Towards a Performance-based Management System for CGIAR Research

Purpose
This document outlines the progress to date in the development of an integrated framework for a performance management system for CGIAR Research and seeks System Council feedback on the main document and annexes in relation to:

- The overall approach being taken (as set out at Annex 1)
- A suggested approach for the identification of target pathways and indicators, using SLO1 as pilot (as set out in Annex 2)
- The proposed draft for annual Program of Work and Budget Template for the CGIAR Portfolio (as set out in Annex 3)
- The first outline of proposed Progress Markers, proposed indicators and targets, disaggregated to flagship for CRPs (as set out in Annex 4 – Separate document)
- A high-level suggested schedule for the completion of all components of the expected Performance Management System, including common indicators (table 1 of the paper).

Additional interpretation note
This paper, and Annex 4 in particular, is a companion document System Management Board’s proposal that on 23 November 2016, the System Council approves the allocation of 2017 W1-2 funding for the approved 2017 – 2022 CGIAR Portfolio in the amount of US$ 193.1 million (as set forth in meeting document SC3-2A), or such other amount as determined appropriate taking into account the observations of the Joint System Council/ System Management Board Funding Allocations Working Group.

Document category: Working document of the System Council
There is no restriction on the circulation of this document

Prepared by: the CGIAR System Management Office
Part A - Background

1. A key responsibility of the System Management Board under the July 2016 revised governance framework is to “recommend a proposal to the System Council for an integrated framework for a performance management system for CGIAR Research”\(^1\). In support of that responsibility, a task force on indicators has been working to advance a common understanding of the components of such a framework. CGIAR’s Strategy and Results Framework 2016-2030 (‘SRF’) lays out CGIAR’s goals and aspirations, and outlines the areas of work required to contribute effectively to the System Level Outcome (‘SLO’) targets identified for each of the three SLOs (SLO 1 - Reduced Poverty; SLO 2 – Improved Food and Nutrition Security for Health; and SLO 3 – Improved Natural Resources and Ecosystems Services).

2. The strong 2017 – 2022 CGIAR Portfolio, comprised of 11 CGIAR Research Programs (‘CRPs’) and 3 platforms, as approved at the System Council’s 2\(^{nd}\) meeting in Mexico (25-26 September 2016), describes the elements through which research and associated activities will be accomplished for the coming 2017-2022 period.

3. An ‘integrated framework for a performance management system for CGIAR Research’ is needed for CRP management and learning, for providing accountability to CGIAR Funders, and for periodic decision-making. In the context of CGIAR, “integrated” means incorporating various different entities generating performance-related information, like ex-ante appraisal, evaluation, monitoring and impact assessment, into a system that optimally serves performance management needs of CGIAR and its research for development mandate.

4. This paper seeks input from the System Council on:
   a. The overall approach being taken (as set out at Annex 1)
   b. A suggested approach for the identification of target pathways and indicators, using SLO1 as pilot (as set out in Annex 2)
   c. The proposed draft for annual Program of Work and Budget Template for the CGIAR Portfolio (as set out in Annex 3)
   d. The first outline of proposed Progress Markers, proposed indicators and targets, disaggregated to flagship for CRPs (in Annex 4 – Separate document)
   e. A high-level suggested schedule for the completion of all components of the expected Performance Management System (table 1, before the annexes).

5. To provide overall context, the paper first reviews the purpose of a performance management System for CGIAR Research (Part B below), and sets out 8 proposed principles to guide development of that system (A to H as set forth in Part C below).

\(^1\) Charter of the CGIAR System Organization, 1 July 2016, Article 8.(ii)
Part B - Purpose of a performance management system

6. A framework for performance management must be appropriate for CGIAR’s essential role as an agricultural research for development organization. Therefore, the proposed conceptual framework (refer Annex 1) presents how research can contribute to development in the form of a research performance and accountability framework. This is aligned with CGIAR’s innovative SRF, across different levels of accountability, including operational and aspirational accountability.

7. The conceptual framework differentiates among three spheres that determine the extent to which there is control over research results and contribution to development impact, as follows:

   a. Our “sphere of control” - covers CGIAR research, innovations, services and output delivery;

   b. Our “sphere of influence” - covers the use of our research, and changes in capacity and practices leading to impacts as described in the SRF sub-IDOs; and

   c. Our “sphere of interest” - covers the direct and indirect benefits at IDO level and improved wellbeing and ecosystem health leading to SLO impacts.

8. A performance management framework needs to serve multiple purposes and users across the CGIAR System, including those who require performance information for short term and longer term decision-making. Its purpose is to serve both CRP performance management needs and reporting requirements to System governance and Funders.

