

Consortium level monitoring principles (November 2011)

Consortium Office

Introduction

In the reformed CGIAR, monitoring responsibilities have been transferred to the Consortium¹, and evaluation is the responsibility of the independent evaluation arrangement.

As per the Joint Agreement (JA) concluded between the Consortium and the Fund Council (FC) in April 2011, the Consortium Board (CB) has *“the overall responsibility for monitoring research under the SRF and managing the monitoring system”* (Article 22.1 of the JA). This includes monitoring the performance of the Centres and any Partners with respect to each CRP (Article 22.2 of the JA) and is independent of the origin of the funds². Consistent with this, the Consortium Constitution provides that the Consortium shall *“develop, in cooperation with the Member Centers, approve and manage performance of the CRPs”* (Article 5(2) (c)). The monitoring system described in this document thus concerns all the work carried out by the CRPs, regardless of their sources of funds.

To ensure that the monitoring and evaluation functions in the reformed CGIAR do not overlap but are complementary and work in full coherence, the Consortium Office (CO) liaised with the consultants working on the design of the evaluation function. The monitoring strategy described below has been conceived to provide the appropriate building blocks for the evaluation function, thereby contributing to a smooth continuum from monitoring progress to assessing impacts. The CO will work with the independent evaluation arrangement and the Standing Panel on Impact Assessment (SPIA) of the Independent Science and Partnership Council (ISPC) to continue strengthening this streamlining.

This document has been discussed with the CB, the Centres and CRP Directors over a number of months. It was also discussed during an electronic consultation (in July-August 2011) to which GFAR, the ISPC and interested donors were invited to participate. The results of the minimum reporting requirements consultation organised by the Fund Office (FO) have also been taken into account in the document.

The monitoring principles in this document were approved by the Consortium Board at its November 2011 meeting. The draft of the Common Operational Framework chapter focused

¹ These were held until 2010 by the Science Council (today, ISPC) and the CGIAR Secretariat (today, FO).

² The CB has in addition a general “fiduciary responsibility” for the use of the Window 1 and 2 Funds (Article 2.3 of the JA).

on reporting is based on the monitoring principles presented here. This draft chapter is undergoing discussions with donors.

In what follows, key terms are defined and lessons drawn from past experiences with monitoring in the CGIAR. The objectives of the monitoring system are then presented, along with its main features. The seven monitoring principles are explained. Once the templates for reporting on monitoring are approved by the Consortium Board and by the Fund Council, these templates will be described in the last section of this document.

1. Definitions

All CRPs were requested to include in their proposal a description of their impact pathways. These reflect the assumptions and hypotheses made by a CRP about the chain of events linking its research to development impacts and the System Level Outcomes (SLOs), through a succession of effects at different spatial and temporal scales. Figure 1 is a grossly simplified and generic impact pathway, the purpose of which is to clarify the following definitions. In reality, the chain of effects is not linear, and there are multiple outputs, outcomes and impacts, accruing at different time periods.

Baseline: analysis describing the situation/problems to be addressed by a CRP (e.g., as described in the CRP proposal), justifying the CRP's focus and capturing the key hypotheses made by the CRP about how the target domain (geographical) and target groups will be affected by the innovations introduced by the CRP. It uses key variables and proxies to capture these dimensions. It can be undertaken at different levels of resolution and serves to provide an overall context and set of indicators and proxies of change that help frame the scope of the CRP. It serves as a basis for setting indicators of progress in achieving the objectives (outputs, outcomes and eventually impacts) of a CRP, which may be measured through monitoring or through evaluation and impact studies, as appropriate.

Common Operational Framework: framework for common processes agreed between the FC and the CB, which includes monitoring and other operational aspects that apply to all aspects of funding and implementation of the SRF and the CRPs, regardless of funding source or implementing entity.

