Consultative Group on International Agricultural Research (CGIAR)

Instructions for the Reporting of Performance Indicators

for CGIAR Centers

(2008 data)

Science Council and CGIAR Secretariat
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Introduction
The CGIAR Performance Measurement System is a regular feature in the CGIAR Monitoring & Evaluation structure.

The PM system measures Center performance along three dimensions:
- Results.
- Potential to perform.
- Stakeholder Perceptions.

The system provides Centers a tool to better understand their own performance and demonstrate accountability, which is very much welcomed by CGIAR Members. In addition it is used as an input in CGIAR member fund allocation decisions.

Moreover, the reporting of performance results has also become a standard section in the CGIAR Annual Report and in most Center Annual Reports.

Part 1: General Information

1. Timeline for 2009 PM exercise.

	Timeline for 2009 PM exercise
First week January	Launch of the 2008 PM process, including instructions and definitions of indicators.
February 9	Launch of on-line data collection system.
March 15	Deadline for Center reporting on PM indicators.
March 15	Data assessment and verification begins
27-29 March 2009	SC meeting – discussion of PM findings.
May 15	Data verification completed.
early June	Discussion of results by ExCo.
July	Online report made available to Members and Centers.

2. Use of the CGIAR Performance Measurement System

The performance measurement system is a diagnostic tool to understand the current performance status of each CGIAR Center against a set of indicators.

The PM system is used as

- a learning tool for a Center's own performance management and benchmarking with its sister Centers where possible and appropriate,
- a tool for demonstrating accountability and transparency to CGIAR stakeholders,
- an M&E instrument complementing EPMRs and Center-Commissioned External Reviews (CCERs),
- a tool to enable a better understanding of CGIAR System performance,
- an early warning system to alert the CGIAR to any problems and weaknesses annually and thereby allow the rapid implementation of counter measures.

3. Key changes in the 2009 PM cycle

As a result of the CGIAR Performance Measurement workshop held in July 2008 in Washington, DC involving representatives from the SC/SC Secretariat, Alliance Deputy Executive, CGIAR Membership, CGIAR Secretariat and external M&E experts a number of changes to the PM system are being introduced to simplify the system:

- A composite publications indicator with distinct weights will be established.
- The PM System will not have an overall measure of percentage of output targets achieved, but through linking the PM System with the newly established CGMap it will continue to allow interested CGIAR Members and Partners to track the results (i.e. outputs) for individual projects. During a transition period the data continues to be collected through the PM interface until a CGMap interface has been developed.
- The number of required outcome cases will be relative to Center budget based on the previous year's actual expenditure.
- Establishment of a composite score on Impact culture based on the two indicators used for past years.
- Develop a single summary score for the governance checklist.
- Develop a single summary score for the culture of learning and change checklist.
- Drop two diversity indicators: "Diversity in recency of PhDs" and "G&D Goals in place"
- Retain two financial indicators: (i) reserves and (ii) cash management; the remaining three indicators are to be removed from the PM system.

3. Submission of evidence material supporting the performance measures

The CGIAR Performance Measurement System is based on self-assessment by Centers, selectively verified through a mechanism managed by an external expert in collaboration with the CGIAR Internal Audit Unit.

Centers are requested to submit certain evidence supporting the reported data at the time of submission of the indicators. This requirement is indicated with the phrase “Requested evidence material”. However, during the verification phase conducted by an External Verifier, the Centers will be requested to submit more detailed evidence material for those indicators selected on a sample basis. (e.g., governance checklist, culture of learning and change checklist etc.). While this material can be uploaded to the PM database already earlier (if desired by the Center), we suggest to wait until the indicators to be verified are selected so the burden will be less on Centers.

Part 2: Description of Indicators

I. Indicators of Results

Element 1: Outputs

Definition: Outputs are the products of research with a defined time line, contributing to reaching the Center goals by offering solutions to problems identified during the planning process.

Starting this year, the PM System will measure outputs in terms of publications, capacity strengthening activities and data management strategies. The latter two indicators will be piloted outside the PM System.

The PM System will not have an overall measure of percentage of output targets achieved, but through linking the PM System with the newly established CGMap it will continue to allow interested CGIAR Members and Partners to track the results (i.e. outputs) for individual projects. During a transition period the data continues to be collected through the PM interface until a CGMap interface has been developed.

