

CGIAR SCIENCE COUNCIL

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Monitoring and Evaluation: Processes and experiences

The purpose of this paper is to describe the mechanisms and processes that have been used systematically in the CGIAR for planning, monitoring and evaluation (M&E); what the Science Council's (SC) role has been, and what useful experiences can be drawn from the past. This paper represents the SC's exit strategy from its role of commissioning and conducting a large part of the CGIAR's M&E in which it has accumulated a wealth of experience that can be of use as the CGIAR is going through a significant transformation.

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1. Introduction

The purpose of this paper is to describe the mechanisms and processes that have been used systematically in the CGIAR for planning, monitoring and evaluation (M&E); what the Science Council's (SC) role has been, and what lessons can be drawn from these experiences. This paper represents the SC's exit strategy from its role of commissioning and conducting a large part of the CGIAR's M&E in which it has accumulated a wealth of experience that can be of use as the CGIAR is going through a significant transformation. The paper is structured by the type of M&E activity and it includes some comments on how the M&E system has evolved, and the SC's experiences of the value and shortcomings of each activity. A list of the documents deriving from the SC's monitoring and evaluation activities is given in Annex 1.

The SC, established in 2004 to succeed the Technical Advisory Committee (TAC), with four explicit functions: advise the System on priorities and strategies, monitor quality and relevance of research, assess impact and promote impact culture, and promote partnerships for science for development. The objective of the SC activities has been to improve the efficiency and effectiveness of the System in reaching its goals of poverty alleviation, food security and environmental sustainability, and this has been facilitated by the logical linkages between the SC's different functions listed above. The three key criteria that have guided the SC's assessment of relevance have been the research for development nature of the CGIAR's activities; the CGIAR's comparative advantage relative to many organisations involved in agricultural research and development, and the international public goods' (IPG) nature of the research. The SC defined the following characteristics as being essential to an integrated M&E system:

- It should be useful for accountability to the Donors, showing the way in which resources are used and the likely development results that will be achieved;
- It must facilitate learning by the Centers, drawing lessons from experience and enabling Centers to share their knowledge on successes and failures, and promoting the use of promising practices.
- It must be integrated, i.e., its components should fit together as a system in order to minimise transaction costs
- The components using self-assessments as inputs should be independent, which is critical to ensure their credibility

The SC undertook to streamline the different processes into an integrated system to produce relevant information for multiple purposes at reasonable effort and cost. The CGIAR planning, monitoring and evaluation cycle for Centers and Challenge Programs (CP) is presented in the following table and the iterative linkages are shown.

| Activity | Key features | Integration in the M&E System |
|-------------------------------|---|---|
| System's research priorities | Endorsed by the CGIAR membership. Revised periodically. | Guide collaboration, strategic planning and priority setting. |
| Center and CP Strategic Plans | The Boards' legal responsibility to set the direction of the institute. SC provides the Board a commentary on the draft about System's issues | Underpin the Medium-Term Planning. Reflect recommendations from EPMR. |

| | | |
|---|--|---|
| Medium-Term planning (MTP) | Rolling 3-year plan that presents workplan and financing plan for the first year. Centers submit updated MTP to a central System's database (CGMap). SC provides a commentary to ExCo on research relevance. | Reflects System's priorities and institutes Strategic Plan. Reports implementation of EPMR recommendations. |
| Performance Measurement System (PMS) | Annual system collecting data for indicators on research, institutional, and financial health. Mostly self-reported, independently audited; also some external peer assessment. | Data, scores and assessments available to EPMR as input. |
| Center Commissioned External Reviews (CCER) | Tool of Board oversight planning for strategic, programmatic and management areas. | Tools for self monitoring and evaluation. Inputs to EPMRs. At best complements the EPMR Panel's work. |
| External Program and Management Review (EPMR) | Conducted by independent panels of experts. Commissioned by SC on behalf of the CGIAR and jointly organised by the SC and the CGIAR Secretariat. | Key component of the independent evaluation sub-system. Recommendations often relevant for strategic and operational planning |
| Challenge Program External Review (CPEER) | Same as EPMR. Linked to the phases of a time-bound program. | Component of the independent evaluation sub-system. Strategies, MTPs and their assessments are inputs. |
| Ex-post impact assessment (epIA) | At Center level conducted by Centers. SC/SPIA guides and coordinates epIA and conducts meta-studies. | Relevance for strategic planning. Material for EPMRs and <i>vice versa</i> . |

The M&E activities in the CGIAR have also included thematic ("stripe") reviews and periodic external reviews of the entire System, the last of which was completed in 2008. Parallel to the CGIAR's M&E, some donors require and undertake their own reviews of the Centers and CPs in order to fulfil contract obligations.

The SC is independent from Centers and donors, and its role in external reviews has been to commission and organise them through its Secretariat (EPMRs and CPERs are organised jointly with the CGIAR Secretariat), and to provide a quality audit of the analysis and findings, and commentary on the Panel reports for the benefit of CGIAR's decision-making. For EPMRs and CPERs that have been commissioned on behalf of the CGIAR, the reviews have been conducted according to CGIAR/ExCo approved Terms of Reference. **All external reviews have been conducted by independent external panels of experts.**¹ The EPMR reports of Centers submitted to ExCo have included the Panel reports, the Center's or CP's response when relevant, and the SC commentary. EPMR, CPER and thematic review reports were until 2008 submitted ultimately to the CGIAR for decision and endorsement.

The following section gives a brief synopsis of the purpose of and experiences from each element in the M&E process.