Evaluation: occurs on a 4- 5 year basis, and is an assessment of the value of the impacts or developmental changes (planned and unplanned) brought about by a CRP's results, outputs, outcomes and impacts by comparison with the investment in/costs of the CRP.

Impacts: the ultimate positive/negative, direct and indirect consequences of the CRPs on the status and state of selected development variables concerning the SLOs - which are themselves related to the attainment of Millennium Development Goals. These development variables, specifically related to each SLO, may include decreases in rural poverty rates at transnational level, increased household food security levels, including increased nutritional quality of diets of the poor, increased resilience of the most vulnerable agricultural systems to climate change and other external shocks. Impacts are the overall and long-term effects that are attributable to a CRP.

Milestones: intermediate ‘markers’ of progress toward the delivery of outputs or outcomes, expected to be delivered by the CRP at specific dates, before the full output/outcome is delivered. They help track progress.

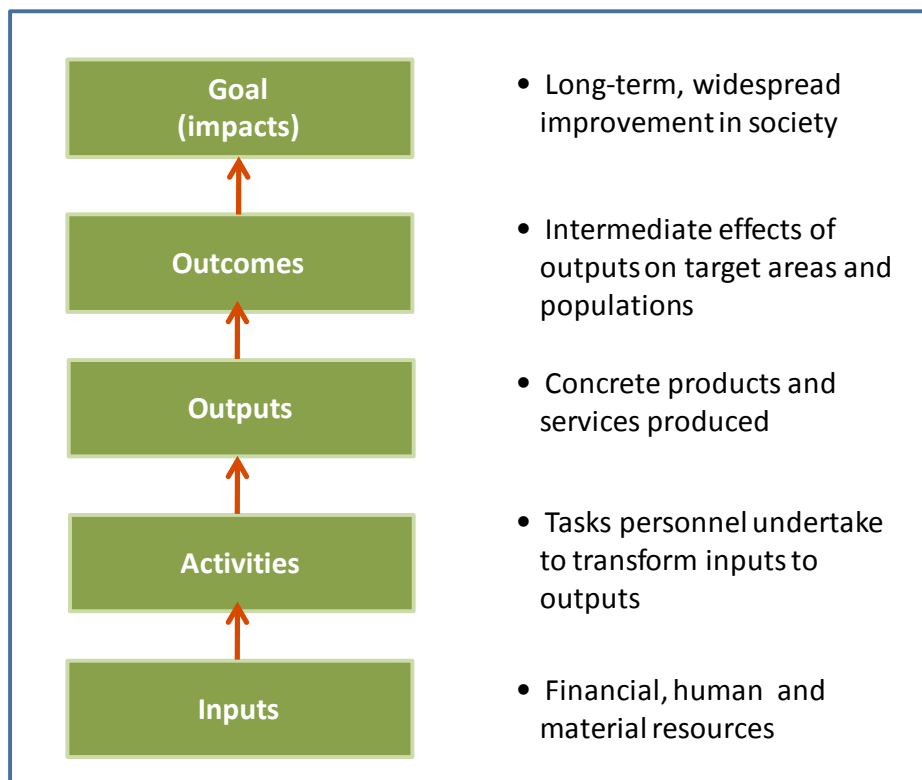
Outputs: the most immediate effects of the activities undertaken in a CRP. They are tangible and concrete products (e.g., improved germplasm, publications, improved management practices, policies) that are necessary to achieve the CRP’s objectives. Outputs relate to the completion (rather than the conduct) of activities and are a type of results over which scientists and research managers have the highest degree of control.

Outcomes: the consequences/effects of the outputs produced by the CRP. Outcomes are the wider changes in the social, economic and bio-physical environment in a target area and/or in the behaviour of a target population that are attributable to the CRP’s implementation. For example, the availability of new policy options for better addressing food security issues (an output) results in an outcome of increased food security in 8 countries. Outcomes, like outputs, relate to the completion of activities and are a type of results over which scientists have a lower level of control than over outputs, because of the confounding effect of many other changes taking place at the scale at which outcomes become manifest.