INDICATOR 1: Composite measure of Center research publications

This composite indicator consists of three measures:

- 1A: Number of externally peer-reviewed publications per scientist in 2008 that are published in journals listed in Thomson Scientific/ISI
- 1B: Number of externally peer-reviewed publications per scientist in 2008 (excluding articles published in journals listed in the Thomson Scientific/ ISI)
- 1C: Relative rating of Center's best publications regarding journal impact factor

Rationales for sub-measures 1A-1C along with instructions are given below. Calculation of the overall score for indicator 1 is presented in Table 1.

Measure 1A: **Number of peer-reviewed publications per scientist in 2008 that are published in journals listed in Thomson Scientific/ISI**

Rationale: This measure reflects the contribution of knowledge by the Center to a wide international audience and the quality and usefulness of that information as determined by peers from an internationally recognized journal database.

Please report the number of peer-reviewed publications per scientist in 2008 that are published in journals listed in the Thomson Scientific/ISI Master Journal List (database of over 15500 peer-reviewed journals). The list can be found at

http://www.thomsonscientific.com/cgi-bin/jrnlst/jloptions.cgi?PC=master

Requested Evidence Material:

- List of publications (with full citation and consecutive numbering), including (i) name of Center scientist(s) who authored or co-authored, (ii) year of publication, (iii) title of publication, (iv) volume number, (v) journal name, (vi) page numbers, (vii) ISSN, and (viii) indication of which author is a developing country partner if applicable.
- List of scientists included in the denominator FTE. This list must include: (i) Name and position or title, (ii) date of hire and departure, and (iii) status (e.g. IRS, RRS NRS). Please also include a description of your indicator computation and the FTE for each scientist in the list.

Guidelines for measuring the number of peer-reviewed publications

- This should include publications strictly published in 2008. Publications from the previous year (2007), whether online or hard copy, will be accepted only if they were not included in the list of publications from the previous year. Publications can only be counted once, either online or in hard copy. Please ensure that publications from the previous year that were not counted in that PM verification are listed separately
- The journals or book series should have an editorial board and clear review procedures (feedback from technical editors).
- Peer-reviewed publications other than journals should include i) books either written or edited by IARC staff[1]; ii) chapters in books and conference compilation documents where these have been formally published and externally refereed; iii) monographs only when they are formally published and externally refereed.

  No other publications should be included in this category such as abstracts, working papers, internal series, newsletters, reprints etc.
- Only ONE entry of each paper per Center is permitted. Where there are multiple authors including ones from different Centers then both Centers may count the paper in their submissions.
- When staff joins an institute during the year in question, publications from their previous employment may be counted as long as they are relevant to the work of the CGIAR. Likewise for staff leaving an institute in 2008 all appropriate 2008 publications may be counted. If the scientist has left in years prior to 2008 and the publication is published in 2008, then both the publication and scientist must be counted only if the publication was prepared during the scientist's tenure at the center. Please refer to "Annex 1. Summary of definitions" for the calculation of FTE in these cases.
- Publications resulting from work fully funded by the Center, but written by a non-Center staff can be included, but then the person must be also included in the scientist count.

[1] In the case of IARC staff acting as both editors and authors of chapters in an edited book, the book itself would count as one publication (if it had been externally peer reviewed) and each chapter with an IARC author would count separately.

Follow the guidelines for measuring the number of externally peer-reviewed publications given above when applicable. For calculating the number of scientists and its FTE please use the definition in Annex 1.

Measure 1B: **Number of externally peer-reviewed publications per scientist in 2008 (excluding articles published in journals listed in the Thomson Scientific/ ISI).**

Rationale: This measure reflects the contribution of peer reviewed knowledge and information by the Center for targeted stakeholder audiences (not including major international journals)

Please report the externally peer-reviewed publications per scientist in 2008. Please report separately– if pertinent:

- number of externally peer-reviewed publications per scientist in externally published journals and books.
- number of externally peer-reviewed publications per scientist in Center-produced book/research report series or journals.

Externally peer reviewed means that the publications have been reviewed by experts that are not Centers' staff or work as consultants with the Centers.