¹ The SC considers that peers in the appropriate subject matter best do "independent" monitoring of science with the independence coming from their recognised world standing in science and them not having any vested interest in the review process.

2. Planning

MTPs

The CGIAR has followed a planning horizon of three years for the implementation of the research agenda. This has been done through a rolling Medium-Term Plan, submitted annually by all Centers and CPs, in which the research agenda has been adjusted and justified in the context of the CGIAR's priorities and strategies, progress in science, and funding opportunities. The SC has reviewed these plans involving external experts in some cases. The SC has provided comments regarding relevance to the CGIAR's agreed research agenda, alignment with the CGIAR's priorities, the IPG nature of the research and appropriateness of partners for use by donors and by the Centers. The SC also uses this process to endorse the next years work plan and budget for approval by the CGIAR.

The MTPs have had three important elements facilitating M&E. First, the Centers describe the impact pathways identifying the constraints to impact - the partnerships to be included and capacity building to be addressed to enhance outcome and impact. The impact pathway provides a tool for Centers to monitor success. As the MTP is now indirectly linked to the PMS through annual monitoring of outcome achievement in the latter, the clarity for planning and the utility of the plans for monitoring are expected to have increased. Second, the MTPs are used for reporting on the implementation by a Center/CP of its external review recommendations. The MTP includes a tabulated progress report in each annual submission, and changes are reflected in the detailed program descriptions which the SC comments on. Thirdly, monitoring of the achievement of output targets planned in the MTP, which was initially tested as a PMS indicator, is a forthcoming feature in the MTP database (CGMap).

In 2005 the SC revised the guidelines for MTPs considerably aiming at improving the utility of these documents for Centers, donors and the System. Since 2008 the MTPs have been prepared using specific software, EasyMTP, that facilitates submission on-line to a central CGIAR MTP database.² The database facilitates analysis of System-level coherence of program planning, distribution of allocations across priority research areas, and partnerships. With the improved clarity, consistency and content of MTPs, the SC has been able to endorse many plans and move them on to a (longer than annual) schedule of periodic assessment. Annual MTPs are updates to the System's database based on data submitted in the previous year. Finally, the harmonization and on-line availability has increased the accessibility of MTPs by donors to whom the plans can provide important information.

Most Centers' internal research organization fully reflects the MTP structure and they follow logframe planning. All Centers construct the larger (MTP) projects from smaller projects funded by core and grants money and many have internal project management systems that are fully compatible with the on-line MTP tool.³ One tension in analyzing the MTPs for the annual assessment of relevance and strategic coherence is the distortion caused by short-term grants on the overall strategic goals/output sketched at a higher level. There has been evidence of the strategy providing coherence to restricted grant funding, but also of grants creating departure from the strategic objectives in a way that is not easily analyzed and that reduces the efficiency of the MTP process in steering the Centers towards a more coherent research agenda. Furthermore, some Centers have taken the MTP process as an additional, externally imposed layer of reporting that has no connection to their internal planning. The MTP and

² <http://cgmap.cgiar.org/start.iface>

³ One example is CIP where the MTP output targets and the outcomes (of the PMS) are part of the CIP Annual Report. Also the Center links individual scientist annual performance management to the MTP output targets.

logframe planning format has raised some questions among the CPs regarding research done in complex partnerships and how it is best reported and attributed. Also the kinds of facilitation and process oriented activities that many SWEPS and some Centers engage in do not easily fit into the MTP's research planning framework.

Strategic Plans

With the upgrading of the MTP process into a better harmonized System's tool, the SC started shifting its focus from operational research planning to the higher level of strategic planning by providing comments regarding System-level issues on new strategic plans to Center Boards. This practice began in 2007. At the time of developing a new Strategic Plan, the Center board shares a DRAFT of the plan with the SC for its commentary on matters related to the overall CGIAR system.

3. Monitoring

Internal monitoring through Center Commissioned External Reviews (CCER)

The CCERs were introduced in mid-1990s when the Center Boards were encouraged to commission external peer-reviews for the dual purpose of satisfying the needs for Board oversight and providing an input to the EPMRs. The experiences of the CCERs as building block for EPMRs were not very satisfactory. They were not a uniformly useful input to the EPMRs that would have allowed substantial streamlining of the reviews including reduction in Panel size and time spent at Centers. This was due to the variable purpose, timing and quality (in terms of teams, TORs and subsequently the reports) of CCERs, and perhaps lack of a deliberate effort on the Panels' part to accept CCERs as valid component products into its EPMR. In 2005 the SC published new guidelines for Center M&E⁴ and recommended to the Boards a best practice approach to organizing CCERs. These included: harmonized TOR with explicit coverage of the items important for the EPMRs and better linking of the CCERs to a forthcoming EPMR, including comprehensive coverage of Center programs, and an expectation of independence of the CCER panels. The expectation was that EPMRs would move towards auditing the internal performance evidence rather than conducting the actual evaluation. In 2008, the SC reversed its view about the CCERs, acknowledging them as first and foremost a Board tool for conducting monitoring, evaluation and strategic oversight rather than a uniform (and implicitly independent) tool for EPMRs to provide program level assessment of quality, relevance, achievements and impact. However, the SC has continuously encouraged EPMR teams to consider CCERs of good quality as valid inputs that can complement the EPMR assessment. EPMRs have systematically evaluated the Board use of CCERs. In recent years the quality of CCERs and their usefulness for the EPMRs have, in general, improved, and several recent EPMRs have relied to a large extent on the CCERs of adequate quality in particular areas rather than repeating the assessment of areas covered by the CCERs. CCERs should therefore systematically be made available to donors, which has not been the case. The growing importance of the CCERs was also acknowledged in the independent EPMR meta-review conducted in 2007.⁵

