

CONSULTATIVE GROUP ON INTERNATIONAL AGRICULTURAL RESEARCH
SCIENCE COUNCIL AND CGIAR SECRETARIAT

**GUIDELINES FOR CONDUCTING EXTERNAL PROGRAM AND
MANAGEMENT REVIEWS (EPMR) OF THE CGIAR CENTERS AS
PART OF THE NEW POLICY FOR MONITORING AND
EVALUATION**

SCIENCE COUNCIL SECRETARIAT

JUNE 2006

INTRODUCTION

In June 2005 the CGIAR approved the policy document, *Monitoring and Evaluation System for the CGIAR Centers*. The new components of the monitoring and evaluation (M&E) system include annual performance measurement (PM), Center Board Commissioned External Reviews (CCER) and streamlined External Program and Management Reviews (EPMR).

EPMRs are commissioned by the SC on behalf of the Group and organized jointly by the SC and the CGIAR Secretariat. They are conducted every five years for each Center. These Guidelines are to be used in implementing the EPMR as part of the new M&E process. They incorporate the Terms of Reference for EPMRs (TOR) as endorsed by the Group in 1997. They do, however, bring new approaches to the EPMR based on an enhanced Center Board Program for CCERs. The guiding principles for the Center Boards to implement CCERs are attached (Annex 2).

In the new M&E system, EPMRs continue to provide a measure of central oversight and serve as an essential component of the CGIAR's accountability system. The EPMRs bring to a closure a five-year review cycle. They complement the annual Science Council (SC) assessment of the MTPs, the annual self-assessment mechanisms of the PM, and the CCER Program of the Boards, covering the Center's research Program and management.

These Guidelines have been designed for review of a Center. A companion Guideline will be developed for the External Reviews of Challenge Programs based on the same principles.

TERMS OF REFERENCE FOR EPMRS¹

Objectives and Scope

EPMRs seek to inform CGIAR members that their investment is sound, or recommend measures to make it so. Members of the CGIAR and other stakeholders can be informed whether the Center is doing its work effectively and efficiently. EPMRs are both retrospective and prospective and help ensure the Centers' excellence, relevance and continued viability, and the CGIAR System's coherence. Each review is expected to be strategic in orientation and as comprehensive as the situation warrants.

The broad objectives of EPMRs are to: a) provide CGIAR members with an independent and rigorous assessment of the institutional health and contribution of a Center they are supporting; and b) to provide the Center and its collaborators with assessment information that complements or validates their own evaluation efforts, including the CCERs.

The EPMR Panel is specifically charged to assess the following:

1. The Center's mission, strategy and priorities in the context of the CGIAR's priorities and strategies;

¹ As endorsed by the CGIAR in 1997.

2. The quality and relevance of the science undertaken, including the effectiveness and potential impact of the Center's completed and ongoing research;
3. The effectiveness and efficiency of management, including the mechanisms and processes for ensuring quality; and
4. The accomplishments and impact of the Center's research and related activities.

Topics to be covered

Mission, Strategy and Priorities

- The continuing appropriateness of the Center's mission in light of important changes in the Center and its external environment since the previous external review.
- The policies, strategies, and priorities of the Center, their coherence with the CGIAR's goals (of poverty alleviation, natural resources management, and sustainable food security), and relevance to beneficiaries, especially rural women.
- The appropriateness of the roles of relevant partners in the formulation and implementation of the Center's strategy and priorities, considering alternative sources of supply and the benefits of partnerships with others.

Quality and Relevance

- The quality and relevance of the science practised at the Center.
- The effectiveness of the Center's processes for planning, priority setting, quality management (e.g., CCERs, peer reviews and other quality and relevance assurance mechanisms), and impact assessment.

Effectiveness and Efficiency of Management

- The performance of the Center's Board in governing the Center, the effectiveness of leadership throughout the Center, and the suitability of the organization's culture to its mission.
- The adequacy of the Center's organizational structure and the mechanisms in place to manage, coordinate and ensure the excellence of the research programs and related activities.
- The adequacy of resources (financial, human, physical and information) available and the effectiveness and efficiency of their management.
- The effectiveness of the Center's relationships with relevant research partners and other stakeholders of the CGIAR System.