Performance monitoring: a continuing process of data collection and analysis to determine how well a CRP is progressing along its impact pathways, toward expected ultimate impacts. Progress is assessed along a sequenced hierarchy of outputs, outcomes and their respective research and development milestones. Monitoring provides regular feedback and early indications of progress or lack thereof in the achievement of intended results.

Results: all the different effects of a CRP’s activities. The terms “outputs”, “outcomes” and “impact” describe more precisely the different types of results at different levels of the impact pathway hierarchy.

Figure 1: Extremely simplified generic impact pathway



Source: Binnendijk 2000

2. Key lessons from previous experiences with performance monitoring in the CGIAR

The 2008 External Evaluation of the CGIAR System noted that past M&E systems in the CGIAR have relied on multiple indicators, some of which were difficult to link to performance, were complex, time consuming and expensive to measure.

Past experiences with monitoring in the CGIAR highlight that an effective system needs to address four monitoring challenges.

- First, since monitoring is undertaken yearly, medium and long-term effects (development outcomes, impacts) cannot be captured during the initial years of implementation of a CRP. *Therefore, monitoring needs to capture different types of effects over the life cycle of a CRP (e.g. research milestones, followed by outputs in the initial years, development milestones followed by development outcomes later on).* Ex post impact assessment becomes relevant in later years, as part of evaluation and is most credible when conducted by an external entity such as SPIA or the IEA.
- Second, given that good science and research are by nature risky (results cannot be predicted with 100% accuracy), the monitoring system cannot assume that success automatically implies that 100% of expected outputs and outcomes are reached³. A more nuanced approach is needed that accounts for unexpected outputs and outcomes, and draws lessons from these. *An effective monitoring system*

³ This would result in stifling innovation as scientists would only undertake research once they knew what the results would be (the antithesis of innovative research).

acknowledges that learning from the process of following a 'dead end' can actually be the source of future research innovations.

- Third, it is important that the *monitoring system and performance incentives at scientist and team level be aligned*. If the number of international refereed publications is an indicator in the monitoring system, it should also be used in the scientists' performance evaluation system. If the monitoring system also emphasises outcomes and impacts on the ground, then scientists' performance evaluation cannot only focus on international refereed publications, as this would send a contradictory signal to scientists.
- Fourthly, *monitoring must be mainstreamed into the research agenda of each CRP*, clearly contributing to improving its performance, and as such be perceived as useful by scientists, donors and research managers. In this way, the costs of implementation will be more than balanced by the benefits to the CRP.

3. Objectives of the monitoring system

The goals of this monitoring system are to distil an integrated set of learnings, knowledge, results that reflect actual progress in the implementation of the portfolio of CRPs. Information thus produced can be used to:

- demonstrate accountability vis-à-vis donors and other stakeholders;
- convince (advocacy) by using evidence from findings;
- document—recording and creating an institutional memory;
- involve—engaging stakeholders through a participatory process;
- promote understanding—reporting results to enhance understanding of programs and policies.

To do this in a manner that increases system effectiveness and efficiency, the monitoring system must be as simple and low-cost as possible whilst fulfilling the needs of donors, the CB and scientists and research managers in the CRPs. The intent is to provide a minimum set of timely, useful and credible information to them.

The objectives of this monitoring system are to:

- i. Provide a transparent, credible and rigorous frame for assessing the rate of progress in the delivery of results at both CRP and CRP portfolio levels;
- ii. Encourage and facilitate drawing lessons from this assessment, in order to further improve CRP performance;
- iii. Satisfy FC donors' minimum requirements for reporting;
- iv. Provide overall coherence and reasonable standardisation in approaches, within each CRP and across all CRPs, for progress at portfolio level to be assessed and associated lessons drawn.