<u>Requested Evidence Material:</u>

- List of publications (with full citation and consecutive numbering), including (i) name of Center scientist(s) who authored or co-authored, (ii) year of publication, (iii) title of publication, (iv) volume number, (v) name of journal, (vi) book or other, (vii) page numbers (range), (viii) indication of whether it is a Center owned series/journal or an externally published journal or book, (ix) indication of which author is a developing country partner if applicable, and (x) editors.

Measure 1C: **Relative rating of Center's best publications**

Rationale: The CGIAR Centers aim to be Centers of excellence in agricultural science to address complex issues of relevance to the poor. As a system of excellence the CGIAR is more likely to attract new research partners. This measure reflects the quality and originality of the Center's research shown by ability to reach top quality journals with a proportion of all publications.

This measure compares the journals in which a sample of the Centers articles (defined on basis of FTE) was published to the top journals in a subject category using a "normalized impact factor (IF)"[1] **This measure is generated based on a sample of articles submitted for 1A. Centers do not have to provide additional information.**

[1] Normalised IF = journal impact factor divided by the average of the IFs of the three top journals in the subject category

Table 1: Calculation of the composite publication indicator value

Measure	Weight	Performance Target and Scoring[2]
1A Number of peer-reviewed publications per scientist in 2008 that are published in journals listed in Thomson Scientific/ISI	50 %	• 2 journal articles per scientist. • Scoring = 0-5 points with 0.5 articles/scientist being the lower threshold.
1B Number of externally peer-reviewed publications per scientist in 2008 (excluding articles published in journals listed in the Thomson Scientific/ ISI)	20%	• 1 publication per scientist. • Scoring = 0-2 points with 0.5 publications/scientist being the lower threshold.
1C Relative rating of Center's best publications regarding journal impact factor	30%	• relative to highest score among Centers. • Scoring = relative to highest score that gets 3 points.
Total indicator 1 score is the sum of the three sub-measure scores.		

INDICATOR 2: Percentage of scientific papers that are published with developing country partners in refereed journals, conference and workshop proceedings in 2008

NOTE: Development of a capacity building indicator is on-going and this measure will be part of the more comprehensive component indicator.

For calculating indicator 2, use those publications listed in measures 1A and 1B and add those published in international newsletters and other scientific series, and papers presented at formal conferences and workshops with external attendance. Do not include internal presentations. The publications considered co-authored must clearly articulate the formal authorship including the authors who are NARS based. Indicate the percentage of publications which has NARS based co-authors within the total list.

Requested Evidence Material:

List of all publications (with full citation and consecutive numbering) included under this category, indicating the developing country partner(s) among the authors of the publication. Please also include a description of your indicator computation.

[2] Examples of calculation
1A-1: Publishing rate = 1.90; Score = (1.9-0.5)*[5/(2-0.5)] = 4.66
1A-2: Publishing rate = 1.25; Score = (1.25-0.5)*[2/(2-0.5)] = 1.00

Monitoring of achievement of MTP output targets in 2008

Definition: Output and Output Target

- **Outputs** are the products of research with a defined time line, contributing to reaching the MTP project (and thus the Center's and CGIAR goals) by offering solutions to problems identified during the MTP planning process.

- **Output Targets** are the annual deliverables, defined by quantity and type, expected in a specific year and contributing to achieving the MTP Project Outputs. Output targets are deliverables in the following categories: materials, policy strategies, practices, capacity, and other kinds of knowledge.

One of the results of the CGIAR Performance Measurement workshop was to recommend that "Achievement of output targets will be monitored by Centers and will be made publicly available through linking CGMap with the PM System…The PM System will not have an overall measure of percentage of output targets achieved, but through linking the PM System with the newly established CGMap it will continue to allow interested CGIAR Members and Partners to track the results (i.e. outputs) for individual projects." This recommendation was endorsed by ExCo during its meeting in October 2008.

NOTE: During a transition period the data continues to be collected through the PM interface until a CGMap interface has been developed.