Accomplishments and Impact

- Recent achievements of the Center in research and other areas.
- The effectiveness of the Center's programs in terms of their impact and contribution to the achievement of the mission and goals of the CGIAR.

CONDUCTING EPMRs

In the new M&E system, EPMRs become increasingly an audit of the other components: annual PM and CCERs. Beyond the broad objectives stated in the TOR, the EPMRs are meant to provide Centers with independent recommendations and advice on how to improve the efficiency and effectiveness of the Center in pursuit of its mission and goals. Thus, the EPMR report is both an audit on past performance and a strategic document with a focus on the Center's future. Specifically, EPMR needs to advise on what changes the Center might consider in terms of its programmatic strategy and objectives; what new avenues of collaboration and partnership it might consider; and what structural changes the Center might consider in pursuing more efficiently and effectively its mission and goals.

The EPMRs are designed to complement and build on the CCERs by providing a more strategic overview of the performance of the Center. The PM provides inputs to both CCERs and EPMRs. To be credible and acceptable, all CCERs and EPMRs must strive to be objective and transparent. While the EPMR process must be participatory to enhance mutual understanding of all the important issues, the distance between the Panel and the Center must be observed to protect the Panel's integrity and independence. The reports must be direct, explicit and frank. These principles are observed throughout the review process.

The Participants

The participants in an EPMR are: the EPMR Panel Chair and members; the CGIAR Members, the SC, the SC Secretariat and the CGIAR Secretariat; the Panel Secretary; members of the Center's Board, management and staff; the Panel's support team of external consultants and resource persons; Chairs of CCERs (as resource persons where possible); and the Center's many partners at the local, national, regional and international levels.

Strategic Issues to be addressed by the Panel

In addition to the generic TOR for each EPMR which have been approved by the Group, the SC identifies a set of Center specific issues to be addressed by the Panel. The SC does this by canvassing views from SC members, CGIAR Members, the Center under review, other CGIAR Centers and the CGIAR Secretariat. Items are also drawn from the CCERs and the SC assessment of the Center's Medium-Term Plans. The list of issues is shared with the Center and the Panel as specific strategic issues to be addressed during the review.

Implementation

The SC and the CGIAR Secretariat jointly organize the EPMRs. The SC focuses on all programmatic aspects and the CGIAR Secretariat focuses on Center management and governance aspects of the review. Consulting with the Center management as necessary, they determine review design and Panel composition.

The SC and CGIAR Secretariats provide a resource person for the respective aspects of the review. A staff member of the SC Secretariat serves as Panel Secretary and resource person

for programmatic issues. S/he assists in organising the review in consultation with the CGIAR Secretariat, the Center, the Panel Chair and members.

The EPMR relies heavily on Board commissioned CCERs, which are expected to greatly improve the efficiency of the EPMR process.

The EPMR schedule consists of the pre-implementation phase (preparation by the Center, SC and the CGIAR Secretariat), Panel interaction with the Center Board, usually through attendance at a Board meeting; Initial Phase visit to the Center HQ, which may take place back-to-back with the Board meeting; visits to selected field sites as deemed necessary by the Panel Chair; and a Main Phase also at the Center HQ during which the Panel completes all the chapters of the report.

The Pre-implementation Phase

The pre-implementation phase of the EPMR begins with the Board ensuring they have in place an adequate cluster of CCERs. The *Principles* suggest that CCER to be effective for the EPMR should be reasonably current, i.e. within 3 years of the EPMR. The following steps are needed: The SC Director will send a formal letter to the Center three years before the EPMR begins with a request to the Board to provide a schedule of the CCERs to be conducted during the three year period leading into the review.

The CCER reports, including the Panel membership and their qualifications, and an account of the follow-up actions planned or taken by the Center Management and Board are made available to the SC and CGIAR Secretariats at the onset of planning of the EPMR.