9. More specifically:

   a. In the sphere of control, a performance framework needs to include holding CRPs accountable for taking steps to increase the likelihood that research is used, serving adaptive management by CRP, and reporting to System-level governance and Funders that the CRP is acting on performance information and making progress in delivering outputs. For reporting, standardized means are provided to report annual programmatic performance.

   b. In the sphere of influence, a performance framework needs to include facilitating planning, monitoring and documentation of research use, for feedback to CRP management for learning and prioritization, and reporting to System governance and Funders on progress towards outcomes that reflect the evidence of relevance (e.g. from users) of the CGIAR Research to development challenges and key stakeholders in selected geographies.
c. The **sphere of interest** corresponds with IDOs and the aspirational SLOs that reflect past research and therefore has limited direct relevance for performance-based management. The purpose of the framework is to demonstrate linkages from research and its uptake to development outcomes in illustrative cases where causality can be reasonably established, and where possible, facilitate linkages of CGIAR work to the aspirational SLO targets in the SRF.

**Part C - Proposed principles of a new performance management system**

**A. It will be based on the conceptual framework of research assessment and accountability**

10. The Task Force has adopted the following conceptual outline to establish the different levels where performance management needs to be addressed and to focus its work on outcomes (spheres of influence and interest):

   a. **Sphere of control** – Monitoring, Evaluation and Learning (‘MEL’) for Research relevance and Quality,
   b. **Sphere of influence** - MEL for Research use and effectiveness
   c. **Sphere of interest** - MEL for development effectiveness through which research can contribute to development outcomes.

**B. It needs to be integrative and inclusive of the different related entities**

11. There are several functions and initiatives within CGIAR which address some of the important elements of such a framework. For example:

   a. Periodic (every 6 years) ex ante appraisal of CRP proposals by the ISPC;
   b. Current Quality of Research Working Group led by the ISPC;
   c. Periodic (every 5 years) evaluation of science quality, relevance and effectiveness through IEA-led evaluations of CRPs;
   d. A working group composed of members from the Monitoring, Evaluation and Learning Community of Practice (‘MELCoP’) on designing interim templates for the CRPs’ Plan of Budget and Work and Annual Report; and
   e. A Task Force on Indicators set up in May 2016 (convened by the System Management Office with MELCoP, CRP and Funder members) for identifying and operationalizing the SRF pathways and indicators.

12. The final framework will be developed in a consultative and collaborative manner with all relevant CGIAR entities.

13. The performance framework will assess where there are gaps in existing approaches, and identify the scope for refined approaches. For example, through **ex ante** program appraisal, CRP evaluation, monitoring, impact assessment, performance information
Towards a Performance-based Management System

C. It needs to acknowledge different levels of outcome indicators

14. The ‘Results Framework’ set out in part 4 of the SRF clarifies the different possible levels of indicators\(^2\), i.e. they can be on the research, intermediary development, and development level. Performance information and indicators will be developed to cover performance management from research to outcome delivery. Clearly distinguishing between management performance and impact performance will be important in clarifying the different functions of the performance-based management system.

D. It needs to recognize that indicators are only one part of an effective performance management system

15. Performance-based decisions need different kinds of performance information ranging from records and data, monitoring, and qualitative assessments and evaluations, to outcome and impact studies. Indicators that can be helpful in standardizing and streamlining certain aspects of performance, need to be derived from and linked to the performance-related functions within the CGIAR Portfolio. For the system, different kinds of indicators will be considered: qualitative, quantitative, index-based and diagnostic.

16. Given that CGIAR is a very broad enterprise engaging in a wide spectrum of research activities targeting very different kinds of user groups and environments, the performance management system needs to respect that diversity, while also identifying an appropriate number of common measures and indicators. These indicators need to be tested for their effects for incentivizing high performance and complemented with other evaluative approaches.

\(^2\) As designed by the Funders and set out at p.14-15 of the SRF: [here](#)

To ground these SLOs at the level of research activities, CGIAR has introduced the concept of Intermediate Development Outcome (IDO)s, which enable researchers to think through the contexts in which their outputs might contribute to development outcomes. Below this level are Sub-Intermediate Development Outcome (sub-IDOs), which represent research outcomes adopted by immediate users such as National Agricultural Research Systems (NARS) researchers and national policy makers. The IDOs and sub-IDOs will be adopted or adjusted by each CGIAR research program, according to program- and peer-reviewed assessments of priorities and what can be delivered.
E. **It needs to be implemented through a phased approach that learns through implementation**

17. In finding appropriate ways of incorporating performance information for these different levels, functions and time frames (annual progress to long term outcomes), due attention will be given to linking the performance analysis across the functions to performance measures that are efficient, streamlined, and unambiguous in their interpretation and in setting appropriate incentives for performance. This will take into account indicator work of other agencies (and experiences in their use for project reporting by CRPs), in addition to contributions of ISPC’s and IEA’s appraisal, evaluation and impact assessments, and ISPC’s current work on Research Quality.