Centers are requested to report on achievements in 2008 of the annual output targets set in MTP 2008-2010. The PM report is to cover all MTP projects and outputs listed in MTP 2008-2010. For each MTP project please list the outputs and output targets and select the status of the output target. The following status options will be available:

- Fully Achieved – all aspect of the target have been achieved/completed
- >75% Achieved (with comments on what has been achieved and why it is less than 100%);
- >50% Achieved (with comments on what has been achieved and why it is less than 100%);
- < 50% Achieved (with an explanation);
- Cancelled (with an explanation);
- Deferred (with an explanation and new target year)

Deferred output targets (including those that have been partially achieved) should be resubmitted in the MTP for a later year; in MTP 2010-2012 for 2009 or 2010. If output targets are deferred by more than 2 years, they should be marked cancelled. If the outputs and output targets have significantly changed from those planned, provide an explanation for the new output targets reported.

The online system will have an interface for inputting explanations related to the reported targets.

Note:
For a clearer definition of each of the output categories: Materials refer to all biological materials and knowledge that adds value to them; not to documents. Policy strategies refer to analysis and information that is aimed to be used for policy decision making. Practices include tools, methods and processes that intended for use in research, breeding, policy work, extension, demonstration, and evaluation in the field. Capacity strengthening includes training and other instruction aimed at enhancing individual capacity, training materials and resources, and interventions that are aimed at enhancing institutional capacity. Other kinds of knowledge include knowledge and data that are the deliverable research achievements and do not belong to any of the other categories.
Completed *ex post* impact studies should be reported under the Impacts measure 3A: *ex post* impact assessment studies.

Element 2: Outcomes

Definition: Outcome
Outcome is the external use, adoption, or influence of a Center output(s) (e.g. by partners, stakeholders, clients).

Rationale: This indicator measures the uptake and use of the research results by the immediate clients. It is a measure of the relevance of the research by the Center and its ability to monitor and document outcomes from the diffusion of research outputs as the first step toward demonstrating impact. It also reflects the effectiveness of auxiliary activities by the Center to stimulate outcome, such as capacity building and establishment of partnerships.

INDICATOR 3: SC assessment of Center Outcome reports

Centers are requested to report on the **most significant outcomes documented in 2008** resulting from outputs that the Center produced. The number of cases to be submitted depends on the Center's actual expenditure for 2007 and is shown in the table below.

Center	Actual Expenditure 2007 (US$ million)	# of outcome cases requested
Africa Rice Center	10.3	3
CIFOR	16.9	4
WorldFish Center	17.3	4
IWMI	23.9	4
CIP	24.1	5
ICARDA	27.0	5
World Agroforestry Center	30.4	5
Bioversity International	37.6	6
IRRI	37.7	6
ICRISAT	37.8	6
ILRI	40.6	6
CIMMYT	43.9	7
IITA	44.7	7
IFPRI	45.7	7
CIAT	48.9	7

The outcomes need to be linked to an achieved output target identifiable in an MTP (also called research milestone in MTPs prior to MTP 2006-2008) or to an overall achieved output specified in any MTP not earlier than in MTP 2004-2006.

Please provide a description (in 500 words maximum) for each of the outcomes, including the following:

- An clear outcome statement of the outcome achieved (the statement must explicitly describe the achieved outcome rather than cite the planned outcome as written in the MTP)
- What output/output target resulted in the outcome?
- In which MTP was the output/output target identified as planned before its achievement?
- Where was the achievement of the output/output target documented?
- Who used/adopted or was influenced by the output? Identify the kinds of people or entities affected and their location by country.
- How was the output used or adopted? What was the nature of the influence of the output?
- What is the magnitude and significance of the outcome relative to the intended recommendation domain? (in terms of, for example, the extent of use/adoption by the intended users and geographic coverage or reach of intended user groups, IPG nature of research, likelihood of impact on CGIAR goals, novelty and innovativeness of research or capacity building that led to the outcome, success in more intractable targets).
- What is the evidence for the outcome? Specifically, what kind of data were collected or study was conducted? Who collected the data and/or conducted the study? If not included in the outcome evidence, what is the evidence that shows that the outcome is derived from the output/output target?