The EPMR Panel Profile

The design of the EPMR and the Panel composition depend on the coverage and quality of the CCERs. The SC and CGIAR Secretariats brief the Panel Chair on the strategic issues raised and on the information available from the CCERs. The final design of the EPMR, including the Panel profile and size, will be adjusted with the aim of not duplicating the CCERs. The Panel will consider the CCERs and assess their quality as input to the EPMR.

Panel Chair and Panel Members

The quality of the outcome of the EPMR depends critically on the quality of the Panel Chair and the Panel members. In order to engage highly competent professionals, the EPMR process must be efficient, including timely planning. The Panel Chair and member selection process follows procedures established by the SC and the CGIAR Secretariat. The process of identifying a Chair begins about one year before the EPMR. The Panel Chair should be a recognized expert in a relevant area of research with considerable experience in research management and understanding of international agricultural research in the development context, have excellent analytical and leadership capability, and excellent command of English. S/he should have served on an EPMR or equivalent review outside the CGIAR and demonstrated capacity to lead an independent and objective review.

The Panel Chair is involved in determining the Panel profile and composition. For doing this, s/he is i) informed of the Center's and the SC's suggestions regarding Panel profile; ii) briefed by the Panel Secretary and CGIAR Secretariat resource person on the coverage of CCERs and whether they meet general criteria for quality; and iii) provided with a long list of potential Panel candidates. Direct contact with the CCER Panel Chairs by the SC Secretariat, CGIAR Secretariat or Panel Chair is advised. The Panel Chair is also briefed by the SC Chair about the overall goals and conduct of the review.

The Panel size should not exceed four, including the Chair. The Panel Chair will judge the need for consultants with specific skills to address particular aspects of the TOR. Panel members are generally selected for their ability to focus on the institution-wide issues relating to the Center's mission, strategy, priorities, programs, governance, and management. The Panel members should be drawn from a pool that has maximum regional and gender diversity; they are to be recognized experts in their field of expertise and the context of its application to solve problems; they must have good analytical skills and ability to write clearly and concisely in English.

The Panel Chair ensures that the Panel undertakes its assessment and completes the task in accordance with the general TOR and addressing the Center-specific strategic issues. The Chair assigns duties to each Panel member and encourages members to contribute to all aspects of the review report so that the report reflects the judgment of the whole Panel. S/he conducts the EPMR in a manner that is objective, analytical and constructive, and in a manner of mutual respect with the Center. The Panel Chair shares factual information with the Center for verification while maintaining independence in judgment.

The Center

The Center's Board, management and staff play a crucial role in the conduct of the review. They are closely involved in planning and organizing the review. Throughout the process, the collaboration and inputs of Center management and staff are essential for the review to run smoothly and for the report to be credible and acceptable. The Center should appoint one senior contact officer to facilitate the implementation of the review including compilation of all documents and information.

In preparation for the EPMR, the Board is expected to make available to the Panel a list of issues relevant to the EPMR. For this, the Board is encouraged to draw from the findings of CCERs and other relevant reports. The Center management provides appropriate material for the Panel following the instructions provided by the SC Secretariat and CGIAR Secretariat. Some of the material is expected to be readily available, while other documentation needs to be prepared specifically for the EPMR. The main documents include:

- The Strategic Plan of the Center or a strategic report from the Board on the Center's vision and goals showing how the Center will contribute to the CGIAR goals;
- An aggregate analysis of impact of the Center activities showing how the investment in the Center has contributed to outcomes and impact;

- A portfolio analysis on Center research including recent planning, i.e. the MTP reports for the period under review; and,
- Results of self-assessment processes including PM reports, CCERs and other relevant reports. All donor review reports should also be made available to the Panel.

A detailed list of documents and other materials to be provided to the Panel by the Center, SC and CGIAR Secretariats is given in Annex 1. The materials will be placed on a restricted Web site established for the EPMR, and distributed to the Panel on a CD-ROM prior to the Initial Phase. The Panel Chair and Secretary advise Panel members on specific reading tasks.