Annual external Performance Management System (PMS)

The CGIAR annual Performance Measurement System (PMS) was started in 2005. The purpose of the PMS was to serve as a tool for decision-making and performance management by the Centers, donors and the System; for demonstrating accountability; allowing

⁴http://www.sciencecouncil.cgiar.org/fileadmin/user_upload/sciencecouncil/Reports/cgiar_me_final.pdf

⁵ Robinson M. and H. Elliot 2007. Meta-Evaluation of CGIAR External Program and Management Reviews (EPMRs). Science Council of the CGIAR and the CGIAR Secretariat.

benchmarking; and informing resource allocation. The PMS is based on self-reporting and subsequent external verification of the data on the basis of sampling. Some components in the PMS involve external peer-assessment. In the four years of operation, the PMS has been modified following experiences including those of the Centers.⁶

The PMS was constructed to monitor both institutional and financial health, and program results based performance in producing research outputs, outcomes and impact. The PMS also has a stakeholder perception component. The SC has been responsible for developing and monitoring indicators related to results of program activities.

The revised PMS includes four indicators for results. The **output** indicators are: 1) a composite indicator for peer-reviewed publications (including published cultivars) and 2) a measure of co-publishing with developing country authors. The incentive of the publications indicator, which includes an upper limit for quantity, is for Centers to maintain i) high quality of the research⁷ on which new technologies, their adaptations and policy advice are based, and ii) excellent reputation and among peers, partners and research donors. However, publications alone do not sufficiently reflect output performance. Therefore, to comprehensively cover output performance, it was agreed to design indicators for capacity building through training and management of data as important IPGs. The three components: publications, data and training, would be equally applicable to all Centers irrespective of mandate and nature of research.

The indicator for **outcomes** is based on the SC's peer-assessment of cases of outcomes (3-7, depending on Center size) submitted by the Centers. The assessment criteria include clear attribution of outcome to Center outputs (as planned in the MTP), clarity and specificity of the description of the outcome as backed up by credible evidence, importance and relevance of the outcome and scientific ambition and novelty of the research that led to the outcome. This indicator represents an essential first step in the pathway to impact and it can be "facilitated" by Center activities in capacity strengthening, advocacy, choice of appropriate partners, etc. The incentive is for the Centers to plan and monitor achievement at the outcome stage across their research portfolio and document the outcomes for accountability and learning.

The indicator for **impact culture** is based on three components and measures Centers' efforts to document impact from their past research (hence, *ex post* impact assessment, epIA) to fulfil their accountability imperative towards CGIAR stakeholders. It also measures their efforts to institutionalize impact culture among their own researchers and partners. The incentive is for Centers to conduct a reasonable number of epIAs (as per budget), advocate impact culture at the Center and among partners and maintain high quality and rigor in impact evaluation. This component indicator is partly based on SC assessment.

The SC concluded that "commitment to documenting impact and establishing an impact assessment culture" is a good proxy of accountability measurable on an annual basis. The Council also concluded that it was not feasible to come up with an annual indicator for actual impact, due to following reasons:

- a) There is a long gestation between research and the realization of impact on developmental goals such as poverty, food security, and environment. Therefore the

⁶http://www.sciencecouncil.cgiar.org/fileadmin/user_upload/sciencecouncil/Performance_Measurement/PM_Guideline_2009_Jan7_for_web.pdf

⁷ Peer review is the universal measure of good science.

indicator is less useful for ‘in-time’ internal learning and feedback for revising current on-going programs on an annual basis.

- b) Centers have diminishing influence on the ultimate impacts (compared to outputs and outcomes), which continue to occur over a long period of time. Thus, it is difficult to attribute a stream of “impact” to specific research interventions (in a specific time period).
- c) Given the diversity of research outputs, age and size of Centers, it is difficult to come up with uniform indicators that measure economic, social and environmental “impact” across all Centers.
- d) Measuring “impact” of research (in a credible manner) is a time- and resource-intensive activity, and requires specialized skills and investment/research in new methodologies. Also, some types of impacts simply do not lend themselves to straightforward measurement. Thus, requiring the reporting of “impacts” of research on an annual basis will not only be a major undertaking but become an expensive and burdensome activity for all Centers.

Recognizing that simple indicator metrics can be but one factor to inform the Centers themselves, their partners and the donors of the Centers’ performance, the SC has prepared a Guide for the use of annual performance indicators to make users aware of the potential and limitations of the PMS and to encourage appropriate interpretation of the results. It is very difficult to measure annual progress towards achieving research goals. Unlike production processes in industries and services, one cannot simply count the research contributions and compare them across Centers. Attempts to focus performance measurements on what can be easily counted and compared across Centers may give misleading results and shift attention from actual performance to the indicator value. When funding decisions are made directly on basis of indicator data the PMS may inherently tempt gaming and focus on indicator values. To reduce these risks, the Guide makes the incentives for high performance clearer and establishes targets for expected performance. Although timeliness and simplicity may make the PMS attractiveness for donors to use in funding decisions, it is important to acknowledge that the PMS does not provide a comprehensive assessment of all performance, and is not a stand-alone measure of the ability to perform. It is intended to complement other M&E instruments such as the EPMRs, CCERs, impact assessments, etc., to obtain a more comprehensive view of Center performance, especially for relevance, quality and quantity of results, and their potential for impact.