4. Main features of the monitoring system

The monitoring system has the following features:

- A set of seven monitoring principles constitutes its backbone;

- Each CRP develops its monitoring plan within the framework of these principles. The CO will facilitate the process of alignment of the monitoring plans with these principles;
- Each CRP monitors its progress and reports to the CO annually, using the reporting template currently under discussion with donors (section 6);
- The CO will facilitate and chair a cross CRP working group of monitoring experts. This working group will be responsible for drawing lessons that cut across the CRPs and for working with the CO on the identification of portfolio level measures of progress;
- The annual (monitoring) report of the CB to the FC which concerns progress in the implementation of the entire research agenda of the CGIAR will thus contain a CRP level set of reports (from each CRP) and a portfolio level analysis of progress, at the level of the SRF;
- The CO will develop a web-based tool openly accessible to the monitoring data and information that will be collected by the CRPs and analysed by the working group;
- Verification of the monitoring data provided by the CRPs will take place at two levels. First, external evaluations of CRPs and CRP components, commissioned by the IEA and the leadership of the CRPs, should be asked to include assessments of the reliability of the monitoring reports provided by the CRPs. The fact that the monitoring reports of the CRPs will be publicly accessible on the CGIAR Consortium website will be an additional encouragement to provide rigorous and reliable information. Second, after a full year of implementation of this monitoring system and of reporting on its results, the Consortium, donors, CRP leadership will take stock of this experience and will jointly determine whether amendments to the system, including the reporting templates, are called for. The IEA could also be asked by the FC and the CB to conduct external evaluations of this monitoring system at regular intervals.

5. Seven Consortium level monitoring principles

Principle 1: What is monitored is progress over time, both in quantity and quality, toward the delivery of outputs and outcomes. As stipulated in the JA and the Consortium Constitution, the Consortium is responsible for monitoring all activities under the SRF and the performance of the CRPs, regardless of the origin of the funds used (from all windows in the Fund and from bilateral sources outside of the Fund). This monitoring system thus concerns the totality of the outputs and outcomes produced by the CRPs.

The approved proposals of some CRPs contain quantified/well described outputs, milestones and outcomes. For others, these will be quantified/well described when the operational plan of the CRP is developed, following approval. Monitoring at CRP level must capture progress toward the attainment of the CRP's research outputs (before outputs are generated, milestones can be captured) and outcomes (milestones can be measured before outcomes start materialising).

These include, inter alia, an assessment of:

- The quality of research outputs (including but not restricted to the usual science quality indicators⁴);
- Gender related outputs and outcomes, and their milestones, which are part of the CRP's gender strategy (see the Consortium Diversity and Gender Strategy);
- The effectiveness of the partnerships that are essential for the implementation of the CRP and its impact pathways. Indicators for partnership effectiveness may be difficult to find, in which case qualitative assessments will be used;
- The effectiveness of the steps taken to mitigate risks and uncertainties, as depicted in each CRP proposal.

Principle 2: In parallel with progress assessment, total spending (from all sources: Fund and bilateral) against expected expenditures, is monitored and reported by thematic component of a CRP, and if relevant at the regional level. This includes reporting spending by the relevant group of partners. This is to determine whether the CRP remains solvent and in line with overall investment parameters. It is also information needed to assess overall CRP effectiveness (balance between progress achieved and spending to achieve it).

Principle 3: Progress is monitored through quantitative, and where appropriate qualitative, approaches that are transparent can be validated independently and are cost-efficient. The scientists working in a CRP (including partners and stakeholders) are best placed to determine which tools are the most appropriate for measuring progress of their CRP toward expected milestones, outputs and outcomes. The transparency and verifiability of the tools they select are crucial to the credibility of the monitoring system. Methods and tools range from documentation of success stories along clear guidelines and criteria, to participatory appraisal and perception survey, internal rate of return, use of control groups, counterfactual econometric modelling, indicators and expert opinion... The CO will discuss with CRP Leaders and Centres' Directors of Research a set of proposed best practices in this regard⁵. Partners from institutions external to the CGIAR are likely to have different performance assessment and monitoring systems in their home institutions. The performance agreements each CRP develops with its partners should thus clarify that external partners will use this common monitoring approach for all CRP based activities.