18. The framework outlined above provides a means to convene CRPs and system entities for agreement on the performance management system, including indicators and measurement tasks, which would be trialed in 2017.

F. **It will rely on robust reporting tools anchored in the CRPs**

19. The collection of data required for performance management and reporting, and any indicator target data relative to CRP performance, will be the responsibility of CRPs themselves. However, for annual reporting, the process will be guided by a call for Programs of Work and Budget (‘POWB’) from CRPs. A draft of this interim template document is provided as Annex 3, which builds on the requirements above and experience from the current portfolio of CRPs that end on 31 December 2016. The proposed POWB template for the CGIAR Portfolio 3 focusses on outcome reporting, and POWBs are expected to include anticipated research outputs and milestones with progress confirmed at the Annual Reporting stage. 4

20. Additional dimensions of annual reporting to be developed are: (i) a POWB and Annual report formats for Platforms (against services rather than outcomes); and (ii) Annual reporting of all Centers (not just CRP lead Centers) on non-portfolio but SRF-related research, to allow funders a complete picture of CGIAR contributions.

G. **It must recognize the cost and efficiency implications of a new system**

21. The potential benefits of implementing a new system are numerous: better informed decision-making, greater funder awareness of the impacts of contributions – all potentially leading to greater confidence in system-level and overall financing for CGIAR.

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3 The System Management Office is in the process of collecting feedback, firstly from the MELCoP and subsequently from CRPs and system entities. It will be submitted to the System Management Board for endorsement and provided to CRPs in January 2017 and may be refined in 2018.

4 Note that the Annual Reports that CRPs will submit starting 2018 will be for 2017 activities.
Towards a Performance-based Management System

For Input

22. However, sensitivity to the costs of collecting and managing data and information on performance must run through all elements of the exercise. Further, opportunities to seek efficiencies in terms of avoiding duplication in existing performance review practices in the system will be sought.

23. Initial start-up costs are included in the System Management Office budget request, although supplementary resources may be required to effectively support this proposed initiative\(^5\). Additional costs may be identified in the action plan, possibly requiring further consideration of funding requirements.

H. It will be connected to the Big Data Platform

24. The recently approved platform on Big Data has identified three objectives purposefully sequenced. As a first and necessary step, CGIAR must get its own house in order with respect to data, valuing data as a product in itself with global public good potential, and applying best practices to managing and making it widely available following FAIR (Findable, Accessible, Interoperable, Reusable) Open Access principles. This requires the infrastructure, tools and data culture to succeed, in both technical and managerial dimensions, and Objective 1 focuses on this. A key functionality of the infrastructure is to not only harvest research data from repositories at Centers, but to also index relevant, non-sensitive content from MEL platforms (such as CCAFS’ MARLO platform, outlined in Fig. 1 and 2 below). This will allow MEL data to be analyzed and visualized seamlessly with research data using the analytical and visualization tools that will also be part of this infrastructure.

25. Objective 2 enables the external partnerships needed to deliver on Objective 1, and aims to enable CGIAR to make a significant advance in its capacity to manage, use and analyze data. New partnership models will be developed with upstream and downstream partners, from public and private sectors, to deepen and widen CGIAR’s capacity on big data analytics and use.

26. Objective 3 is designed to inspire through the operationalization of CGIAR and partner capacity to innovate around big data. It aims to tackle some of development’s most complex problems with new data-driven approaches, and deliver scalable pilots of effective big data for development solutions. In this context, the Platform on Big Data will help to demonstrate the power of CGIAR big data analytics through “inspired” projects that solve development challenges at the core of CGIAR SRF. These may include, but not be exclusive to, approaches that use big data analytics and ICTs to provide unprecedented multi-disciplinary data to researchers, deliver novel information to farmers, monitor the state of agriculture and food security in real time.

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\(^5\) Detailed costing implications will be included in the action plan for the development of this CGIAR Integrated Framework on Performance Management System, which will be presented for approval to the System Management Board and System Council before the end of 2016.
Towards a Performance-based Management System
For Input

and inform critical national, regional and global policies and decisions. Through a novel integrated framework for MEL, the CGIAR will design innovative business intelligence models for testing new scenarios (see Fig. 2) based on big data analysis and directly connected with the phase 2 platforms and programs.