Center Stakeholders

Representatives of national agricultural research systems (NARS, including NGOs, universities and the Private Sector), regional and sub-regional organizations, bilateral and multilateral agencies, other researchers and managers of other Centers and Challenge Programs and advanced research institutions are important partners of CGIAR Centers, and their inputs are essential for the quality of the EPMR review process. As part of the review, these stakeholders' views on the Center's strategy, programs and collaboration and outputs and outcomes are gauged through two processes, which the Panel Chair defines in consultation with the Center and Panel members: a) Stakeholder survey by phone or e-mail, the results of which ought to be available to the Panel early on (the Panel may adjust its own survey if results of a recent Center conducted stakeholder survey are available); and b) Field visits. These consultations are intended to facilitate the assessment of the Center's role in the CGIAR and in the global context.

Assessment of the Board

Interactions between the Center Board and the Panel form an essential component of the review. Thus early in the process, preferably prior to the first visit of the full Panel to the Center (Initial Phase)², the Panel Chair and Panel member specializing on governance issues attend a Board meeting and interview Trustees about the Board and Center matters. These interactions contribute to the Panel's assessment of the Board's efficiency and operations, and the rigor of the Board's oversight of research quality and relevance, management and finances, including the implementation of the CCERs. The Panel should observe the content and dynamics of Board procedures, Board and Management relations and evidence of the Board being fully engaged with all key matters, including setting the vision and goals, monitoring and evaluating performance, setting policies, preparing contingency plans and ensuring that resources are used effectively and efficiently.

The Panel members attending the Board meeting need to review both the documentation provided by the CGIAR Secretariat on CGIAR governance, the Center on legal matters, and documents provided to the Board, including some recent Board Minutes. In addition to following the Board meeting, they need to observe the Board committees in action.

² The Board meeting and EPMR Initial Phase should not coincide.

Initial Phase

The Initial Phase usually takes about a week. The Center, Panel Chair and Panel Secretary design the agenda of the Initial Phase. The visit includes sessions and discussions with Center management and key staff members in order for the Panel to obtain an overview of the Center's current activities and future plans, to identify strategic issues and formulate hypothesis for key findings. The key senior Center staff should be available in person during the Initial Phase.

Before and during the Initial Phase the Panel receives detailed briefings from the SC and CGIAR Secretariats on relevant recent developments in the CGIAR and the Center being reviewed, covering both technical and programmatic matters, and matters on governance, organization, finance and human resources.

The Panel holds internal briefings throughout the Initial Phase and, by the end of the visit, produces an outline of the report, including assignments for drafting the report sections. The recommendations of the previous EPMP and the Center's initial and updated responses to them are the Panel's point of departure, and the Panel provides an assessment of the progress on implementation in an appendix to the report.

During the Initial Phase the Panel Chair should request from the Center any additional information and documents deemed necessary for the Panel's work.

Field Visits

The Panel conducts a limited number of field visits as judged necessary by the Panel Chair in consultation with the Center. The CCER panel itineraries may influence the choice of the EPMP field visits. Small Panel sub-groups conduct these visits, each visit lasting about 3 days. The purpose of these visits is to provide a realistic assessment of the Center's field operations, working conditions, and interactions with NARS and others in the region. The Panel is encouraged to prepare a check lists for the visits so that the sub-groups gather similar information relevant for the report's conclusions.

One purpose of the field visit is for the Panel to interact with Center staff posted outside of HQ. Center staff are also responsible for logistical arrangements. However, Center staff does not participate in substantive discussions with country officials, clients or stakeholders. Center HQ staff do not accompany the Panel during field visits.

Main Phase

The Main Phase of the review lasts about 10 days and takes place at the Center HQ. By the time the Panel gathers for the Main Phase, first drafts of virtually every section of the report will have been shared with the entire Panel. It is desirable that comments to the first drafts will also have been circulated among the Panel. This is essential to enhance the Panel members' contributions to and agreement of the contents of the entire report and to free time for Panel discussions on the most important strategic issues, findings, conclusions and recommendations. The Panel members also need time to interact with key staff members for

validating their hypotheses and confirming the information that forms the basis of their assessment. All Panel members need to agree on the final chapter drafts which are then shared with the Center management to ensure their accuracy and factual correctness. The Chapter relating to Board function is shared in confidence with the Board Chair for factual correctness. Also an executive summary and the key recommendations are shared with the Center management before the formal presentation to the Center staff.