Requested Evidence Material

- Please make all evidence documents available in the PM database as attachments (files or zipped files).
- Keep the documentation to the minimum and include only direct evidence explicitly documenting the outcome and showing the link from the output to the outcome, not anecdotal evidence. Direct evidence means that a study has been conducted or set of observations are collected showing explicitly that the outcome has occurred or the outcome is explicitly reported in document other than an outcome assessment, for example in a newspaper article. Anecdotal evidence refers to material, including for example books, photographs, newspaper articles and bills that have limited relevance to the outcome reported or make an unsubstantiated reference to the outcome or outcomes of similar nature in general.
- The study documenting the outcome must have been completed in 2008 and the output/output target from where the outcome derived should have been presented as planned not earlier than in MTP 2004-2006.
- The number of evidence documents should not exceed three.
- Relevant sections from large reports should be extracted into a single document. In such case full references need to be given.
- If the evidence for the achievement of the output is not in the outcome study, it needs to be included separately.

- The most appropriate evidence documents are studies that have been specifically conducted to monitor outcomes and therefore clearly establish the link from Center output to the outcome. Testimony from a stakeholder is not sufficient evidence.
- The evidence material needs to be made available in English, French or Spanish.

The value of the overall evidence depends on the strength of the evidence about the outcome having occurred and attribution of the outcome to a specific Center output/output target.

The scoring table used by the SC for assessing the outcome cases is given in Annex 2.

Element 3: Impact Culture

Definition: Impact
Impacts are the longer range social, environmental and economic benefits that contribute to CGIAR goals and the center's mission and objectives that derive at least in part from a Center's research related outputs.

Definition: Ex post Impact Assessment (epIA)
EpIA is a specialized area of evaluation that is designed to identify and measure consequences resulting from earlier interventions of a program or project. Its timing is epIA's defining characteristic: epIA takes place after the program's or project's investment has generated the intervention, and sufficient time has elapsed and experience has accumulated to assess the intervention's performance in terms of longer term economic, social, and environmental consequences. EpIA contributes mainly to accountability and secondarily to learning in the evaluation of agricultural research. Impacts of an intervention may be positive or negative, direct or indirect, and intended or unintended.

Rationale: This indicator measures Centers' efforts to document impact from their past research (hence, ex post impact assessment) to fulfill their accountability imperative towards CGIAR stakeholders. It also measures their efforts to institutionalize impact culture among their own researchers and partners.

INDICATOR 4: Composite Indicator on Center Impact Assessment Culture

The indicator is the SC/SPIA rating of commitment to documenting impacts from past research in a credible way and building an impact assessment culture.

Centers are requested to report information related to its commitment to documenting impacts and building an impact assessment culture in three main areas that the SC will use as the criteria for scoring the reports:

(1) Ex-post Impact Assessment (epIA) studies / advancement of epIA methods (45%);

(2) Building an impact assessment culture at the Center, including communication / dissemination and capacity enhancement (20%); and,
(3) Quality of submission of one published epIA study during the past three years that effectively demonstrates the impact of the Center's research on the poor or food insecure people and to the environment, as judged by peer reviewers appointed by SPIA (35%).

Please complete the checklist in Annex 3 for components (1) and (2) and submit one epIA for component (3). The criteria used for assessing component (3) can be found in Annex 3

For the purposes of this exercise, an epIA refers to a published journal article, conference paper, book chapter (but not entire edited book), report or any other publication that has entered the public domain, which is not a revised version of an earlier submission, that documents empirically the impact of a center's research or research-related output in terms of CGIAR goals. The impacts measured may be short-term, medium-term or long-term but must be linked to a clearly discernible intervention derived from research. The epIAs must include some measurement of adoption beyond the household or village level and some measure of ex-post impact as a result of that adoption. Adoption constraints analyses, pilot technology evaluations, farmer preference and demand type studies and ex-ante impact assessments are not, for this exercise, regarded as epIAs[3]. While there may well be an element of ex-ante in many epIAs, there must be some measurement of adoption and ex-post impact to qualify.

[3] While those studies are useful in their own right, and may well be counted as outputs or outcomes, none of these qualify as *ex post* impact assessments (epIAs) for purposes of this exercise.

II. Indicators of Potential to Perform

Element 5: Institutional Health

GOVERNANCE

INDICATOR 5A: Summary Score on Governance Checklist

Rationale: The governance indicators reflect the range of policies and practices that the CGIAR determined were instrumental to good governance based on best practices in the corporate and nongovernmental sectors. The specific measures follow closely the recommendations identified in the 2006 Stripe Review on Corporate Governance, and the roles and responsibilities of Center boards outlined in the CGIAR Guidelines on Center Governance.

