAFP) Meeting. In the last IAFP meeting held in 2006, SPIA, 13 Centers, 4 CPs, donors and IA experts participated and the response was very positive. The next meeting is being planned jointly with EMBRAPA in Brasilia for November 2008. The agenda will be developed in collaboration with IAFPs. In addition, SPIA is planning to organize a special session on impact assessment at the International Association of Agricultural Economics meeting in Beijing in 2009. SPIA is considering de-emphasizing **hard (green) cover reports in favour of electronic means** to save costs and reduce paper use and would appreciate some feedback from ExCo on the value and desirability of this. It is proposed that hard copies of Briefs will still be produced and the full documents will be available on the CGIAR impact and SPIA websites for interested readers. Other future activities of SPIA are provided in the Science Council's Workplan.

### ***Priorities and Strategies***

The activities of the Standing Panel on Priorities and Strategies (SPPS) focus on CGIAR priorities and strategies, the identification of new science and issues affecting the context and conduct of IPG-focussed research.

The Science Council has put emphasis on the *development of Framework Plans* to articulate and implement System Priority (SP) research. Framework plans help identify the core competencies required by the CGIAR in fulfilling its vision in global agricultural research for development. Collectively they help describe the CGIAR's niche in the international agenda and what the System and its partners will do in a collaborative and coordinated fashion. The Alliance Deputies' Executive (ADE) has agreed to a program and schedule for development of FPs and the Science Council continues to provide advice and inputs as needed. Some SPs have been identified as potentially difficult areas (because of the large number of Centers involved or the newness of the area e.g. SPs 2A, 4A, 4D) and the ADE has requested assistance from the SC for these. Nevertheless a number of FPs are scheduled to be finalized by the Alliance by the end of 2007, including five by the end of September, and these will be subject to a Science Council managed peer review process. The schedule of planning and submissions reaches to the end of 2008. However, neither the FPs nor SPs are expected to be static texts, and the modulation of framework plans is expected to be an interactive process with the Alliance. The Science Council, as it considers its Workplan for the next biennium, is examining means to judge the planned portfolio of research, recurrent issues and new science. This will be needed so that work can begin in 2009 in analysis and the preparation of a commentary on the System Priorities leading to the provision of advice to the CGIAR in 2010 (5 years after endorsement of the SPs). It is expected, given the continuing planning cycles, that this commentary would be more of a mid-course evaluation and correction than a complete review of priority research, which was targeted for 2015.

The SC has convened with IFPRI a Workshop on *Food Safety* which was held in Washington DC, USA, on 8-9 May 2007. The Science Council Commentary has distilled the key conclusions relevant to the development of food safety research as part of the system priorities and highlighted some follow-

up studies that the SC might wish to consider. In the discussion of these strategic studies, the importance was noted of linking food safety research as it relates both to income generation and to producer and consumer health. It was suggested that successfully conveying such a message would be important for recognition of this research by the CGIAR membership.

Arising from earlier work, the SC had proposed that the System should revise and renew CGIAR guidelines for the use of IPR in the context of IPG research. However, missing knowledge to make this possible includes a better grasp of the expected stewardship regimes and issues surrounding liability of Centers in entering into arrangements with the private sector. Terms of Reference (or TOR) for such new **studies on Stewardship and Liability** have been developed. This activity, approved by the Science Council in 2007 will be undertaken in close consultation with CAS-IP, and inputs solicited from the CGIAR Secretariat and PSC. The outputs of the study will serve to inform the GRPC in its development of the System-wide IP policy.

Having completed a practical study of Ethics and CGIAR Research, which also resulted in the recommendation for new CGIAR guidelines, the Science Council is initiating the third planned study, *Ethics and the Mission of the CGIAR*. The team is to be assembled under the Chairmanship of Professor Peter Sandoe. The Panel has been identified and the projected start date is early 2008 for a report to SC10. This is expected to be timely input into the CGIAR change process now underway.

A workshop on *Biosafety*, which had been pending as one of the recommendations from an SC-commissioned study in 2004, is being planned for early in 2008. The meeting aims to network key Centers and NARS involved in transgenic research in order to inform the scientists of the recent developments, as well as to involve national counterparts in the early stages of transgenic research activity. It is also hoped that the workshop would assist the work of Bioversity International in bringing together the Centers to discuss policy-related matters in this area.

### ***Mobilizing Science***

Partnerships are key in the conduct of CGIAR science, and there are different modes of engagement with the different players in the research for development spectrum. A study has recently been completed of **CGIAR Centers' partnerships with civil society organizations** (CSOs) and will be published in early 2008. However, the study's main findings and a summary brief will be presented at AGM07. A companion study of links with advanced research institutes is under consideration as well as the means by which the CGIAR can mobilise science in support of the new System Priorities for research.

The Science Council has provided advice to the CGIAR Secretariat on their development of the program for the **Science Forum on Harnessing Advances in Science for Sustainable Agriculture** at the stakeholder meeting at AGM07. There is a list of potential experts to act as speakers and moderators in the first and second sets of Parallel Sessions of the Science Forum; the first, featuring major scientific achievements in and beyond the CGIAR in different regions; and in the second, on developments in various fields of science with potential to be used by CG Centers to better address challenges to achieve sustainable agriculture and its multiple roles, including molecular biology, agroecology, climate risk management and social science. Science Fora, so far jointly organized with the CG Secretariat (at AGM05 and at AGM07) have been geared for a wide range of stakeholders, including research managers, donors, and NARS officials. Meeting the perceived needs of the different constituencies has for the SC been a difficult and disappointing experience. Different ends probably require different means and clearer responsibilities. In order to foster more specific dialogue on science, the SC is considering setting aside time for discussions between CGIAR Center scientists and scientists outside the System decoupled from AGM. The intention would be to hold a meeting on science for development, designed to showcase and provide a platform for discussion of new

developments in science outside the CGIAR, with potential to be used in CGIAR research.

*The Future Operations of the Science Council*

**Science Council Workplan 2008/2009** - The Science Council Workplan for the new biennium has been prepared and will be presented under the subsequent part of this agenda item.

**Science Council Structure** – the Science Council has taken steps to streamline its internal working and this is the subject of another brief under this Agenda Item. The SC acknowledges the contributions of SC Members Dr. Vir Chopra and Dr. Onesmo Olé-MoiYoi, both departing the SC at the end of 2007. The SC looks forward to a timely process so that their successors can be appointed to serve early in 2008. Dr. Flavio Avila, a member of SPIA, and Dr Rey Martorell of SPPS have both stepped down in 2007, and their specific contributions are gratefully acknowledged.

The next SC meeting, **SC9** is confirmed for **March 28 – April 1 2008 in Nairobi** (co-organized by ICRAF and ILRI).