At the end of the visit the Panel Chair presents the main findings and recommendations to the Center management and staff. The Center may invite a Board member to be present. The report is not distributed to the Center.

The final report is completed within two weeks from the main visit. It is expected that the Panel has fully finished writing the chapters and what remains to be done is editing, formatting and compilation of the annexes. The Panel Chair and Secretary finalize the report interacting with the members as necessary. The Panel Chair submits the report to the SC Chair and the CGIAR Director, copied to the Center.

The Panel's Report

The report is expected to be succinct (less than 100 pages) and written in plain language, focusing on assessment of Center performance, in terms of research performance, management and governance, and strategic issues. The Panel is expected to make an independent assessment based on its own observations and other information available to it, particularly the evidence provided through CCERs.

The report comments on the effectiveness of the Center's internal review system on which the EPMR was based, and on how well the Center has addressed the recommendations of the other reviews commissioned by the Center. Every EPMR should have sections briefly addressing these two topics.

The report should make a limited number of clear recommendations on the most significant issues faced by the Center (or the CGIAR) to act upon. The recommendations should be clearly articulated, realistic and doable in terms of implementation. Where those recommendations require additional resources, the Panel will also recommend what activities could be foregone. EPMR Panel may also identify areas of Center activity where a follow-up study (e.g. CCER) would be desirable.

Assessment of Quality and Relevance of Research

Assessment of the quality and relevance of the Center and its research programs are among the most important components of an EPMR. Furthermore, the PM system requires an assessment of the quality of Center research. The SC will provide the Panel with a set of criteria to be used by them to provide this assessment. In order to strengthen a systematic approach to this assessment by very different Panels evaluating very different Centers, the SC requests the Panel to provide both a qualitative and quantitative assessment for each criterion. The SC will use the Panel's assessment to provide the input into the PM process.

Response and Follow-up

The Center Board and Management submit a formal written response to the EPMR report, addressed to the SC Chair and the CGIAR Director. Their response states the Center's agreement, or otherwise, with each recommendation and outlines the actions proposed for implementing the recommendations.

The SC discusses the report and the Center response in the presence of the Panel Chair, Center Board Chair and Director General. The SC prepares a commentary focusing on the programmatic aspects of the Report, and the CGIAR Secretariat prepares commentary focusing on governance and management. The commentary should provide an assessment of the quality of the EPMR report and an endorsement of all the recommendations or justification for not endorsing specific recommendations.

The EPMR report, the Center response, the SC commentary and the CGIAR Secretariat commentary are then submitted to the ExCo, which formulates its recommendations to the CGIAR for discussion and endorsement at AGM.

In the subsequent MTPs, the Center will report on actions taken to implement the Group-endorsed recommendations, including real changes in the MTPs of the projects and programs, until recommendations have been fully implemented. The SC and the CGIAR Secretariat will include an assessment on the implementation of the EPMR recommendations in their MTP commentary to ExCo and the Group.

The Panel's assessment of the Center's research quality will be incorporated into the PM process and be effective for the period between EPMR reviews. In the case where the PM assessment is poor, the SC will, based on the evidence of change at the Center review the PM assessment in the interval between the EPMR process.

A Mid-Term Review can be considered as an appropriate mechanism to monitor closely the Center's handling of major concerns raised by the EPMR.