4. Evaluation

The EPMR conducted every five years is the CGIAR System’s main instrument for evaluating the Centers’ quality and relevance of research, effectiveness and efficiency of management, and achievements and impact on developmental goals. A similar instrument, CPER, was developed for external evaluation of the CPs.

EPMRs

External reviews of programs and management have been conducted since the CGIAR’s inception. In the last five years, the SC has commissioned an EPMR of each of the 15 Centers. The EPMRs’ main aim has been to inform CGIAR members that their investment is sound, or recommend measures to make it so. The EPMRs have served both the donors by providing an independent and rigorous assessment of the institutional health of the Center and the contribution it is making towards CGIAR’s goals; and the Center by complementing and validating its own evaluations and giving strategic advice for future direction. In addition to

the retrospective evaluation of overall performance, achievements and impact, the reviews have provided prospective, strategic guidance for improving efficiency and effectiveness in the future.

The EPMRs have been conducted by peers, not professional evaluators.⁸ The focus has been on international agricultural research for development within the CGIAR's unique context where the reviewers need to have a good appreciation of the research for development environment in developing countries, of the CGIAR and its complexities, of sound governance and management and of what good science can achieve in development outcomes and impacts. The SC takes the view that peers, rather than professional evaluators in the reviewing business, have the necessary profound expertise and experience to undertake this complex task. Further, it is the SC view that scientists welcome and respond to critical commentary by peers whom they respect for their international reputations.

EPMRs have been conducted by independent Panels chaired by a person who is a recognised expert in a relevant area of research, with expertise in research management and international agricultural research and development, with excellent analytical and leadership capability and with prior experience of an EPMR or equivalent review with a proven record of capacity to conduct and lead a review. The Panel members have been selected for their ability to focus on the institution-wide issues relating to the Center's mission, strategy, priorities, programs, governance, and management. Although Panel members have been selected on their competence and international standing all effort has been made to maximize regional and gender diversity in the panels in order to enrich the overall experiences of the Panel. The Center has been consulted on Panel profile and on potential panel members. The Center is asked to comment on a list of potential candidates to make up the team, especially highlighting potential conflict of interest. However the final decision on Panel composition is made by the full SC in consultation with the CGIAR secretariat.

To complement the standard TOR and guidelines for conducting EPMRs,⁹ the SC has prepared a list of strategic issues to be addressed by the Panels that have reflected the views solicited from the CGIAR members, the transcending issues put forward by the Center and the SC's own observations.

Each new EPMR has used the findings of the previous EPMR as a base for the new evaluation. The EPMR process has culminated in the discussion of the report and its recommendations at a SC meeting among the Council, the Panel Chair, Center and donors and observers attending the SC's meeting. The report and the response from the Center to the recommendations, accompanied by the SC's overall commentary on the report's analysis and findings, have been submitted to the ExCo for further discussion and, since 2008, decision on behalf of the CGIAR. ExCo since its inception has requested progress report on the implementation of EPMR recommendations. This reporting and subsequent monitoring by the SC became part of the MTP process in 2005.

The 2007 meta-review of EPMRs concluded that "the CGIAR could not be a 'system' without a mechanism like the External Program and Management Review". It found that donors in general considered the EPMRs necessary for the overall credibility of the CGIAR although EPMRs were not used to replace the specific program/project reviews needed by some

⁸ In 2004-09, about 80 experts from different parts of the world have been engaged in EPMRs.

⁹ http://www.sciencecouncil.cgiar.org/fileadmin/user_upload/sciencecouncil/SC_Guidelines/EPMR_Guidelines_Final_June_2006.pdf

donors. The review further concluded that the EPMR's integrative and holistic view of the Center gave it a strategic function; and that in the increasingly complex environment of multiple partnerships and accountabilities EPMRs were increasingly important for evaluating the effectiveness of the different relationships. The review, however, recommended several ways to improve the efficiency of the EPMR process and increase the consistency among EPMR reports. Anecdotal evidence indicates that the thorough EPMR process that provides peer advice to both the Center and the donors and is systematically applied to all Centers is unique to the CGIAR and very valuable to its members. It is, however, not certain whether donors have been using EPMR results to inform their annual funding decisions.

CPERs

Currently there are four active CPs and one other that has been approved for implementation. Three of the CPs have entered a 2nd phase after an external peer review at the end of the 1st phase (reviewed after about 4 years). One was externally reviewed immediately after the conceptualization phase (18 months after inception). The CPERs followed a common guideline approved by ExCo¹⁰ accompanied by TOR tailor-made for each CP. The review Panels were small (Chair and two members) and the process involved more virtual work than EPMRs. The panels were not accompanied by a secretary but technical and logistics assistance was provided virtually by the SC and CGIAR Secretariats. As these reviews were the first of their kind, they led to three documents of lessons from CPs, by the SC and CGIAR Secretariat, by the Alliance, and by one panel member responsible for governance and management aspects who took part in all three reviews.¹¹ From the experience of all four reviews, the SC's Standing Panel on Monitoring and Evaluation (SPME) has concluded that these types of programs can benefit from external reviews targeted to the cycle of the program that may include an exploratory phase, one or more phases of active research and a final phase of synthesis and transfer (handing over).