All monitoring data and information will be available on line. The OCS is expected to facilitate data capture and use in a cost-effective manner. Until the OCS becomes operational, the CO will provide a dedicated website for this information to be accessible on line.

Principle 4: Each CRP standardises progress monitoring within the CRP. This includes:

- Defining, and quantifying wherever possible, a clear and explicit baseline (see section 2, definitions). The baseline is a quantified description of the challenges and problems the CRP is trying to resolve. Sharing relevant baseline data across appropriate CRPs, including secondary data, is very much encouraged as it increases

⁴ The quality of research outputs is a direct reflection of the quality of the science that generates them. All CRPs are expected to publish their results in high quality scientific publications, but this is, by itself, not sufficient.

⁵ Many if not most of the scientists will work in more than one CRP. Such common best practices will contribute to increasing overall efficiency, as scientists will not have to use different methods to measure the same thing in different CRPs.

efficiency. Challenges and problems are dynamic so changes will need to be captured. The CO and the monitoring working group will facilitate cross-CRP interactions concerning baselines where relevant;

- Standardizing measures of progress, and methods for qualitative assessments, across the thematic components of a CRP, in order to provide a scientifically robust assessment of progress at CRP level;
- When the cross CRP working group of monitoring experts has identified metrics to measure progress towards the System Level Outcomes (SLOs) in the SRF, it will work on the identification of some common indicators of progress that can be meaningfully used by the different categories of CRPs. The use of these common metrics will also imply the use of selected common secondary data sources, for the same reason of overall coherence;
- Measuring unexpected and unintended effects of research innovations, including cross scale effects, in a comparable manner across thematic areas;
- Measuring spending, by thematic component/and or region if relevant, using standardised financial data and common definitions across all CRPs provided by the OCS.

Principle 5: Monitoring progress includes re-visiting the plausibility of the impact pathways in the approved proposal, including their risks and assumptions, in the light of the progress accomplished by the CRP. Information on development impacts is by definition non-existent in the initial years following implementation of a CRP. It is however important and useful to check every so often the plausibility of impact pathways in view of progress accomplished to determine whether adjustments to these pathways and to the partnerships they embody are needed. This can be done relatively simply as a check that the initial pathways continue to make sense or it can involve specific studies. For instance, preliminary and exploratory adoption studies, undertaken a few years into the lifecycle of a CRP, are one form of plausibility check. Appropriately documented success stories are another.

Principle 6: In an effective monitoring system, the results of the monitoring are used as feedback to make necessary adjustments in planned activities. Each CRP thus needs to explain how the results of its monitoring are used to strengthen progress in the next time period. This includes analysing cases of variance between expected milestones, outputs and outcomes and drawing useful lessons. Progress against path not originally planned is inherent to the innovative nature of research and can be a source of unplanned research breakthroughs. When 'unexpected' variance occurs (e.g., research avenues abandoned, new research opportunities that open up and are seized, etc.) it is important to draw lessons from the experience. Such an analysis of this variance (whether due to new opportunities or to unrealised expectations) is part of the normal research process, and is, in itself, an indirect indicator of the scientific quality of the work.

Principle 7: The team accountable for designing a CRP's monitoring plan and collecting the associated information should be identified by each CRP during the first 6 months following inception. This is to ensure that monitoring at CRP level is part of the on-going research activities in the CRP and is fully mainstreamed. This will significantly contribute to the effectiveness of the monitoring process.

6. Guidelines and template for the yearly monitoring report of each CRP and for the cross-CRP (portfolio) analysis of progress

Note: these guidelines and templates, currently under discussion with donors, will be inserted here, upon their approval by the Consortium Board and by the Fund Council. The templates will constitute one of the chapters of the Common Operational Framework.