DOCUMENTS FOR EXTERNAL REVIEWS OF CGIAR CENTERS

POSTED ON A RESTRICTED EPMR WEB SITE FOR PANEL MEMBERS BEFORE THE EPMR			
	Provided by:		
	SC Secr.	CGIAR Secr.	Center
Recommended reading			
1. Terms of Reference and Guidelines for External Program and Management Reviews of CGIAR Centers	X		
2. Most recent EPMR report of the Center	X		
3. Summary of actions taken in response to the last EPMR			X
4. CGIAR research Priorities 2005-2015	X		
5. The latest Board-approved Strategic Plan of the Center			X
6. Medium-Term Plans of the Center for the period of review			X
7. SC commentaries of the Center's Medium-Term Plans	X		
8. Center-Commissioned External Review Reports			X
9. Donor commissioned external review reports			X
10. List of achievements/outputs by Program or other research unit: publications (peer-review and other), research breakthroughs as recognized by peers, germplasm, genetic stocks, new technologies etc.			X
11. A paper prepared by Center management and Board on: a) main issues of current concern, b) vision of clients needs in intermediate (5 years) and long (10 years) term; c) vision on CGIAR and donor status in intermediate and long term; d) state of the relevant science in intermediate and long term; e) plan of action reflecting these vision statements			X
12. The current organization chart, with a brief description of the Center's internal management structure, including the composition and terms of reference of each major committee			X
For reference and information			
13. Toward a New Vision and Strategy for the CGIAR	X		
14. New Monitoring and Evaluation System for the CGIAR Centers	X		
15. EPMR reports of CGIAR Centers	X		
16. Most recent CGIAR stripe studies involving the Center	X		
17. The CGIAR Charter		X	
18. Most recent Annual Report of the Center, and comparable research reports of the programs, if available			X
19. The latest Annual Funding Request			X

20. Professional Staff Assessment for each professional staff member, according to the Professional Staff Assessment CV Form to be provided by the SC Secretariat.			X
21. List of reports of major planning conferences, internal reviews, expert meetings, etc., which have had a major influence on the direction of specific Center programs			X
22. List of the agreements for cooperative activities with other Centers and institutions			X
23. List of ongoing and recently completed contracted projects			X
For panel members on governance and management			
24. Most recent CGIAR financial guidelines and manuals		X	
25. Reference Guides for CGIAR International Agricultural Research Centers and their Boards of Trustees		X	
26. Center Charter and other basic documents establishing the Center, along with subsequent amendments			X
27. Table showing composition of the Board over the last five years, along with an indication of the term of office of current members and their roles on the Board			X
28. Board handbook or rules of procedure			X
29. Table showing allowances, benefits, and salary ranges for each category of staff			X
30. Table showing personal data on professional staff by program, including each job title, incumbent's location, IRS/NRS/LRS status, period of tenure, gender, nationality, age, salary over the last three years, funding source (excluding names)			X
31. Table summarizing turnover of staff over the last five years by staff category			X
32. List of international staff vacancies and how long positions have been vacant			X
33. Set of minutes covering Board and Board committee meetings since the last External Review (and reports of board committees to the full Board if not included in the minutes)			X
34. Staff manual or a description of current personnel procedures for international and locally-recruited staff			X
35. Local compensation surveys used by the Center			X
36. Reports of external auditors, including management letters, and financial officer's reports to the Board since the last External Review			X
37. Most recent internal audit reports			X

PRINCIPLES FOR CONDUCTING CENTER COMMISSIONED EXTERNAL REVIEWS (CCERs)

Background

Since 1995 Centers have been commissioning “Center commissioned external reviews” (CCER) on selected components of their programs and management. The CCERs have been a tool for the Board of Trustees to facilitate its oversight of different aspects of Center performance and strategy, including relevance and quality of science. Boards have used CCERs to a varying degree, some regularly for all aspects of Center activities and others very irregularly for limited areas of activity. The quality and utility have varied greatly. Subsequently, their usefulness in External Program and Management Reviews (EPMR) has varied, and the EPMRs have continuously been designed to undertake a comprehensive review of Center programs and management, drawing little, to-date, from the CCERs.

A new monitoring and evaluation (M&E) system for CGIAR Centers has been approved and will commence implementation in 2007.³ The new system emphasizes the Boards’ responsibility for oversight of all aspects of Center performance. The new EPMR will complement other elements of M&E, including annual performance measurement (PM) and CCERs. Thus the Board commissioned, external, independent reviews on the performance of the Center will become an essential element of the new M&E process.