Large programs pursuing new areas of research or implemented by new types of consortia can benefit from an external review near the end (e.g. 3 years after commencement) of the exploratory phase that involves design of the initial work plan with hypothesis and targets, and establishment of broad partnerships for carrying out the research. An external review relatively early in the program's life provides a chance for early correction, for example to focus the endeavor on the most relevant research for the most relevant outcomes. This has been a most useful lesson from the CP reviews, all of which have recommended a tighter focus on fewer emerging outputs and outcomes. Another lesson from CPERs was that reviews of this nature would benefit from more intensive interaction with the program team and the stakeholders. This could be held in conjunction with a participatory planning and briefing meeting that brings these players together as part of the implementation process, thus keeping the cost to a minimum. The effectiveness of program reviews would benefit from better integration with internal program monitoring through accumulation of tailor-made performance data on a set of indicators relevant for the cycle and the nature of the program.

Development of a streamlined and integrated Center M&E system

The undertaking of the SC to streamline the EPMRs has been moderately successful. The panels' stay at the Center was reduced from 1 + 3 weeks (initial and main phases) to 1 + 2

¹⁰http://www.sciencecouncil.cgiar.org/fileadmin/user_upload/sciencecouncil/SC_Guidelines/CGIAR_Guidelines_CP_External_Review.pdf

¹¹http://www.cgiar.org/exco/exco13/exco13_lessons_learned_cps.pdf
http://www.cgiar.org/exco/exco13/exco13_ade_cp_lessons.pdf
http://www.cgiar.org/exco/exco14/exco14_cp_lessons_20080424.pdf

weeks thereby bringing more flexibility for experts who cannot commit to lengthy travel. The panel size has been reduced from an average of 7.2 panel members (including consultants) per review (31 EPMRs 1990-2004) to 6.1 (15 EPMRs organised by the SC). The direct cost of EPMRs has gone down from approximately 300,000 US\$ (average budget of each EPMR prior 2004) to about 230,000 US\$ (since 2004, average final cost of 13 EPMRs; all nominal values). The approach to assessing Center quality has been harmonised by advising Panels to use standard criteria for this assessment. In recent EPMRs, the Center has been asked to provide a limited set of pre-prepared materials and summaries to facilitate the Panel's orientation for the task and increase consistency between EPMRs.

In addition to streamlining the EPMR process, the SC aimed at improving the integration of the different M&E components. Compared to earlier experiences, the EPMR panels' assessments of CCERs indicate that they are of a more uniform quality and in several cases CCERs have substituted for a detailed assessment by EPMR Panels of the same subject. The CCERs have cost implications for Centers. If the Boards consider CCERs as a genuine component of their oversight they should continue to commission CCERs even if the System does not expect them as standard building blocks for external reviews.

The PMS by and large has not been used much as an input into the EPMRs. This is probably because the indicators are only proxies of the performance they are intended to measure, and EPMR panels have preferred to conduct their own peer-assessment of the various aspects of performance, particularly the aspects of quality, relevance and impact that are not covered in the PMS. The financial indicators may have provided the most useful data used by the EPMR teams as such. However, the PMS has enforced the recording of data on publications and finances in a standard way across all Centers, and highlighted certain aspects of performance considered important by the System, which may have improved the consistency of the EPMRs (such as impact culture and gender equality in recruitment).

With the more systematic follow-up of the Center's implementation of EPMR recommendations through reporting in the MTPs, the EPMRs are likely to have become more effective regarding improvements in performance and continuity between EPMRs of a single Center. The iterative linkage between planning, monitoring and evaluation in principle increases transparency and the ability of all parties (Centers, stakeholders and donors) to observe changes in relevance and performance. It was expected that better integration of the different planning and M&E components would have led to reduction in separate donor reviews and reporting requirements. Although some donors consider that the independent nature of the EPMR makes them appropriate for their own evaluation needs, others donors conduct their own reviews at project, program and even Center level—sometimes almost parallel to the CGIAR's reviews- in order to fulfill their internal granting requirements.. Recent discussions between the European Commission, the SC and the CGIAR Secretariat were a positive sign of mutual efforts to reduce the review and reporting burden on Centers and programs. The SC also begun discussion on how to engage donors better in the planning, implementation and use of EPMRs and how to increase the access to and use by donors of the System's M&E data.

In 2007, the Alliance of CGIAR Centers compiled data from Centers on the various costs of the M&E System, including transactions costs that rarely are available from research institutions.¹² The paper revealed a very positive attitude towards evaluation, a justified

¹²Alliance of CGIAR Centers 2007. Measuring some of the transaction costs to the Centers of assessments and evaluations in the CGIAR.

concern with costs, and the Alliance's support to streamlining the M&E system. However, underlying the Alliance paper there was a concern about excess expenditure (direct and indirect) on overall M&E and a perception that such needs are driven externally (including by the SC). Including MTP preparation in the calculations, the direct and estimated indirect costs amounted to about 2.6% of the CGIAR's total budget. While it is not easy to compare this investment for planning, M&E of the CGIAR with other systems, and comprehensive comparative data are difficult to get, there is some evidence suggesting that the amount in the CGIAR is modest.¹³ There is also clearly scope to improve the cost-efficiency of M&E. For example the transaction cost estimates were highly variable from Center to Center revealing scope for harmonizing practices.

External reviews of SWEPs

Since 2004 the SC organized the external review of two SWEPs, ASB and PRGA, thus bringing to completion the review cycle of SWEPs that had been originally approved by TAC. Each review had its specific TOR and they were conducted by a small panel (chair and two members). Unlike the earlier SWEPs reviews, the ASB and PRGA reviews included an explicit emphasis on impact. The SWEPs reviews have not had a systematic follow-up. For example, the SC recommended that the PRGA be phased out due to less than satisfactory performance in some key areas of the program's mandate; but while the decision is pending the program's future remains unclear. The SC also commissioned a meta-review of the SWEPs and, to follow-up on this review, conducted its own analysis of the programs in the context of changes in the CGIAR. It recommended distinct typologies for future SWEPs depending on the purposes of and demands for such mechanisms, and identified some programs that had good potential to add value and facilitate collaboration in the future. In the new CGIAR this basic function of the SWEPs to enhance inter-Center collaboration may become redundant but some of the collaborative and facilitation arrangements may offer useful examples and be worth maintaining.