Please complete the checklist in Annex 4 for your Center. Also keep available for verification purposes supporting documents such as Board profile, policy documents, excerpts of Board minutes and resolutions.

INDICATOR 5B: Assessment of Board statements

Please submit a short statement (maximum 500 words) describing one important action taken by the board in 2008 to improve the board's performance and the expected impact from this action. Examples of such actions include board restructuring, re-organization of board and committee agendas, improvements to evaluation processes, etc.

A peer-reviewed panel composed of three external members will assess the submissions in terms of standards and practices in governance, relevance, and the expected impact of the actions taken. In particular, the panel will consider:

- If the action is important for improving board performance
- If, in the context of the board's performance, the action will have a substantial impact
- If the action and its impact are clearly and specifically described
- If there is as verifiable source for the action

Supporting Evidence Material: Please also attach a verifiable source for the actions described. Documentation should be verifiable, clear and brief. Relevant extracts from documents (minutes, board-endorsed reports) can be submitted, or if supporting documentation cannot easily be extracted from longer texts, it should be clearly marked within the text.

Center review of panel assessments: Before the score for the board statement are made final, Centers will have an opportunity to review the panel's assessments and to improve or clarify the supporting evidence if the panel has considered it deficient to form an assessment. Centers are not permitted to submit a different action or to appeal the panel's scores once all improved supporting evidence has been re -submitted and reviewed.

CULTURE OF LEARNING AND CHANGE

INDICATOR 5C: Summary Score on Culture of Learning and Change Checklist

Rationale: A vibrant culture of learning and change is critical for a Center's long-term success. Sustaining the quality and relevance of research is related to a Center's regular investment into development of its staff, staff satisfaction, the evaluation of its own effectiveness and the renewal of its human and intellectual capital by seeking greater diversity.

Please complete the checklist in Annex 5 for your Center.

DIVERSITY

INDICATOR 5D: Percentage of women in management (Percent of management positions, either research or non-research, occupied by women as of 31. December 2008).

Requested Evidence Material:

- List of all staff members in management positions, including names, titles and gender.

Definition: "Management position" includes Director General, Deputy Directors General, Directors of major programs/divisions and senior heads of administration if they report directly to the DG.

INDICATOR 5E: IRS Nationality concentration: Percentage of internationally-recruited staff that comes from the top two countries represented in the IRS staff nationality list for the Center (as of December 31, 2008). Please also indicate the Nationality.

Requested Evidence Material: List of IRS staff names and country of nationality

Element 6: Financial Health

Note: The data for all finance indicators will be computed from the Audited Financial Reports of each Center, and will be confirmed by the peer-review exercise. Centers do not need to submit these data separately.

INDICATOR 6A: Long-term financial stability (adequacy of reserves)

This indicator is computed as unrestricted net assets less net fixed assets divided by per day operating expenses excluding depreciation. Only audited numbers and the final results from the peer-review exercise should be used.

The lower benchmark is 75 days, but will be increased to 90 days with a transition period of 3 years.

INDICATOR 6B: Cash Management on Restricted Operations

This indicator is computed as restricted donors accounts receivable divided by restricted donors accounts payable expressed as a ratio. The data for this computation should be taken from the notes on accounts receivable and accounts payable in the audited financial statements, and confirmed by the peer-review exercise.

The benchmark for cash management on restricted operations is less than 1.0

III. STAKEHOLDER PERCEPTIONS

In 2006, the CGIAR commissioned GlobeScan Inc., a global public opinion and stakeholder research firm, to study the perceptions of its key stakeholder groups. The full results have been made available in the 2005 Performance Measurement Report.

Data for this component of the PM System will be used for three years.

The following are key indicators resulting from the survey:

- Partners perceptions about whether a Center "Does an excellent Job Advancing Sustainable Agriculture through Research"
- Quadrant analysis (strength, maintain, opportunities, and focus) results of drivers of Centers' reputation: Research, Partnership, Global/Regional/ Local Focus, Communication, Transparency, Human Resources, Originality and Diversity.