The aim of these *Principles* is to encourage adoption of a relatively uniform standard for all Boards to conduct their independent CCERs in order to improve the efficiency of the M&E process for the Center and for the System

Objectives of the CCERs

CCERs refer to external reviews commissioned by the Board of a Center in any area that is relevant to the Center’s performance of their business (e.g., a specific research program, a support service, financial administration, cross-cutting themes, etc).

The primary purpose of the CCERs is to facilitate the Board’s oversight of the Center’s performance and to enable timely decision making by the Board and Management on strategic issues.

The second purpose of the CCERs is to provide essential inputs into the new EPMR process, so that EPMRs can become more streamlined and focused on strategic issues.

Conducting a CCER

The Center Board takes responsibility for CCERs as a regular part of its oversight function.

Developing a CCER Schedule - The Board will develop a tentative schedule for commissioning CCERs at the Center. The CCERs should be planned well ahead to secure availability of best qualified experts and should link with the EPMR schedule 3 years prior to an EPMR. The Center should inform the SC and the CGIAR Secretariat of the CCER schedule and provide the studies as they are completed.

³ New Monitoring and Evaluation System for the CGIAR.

The Board decides on the number, subject and timing of the CCERs according to the dynamics of the enterprise. The CCERs should cover most if not all of Center programs and management in preparation for the EPMR. It is recommended that CCERs as input to an EPMR should not be older than 3 years. More current CCERs are preferred.

Terms of reference (TOR) for the CCER - The TOR for the CCER should be developed and approved by the Board. The TOR must be specific in order to provide clear guidance to the panel. (One of the main criticisms by EPMR Panels of the CCERs carried out to date is that their TORs have been too general.) In programmatic areas, the TOR must include the CCER panel's assessment of the relevance and quality of science and the supporting evidence for that assessment.

Appropriate criteria for assessing science quality include: quality of inputs including staff and infrastructures, processes in place to assure quality and quality of outputs and achievements. Conventionally used indicators for outputs, such as peer reviewed publications (quality and quantity) need careful interpretation, but they do provide a quantified, objective basis for opinions and comparisons. Sound scientific approaches are essential for the CGIAR.

Appropriate criteria for assessing Program relevance include: i) evaluation of the planning and priority setting processes of the research programs or disciplines under review; ii) whether the scientific activities in that Program were shaped and guided by clear development objectives; iii) whether the rationale and lines of logic for arriving at the research agenda are transparent, systematic and rigorous; iv) transparency of the criteria used for making strategic choices and identifying best bet opportunities and their consistency with those employed by the CGIAR in developing its own priorities and strategies, i.e., the contribution to CGIAR goals, the production of international public goods, probabilities of success and cost effectiveness, and alternative sources of supply and comparative advantages; v) assessment of outcomes and impacts, cost-effectiveness and relevance to CGIAR goals, and vi) the nature and effectiveness of the Center's science partnerships through review of joint products.

Selection of the Panel - The Board approves the CCER Panel Chair and Members. The panel must include critical professional expertise required for assessing the enterprise under review with, in most cases a minimum of two persons.⁴ The people selected should be leading figures in the fields for which they were selected and independent of the ongoing activities of the Center/program. Panel members with recent, i.e. less than 10-year connections to the Center as research partners, consultants, or staff members should not be included. The CCERs should be planned well ahead to secure availability of best qualified experts. Board members should not serve in management-related CCERs, but if the Board desires, they may act as resource persons in programmatic CCERs.

Follow-up of CCER recommendations - The CCER reports are expected to include clear recommendations, duly supported by the evidence discussed by the panel in the text. The Center should report on actions taken on Board agreed CCER recommendations, including management CCERs, in the rolling MTP. The SC and CG Secretariat may comment on the outcome of the CCER, and the follow up in the MTP commentary.

The full CCER report (with the TOR, the Board responses, and the follow-up action plan) will be used by the made available to the SC and the CGIAR Secretariat for planning the upcoming EPMR, and subsequently to the EPMR Panel.

⁴ The Board should avoid CCERs done by a single person. However, there maybe some narrowly defined non-research areas, e.g. looking at the financial control and reporting systems that can be covered by one person.