Thematic reviews

The thematic or *stripe* reviews have been commissioned by the SC on specific priority themes that cut across more than one Center.^{14,15} The need for these reviews has been judged by the SC itself and derived from, for example, the SC's other strategic work, feedback from the NARS and reoccurring findings in the EPMRs. The review of training in the CGIAR was completed in 2005, and the review of social science research in the CGIAR will be completed in 2009. Thematic reviews have previously been presented to the CGIAR Group for decision and endorsement. These reviews had combined an evaluation of on-going activities with a strategic consideration of future needs. There are some indications that these reviews have contributed to positive developments at the System level. For example, the review of plant breeding methodologies in 2002 recommended collaboration, consolidation and even centralization of Center activities on new technologies. It is likely that the review recommendations together with the emerging experiences from new collaborative projects influenced the establishment of the Genomics task force and subsequent proposal for the Generation CP. The training stripe review led to better organisation of the CGIAR Center

¹³ According to anecdotal evidence M&E in UNICEF ranges between 3-5%; grantee requirements for M&E of Kellogg Foundation range between 5-7 %; according to quotes from public sector institutions, including one university in North America M&E ranges between 10-20%.

¹⁴ Since the 1990s before the SC's time thematic reviews have been conducted on the following topics: rice research in the system (1993); CGIAR activities in West Africa (1995); root and tuber crops (1997); policy and management (1997); institutional strengthening research and service (1997); soil and water aspects of NRM research (1997); plant breeding methodologies in the CGIAR (2002).

¹⁵ Also the CGIAR Secretariat has organized stripe reviews, for example on corporate governance in 2006.

training officers as a community of practice and consideration of capacity building as an explicit component of research implementation.

5. Lessons

The uniqueness of the CGIAR's M&E System is that it has been applied in a systematic way to a group of independent research Centers and emerging large research programs that the CGIAR supports. The purpose of the different mechanisms that are intended to complement each other is to improve performance and relevance of research and the related activities to increase the likelihood of impacts on the CGIAR's goals that are common to all Centers and CPs. They are also expected to provide diagnosis when performance is substandard or declining, encouraging Centers and programs to take corrective measures and reinforcing donors' trust in a responsive system. On one hand, the well-internalised planning that produces a public document, the MTP, to be shared with peers and donors, and the inclusion of self-monitoring in the M&E have the potential to increase broad ownership and responsibility for planning, monitoring and learning at Centers and programs at different management levels. On the other hand, the opportunity for researchers to interact with peers and receive their direct feed-back on research challenges, plans and achievements, has great potential to enrich the overall evaluation experience and to embed the reasoning behind a report's recommendations.

There is scope to improve communication about the M&E processes and the results. For example, reviews have commonly come to an end when the report has been completed and received by ExCo/CGIAR. Distribution of the reports has been rather passive and there have been only limited efforts to extract key findings and results from reviews for broader audiences, and for easier and more attractive access by donors and stakeholders. The enthusiasm by which the *ex post* impact assessment briefs have been welcomed by donors demonstrates that there is a keen audience for M&E results that are suitably packaged. Follow-up from external reviews could go beyond simple compliance and implementation of recommendations to include better assimilation, sharing and debate in the Center/program with the relevant stakeholders of the important findings and analyses of a review to gain more from the exercise. Some of the observations, analysis and recommendations for a given Center have system wide implications. In strategic and systemwide reviews the follow-up strategy could be incorporated in the plans at the initiation of the review gaining from the experience of how these reviews have led (or not led) to improvements in the area of activity.

The M&E activities will be organised in a new way in the new CGIAR. The focus of interest for the donors will shift away from Centers to jointly funded programs. Centers nevertheless remain the key implementers of research. The current M&E mechanisms that have been developed for Centers and programs are likely to have applications and provide useful examples and lessons also in the new System. Because research is a long term process and impact to be observed and documented requires an even longer horizon, the System needs to guard continuity in the transition. When the locations in the CGIAR organogram for conducting and organising M&E are decided it is wise to build on the useful experiences of the current M&E system. Four conclusions are highlighted.

1. The central assembly of planning data (the MTP data) is a very useful function of the new CGMap database, which can be adjusted to facilitate changing planning and monitoring needs.

2. Annual performance indicators have limited potential for guiding funding decisions, but they can be an important management tool for establishing best practices and due diligence. They should be carefully designed to match with the intended use, and if used for informing fund allocation, they should match with the program-specific expectations and be combined with more comprehensive evaluation.
3. The new Mega-programs will very likely incorporate the dynamism intended in the CPs. Even when addressing long term goals (as with germplasm improvement) they will be planned in shorter time-lines. Experience from the CPERs indicates that periodic reviews, and accumulation of performance information that would support such reviews, would be best designed in the context of the evolving phases and the intermediate objectives. In a very large Mega-program it is possible that there may be several parallel components at different phases, which also needs to be taken into account.
4. Regarding Centers, an indicator system alone cannot provide the strategic, integrative and holistic assessment needed to secure their continuous efficiency and effectiveness as research providers. There is now an opportunity to further harmonise the preparation for and approach to Center evaluation to avoid unnecessary transaction costs and to design M&E as an important investment with a high pay-off.

6. Phasing out M&E activities as part of the SC's exit strategy

Cognizant of the change in the CGIAR, the SC foresees the following transitional activities as part of its exit strategy for M&E.

| Current Activity | Activity in new CGIAR | SC's role in transition (2009) |
|--------------------------------------|---|---|
| Center and CP Strategic Plans | The legal responsibilities for setting direction will need to be clarified by the Consortium. | Continue commentary on DRAFT strategic plans when requested by Centers. |
| Medium-Term planning (MTP) | New operational plans developed by Consortium. | Maintain its role in MTPs assessment until a new planning and monitoring system is in place. Assess 2010-12 MTPs including 2010 work plan and budget as presented in the MTPs, and progress on implementation of EPMR recommendation |
| Performance Measurement System (PMS) | New performance agreements between Consortium and Fund; and Centers and Consortium. | Maintain its role in PMS until new performance agreements are in place. Assess outcomes and impact indicators of the PMS in 2009. Advice to maintaining publications data base for the CGIAR system for access and quality monitoring. |

| Current Activity | Activity in new CGIAR | SC's role in transition (2009) |
|---|---|--|
| Center Commissioned External Reviews (CCER) | New monitoring tools by the Consortium | |
| External Program and Management Review (EPMR) | New evaluation mechanisms for Consortium and Fund Council needs. | Finalise EPMRs of ICRISAT, IRRI and Bioversity. Commission and organise an external review CIMMYT at request of the CIMMYT board. Stand ready to respond to any similar requests during transition. |
| Challenge Program External Review (CPER) | New evaluation mechanisms for Consortium and Fund Council needs. | Stand ready to respond to requests from CGIAR during transition. |
| Ex-post impact assessment (epIA) | Continuous function. Operation at different levels (Center, activity, program, system) to be decided. | On going. SC/SPIA guides and coordinates epIA and conducts meta-studies. |
| System wide (Stripe) review | | Finalise the systemwide review of social science. Extract useful lessons for the System's attention from the 20 EPMR/ CPERs involving over 80 international peers commissioned by the SC since 2004. |

Annex 1. Documents deriving from the SC's activities in Monitoring and Evaluation

Medium-Term Plans

- Guidelines for Preparing 2010-12 Medium-Term Plans (MTPs) and 2010 Financing Plans, January 2009¹⁶
- Guidelines for Preparing 2009-11 Medium-Term Plans (MTPs) and 2009 Financing Plans, January 2008
- Guidelines for Preparing 2008-10 Medium-Term Plans (MTPs) and 2008 Financing Plans (FPs), January 2007
- Guidelines for Preparing 2007-9 Medium-Term Plans and 2007 Financing Plans, January 2006
- Guidelines for Preparing the 2006-8 Medium-Term Plans and the 2006 Financing Plans, March 2005
- Guidelines for Preparing the 2005-7 Work Plans and the 2005 Financing Plans, March 2004
- CGIAR Center and Challenge Program Medium Term Plans 2009-2011. SC commentary and Center & Challenge Program responses, October 2008
- CGIAR Center and Challenge Program Medium Term Plans 2008-2010. SC commentary and Center & Challenge Program responses, October 2007
- SC commentary and Center responses on CGIAR Center and Challenge Program Medium Term Plans 2007-2009, October 2006
- Preliminary commentary on CGIAR Medium Term Plan 2007-2009 for West and Central Africa, July 2006
- Preliminary commentary on CGIAR Medium Term Plan 2007-2009 for East and Southern Africa, July 2006
- Centre and Challenge Programmes Medium Term Plans 2006-2009; SC commentary and Centre responses, October 2005
- Centre and Challenge Programmes Medium Term Plans 2005-2007; SC commentary and Centre responses, September 2004

Center Strategic Plans

- Guidelines for Council's Commentary of Center's Strategic Plans, June 2008
- SC Commentary on CIAT Strategic Directions, December 2008
- SC Commentary on the IWMI Strategic Plan 2009-2013 'Water for a food-secure world', October 2008
- SC Commentary to CIFOR'S Strategic Plan and CIFOR Response, September 2008
- SC Commentary on World Agroforestry Center (ICRAF) 2008 Strategic Plan and Center Response, September 2008

Performance Measurement System

- Instructions for the Reporting of Performance Indicators for CGIAR Centers (2008 data), January 2009
- SC Assessment and Comments on the PM Results Indicators (2007 data), July 2008
- SC Suggestions to Strengthen the CGIAR Performance Measurement System (PMS), April 2008
- Guidelines for the Reporting of Performance Indicators for CGIAR Centers (2007 data), January 2008
- Guidelines for the Reporting of Performance Indicators for CGIAR Centers (2006 data), January 2007
- SC assessment and comments on the PM Results indicators 2006 data, May 2007
- Description of the Performance Indicators for CGIAR Centers (2005 data), January 2006
- SC Suggestions to Implement the CGIAR Performance Measurement System, October 2005
- Comments from Science Council on Performance Monitoring Indicators - Pilot Year 2005
- Description of the Performance Indicators for CGIAR Centers – Pilot Year (2004 data)

External Program and Management Reviews

- Report of the Seventh External Program and Management Review (EPMR) of the International Rice Research Institute (IRRI).
- Report of the Sixth External Program and Management Review (EPMR) of the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), February 2009.
- Report of the Sixth External Program and Management Review (EPMR) of the International Institute of Tropical Agriculture (IITA), February 2008 (includes SC Commentary, September 2007).
- Report of the Fifth External Program and Management Review (EPMR) of the Africa Rice Center (WARDA), January 2008 (includes SC Commentary, September 2007).
- Report of the Sixth External Program and Management Review (EPMR) of the Centro Internacional de Agricultura Tropical (CIAT), January 2008 (includes SC Commentary, September 2007).

¹⁶ MTP Guidelines and PMS Instructions prepared jointly with the CGIAR Secretariat.

- Report of the Sixth External Program and Management Review (EPMR) of the International Potato Center (CIP), January 2008 (includes SC Commentary, September 2007).
- Report of the Third External Program and Management Review (EPMR) of the International Water Management Institute (IWMI), January 2008 (includes SC Commentary, April 2007).
- Report of the Second External Program and Management Review (EPMR) of the International Livestock Research Institute (ILRI), January 2008 (includes SC Commentary, April 2007).
- Review of ICRAF's Follow-up Actions on the 2006 EPMR Recommendations 1 and 2, December 2007 (includes SC Commentary).
- SC Commentary on the Meta-Evaluation of EPMRs. September 2007.
- Meta-Evaluation of EPMRs, August 2007
- Report of the Fifth External Program and Management Review (EPMR) of the International Center for Agricultural Research in the Dry Areas (ICARDA), January 2007 (includes SC Commentary, September 2006).
- Report of the Third External Program and Management Review of the WorldFish Center, January 2007 (includes SC Commentary, April 2006).
- Report of the Second External Program and Management Review of the Center for international Forestry Research (CIFOR), January 2007 (includes SC Commentary, April 2006).
- Follow-up Review to the Fifth External Program and Management Review of CIMMYT, December 2006 (includes SC Commentary, August 2006).
- Guidelines for conducting EPMRs of the CGIAR Centers as part of the new policy for monitoring and evaluation, June 2006.
- IRRI's Upland Rice Research Follow-up Review to the 6th IRRI External Program Management Review, July 2006 (includes SC Commentary, April 2006).
- Report of the Fifth External Program and Management Review (EPMR) of the Centro Internacional de Mejoramiento de Maiz y Trigo (CIMMYT), April 2006 (includes SC Commentary).
- Report of the Fourth External Program and Management Review (EPMR) of the International Food Policy Research Institute (IFPRI), February 2006 (includes SC Commentary).
- Report of the Sixth External Program and Management Review (EPMR) of the International Rice Research Institute (IRRI), February 2005 (includes SC Commentary).
- Monitoring and Evaluation System for the CGIAR Centers, August 2005.

Challenge Programs

- Report of the First External Review of the Generation Challenge Program (GCP), March 2008 (includes SC Commentary, March 2008).
- SC Commentary on the CGIAR Challenge Program Proposal: Co-Hort—Challenge Program on High—Value Crops (Fruit and Vegetables), August 2008
- SC Commentary on the Challenge Program proposal Climate Change, Agriculture and Food Security, April 2008
- SC Commentary on the Challenge Program Proposal An Oasis Challenge Program to Combat Dryland Degradation across the Developing World, April 2008
- SC Commentary on the Challenge Program on Water and Food (CPWF) Research Agenda and Implementation Plan for Phase 2, April 2008
- Report of the First External Review of the Water and Food Challenge Program, January 2008 (includes SC Commentary, September 2007).
- Report of the First External Review of the HarvestPlus Challenge Program, January 2008 (includes SC Commentary, September 2007).
- Criteria for Assessing Challenge Program Proposals Phase III of the 2nd Cycle, November 2007
- Science Council Assessment of Challenge Program Pre-proposals; The Regular Process, 2nd Cycle, October 2007.
- Lessons Learnt from Selection and Implementation of the CGIAR Challenge Programs, October 2007.¹⁷
- Proposed Evaluation of New CGIAR Challenge Program Pre-proposals, May 2007
- Science Council Assessment of Challenge Program Concept Notes The Regular Process, 2nd Cycle, March 2007.
- Challenge Program External Reviews (CPER). Guidelines, January 2007.
- Science Council Guidance to Challenge Programme Concept Notes, Pre-proposals and Full Proposals, 2007.

¹⁷ Joint report by the SC and the CGIAR Secretariat

- Sub-Saharan Africa Challenge Program External Review, January 2007 (includes SC Commentary on the External Review of the SSA CP Inception Phase, September 2006).
- Synthesis of Lessons Learned from Initial Implementation of the CGIAR Pilot Challenge Programs, October 2004²
- SC Assessment of Challenge Programme Proposal: Improving Livelihoods and Natural Resources Management in Sub-Saharan Africa (SSA): Securing the Future for Africa's Children, September 2004

Systemwide and Ecoregional Programs

- The role of Systemwide Initiatives in Implementing the CGIAR's Research Agenda an Assessment of Current Systemwide and Ecoregional Programs (SWEPs), February 7, 2008.
- SC Comments on the Meta-Review of CGIAR Systemwide and Ecoregional Programs, May 2007
- Meta-Review of CGIAR Systemwide and Ecoregional Programs, March 2007
- Report of the First External Review of the Systemwide Program on Participatory Research and Gender Analysis (PRGA), May 2007 (including SC Commentary).
- Report of the External Review of the Systemwide Program on Alternatives to Slash and Burn (ASB), June 2006 (including SC Commentary).
- Criteria for Assessing Proposals for New Systemwide Programs, January 2006.

Stripe Reviews

- Stripe Review of Social Science in the CGIAR System, Scoping Paper, December 2007.
- Evaluation and Impact of Training in the CGIAR, July 2006 (including SC Commentary).