27. Figure 1: SRF, common standards & interoperable facilities for planning, monitoring and reporting

28. Figure 2: SRF, planning & reporting, big data and business intelligence

Kindly provided by David Abreu (CIAT/CCAFS)
Towards a Performance-based Management System
For Input

Schedule for phased implementation of the performance management system

1. First phase focuses on development of priority components for system-wide discussion including:

<table>
<thead>
<tr>
<th>Item</th>
<th>Action</th>
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<tbody>
<tr>
<td>1.1.</td>
<td>Continuation of the interim System Management Office-commissioned cross-representative Task Force to finalize the identification of feasible levels of outcome measurement and associated indicators</td>
</tr>
<tr>
<td>1.2.</td>
<td>Commencement of the design of an action plan for implementing the proposed approach for an Integrated Framework on Performance Management System for CGIAR Research. This would need to capitalize on ISPC/SPIA, IEA and Centers’ and CRP’s MEL capacities in a well-facilitated manner and consideration of additional expertise needs in the system</td>
</tr>
<tr>
<td>1.3.</td>
<td>Finalization of an interim Annual Program of Work and Budget (POWB) template for 2017</td>
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<tr>
<td>1.4.</td>
<td>Development of an interim CRP Annual Reporting (AR) template and convergence with ISPC/SPIA and IEA on the inclusion of ex ante appraisal and evaluation as well as any indicators on research performance</td>
</tr>
</tbody>
</table>

2. Second phase in 2017 will focus on further system development and initial implementation of a robust results framework:

<table>
<thead>
<tr>
<th>Item</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1.</td>
<td>15 January: First guidance to CRPs on POWB template for 2017</td>
</tr>
<tr>
<td>2.2.</td>
<td>15 February: CRPs and Platforms provide annual POWB for 2017</td>
</tr>
<tr>
<td>2.3.</td>
<td>Task Force conducts the consultative process to finalize core components of the Integrated Framework for a Performance Management System that will include connections between evaluation, impact assessment (ISPC and IEA) and annual financial and programmatic reporting for 2017 - 2022. Iterative and timely input from relevant CGIAR stakeholders will need to be ensured (TORs and deliverables of such Task Force to be endorsed by System Management Board)</td>
</tr>
<tr>
<td>2.4.</td>
<td>Finalization of the Action Plan</td>
</tr>
<tr>
<td>2.5.</td>
<td>Testing the monitoring plan, including revision of the proposed performance measures and indicators on the basis of experience, and proper linkages to national systems</td>
</tr>
<tr>
<td>2.6.</td>
<td>Implementation of an on-line interoperable platform for planning, monitoring &amp; reporting, such as MARLO (Managing Agriculture Research for Learning and Outcomes) setup by CCAFS</td>
</tr>
</tbody>
</table>

3. Third Phase in 2018-2019 will focus on system refinements in light of initial implementation experience in 2017, and building expanding the usage of the system in terms of performance metrics.

Note: this document has been formulated by the Task Force on Indicators and validated by the CGIAR MELCoP to place each of these within one framework, highlight gaps, and start a discussion on a more holistic conceptualization of the various ongoing CGIAR activities, initiatives and entities related to Performance Management within the CGIAR system and accountability to its stakeholders.

CGIAR dedicates itself to advancing agricultural science and innovation to ultimately reduce poverty, enhance food and nutrition security, and improve natural resources and ecosystem services. As a research for development organization, CGIAR’s work starts with scientific advancements and research outcomes, and leads to international development outcomes for the world’s poor. As this work moves along a causal chain of impact from research and testing, to behavioral change and adoption, to the creation of tangible development impacts such as reduced poverty, there are different monitoring, evaluation, learning and impact assessment (‘MELIA’) needs and purposes that need to be satisfied. At this moment in time, there are several different MEL entities and processes in place at different levels of the CGIAR system, but there has not been one framework to align each of these levels with its different methods, users, owners and purposes.

Figure 1 (following) depicts the reach of CGIAR research and the different spheres of influence that the CGIAR system works in, how these different spheres can be measured, and who is responsible for monitoring each one. These three spheres of reach (adapted from IDRC Canada, Research Quality Plus, 2016) are labelled:

A. sphere of control,
B. sphere of influence
C. sphere of interest.

Each of these three spheres corresponds with some monitoring, evaluation and learning (MEL) aspect. For example, the sphere of control, which is directly influenced by the CGIAR, is focused on research quality and relevance of what the CRPs and Centers are doing. In the sphere of influence, research use and its effectiveness are measured while in the sphere of interest, the MEL is focused on Development Effectiveness, which is the furthest away from the CGIAR’s direct control. The graphic has been designed to illustrate the fact that CGIAR has direct accountability and control over its own research, and as that research is taken to scale and one moves along the impact pathway of the system’s work, the CGIAR has less control over how its outputs are delivered to final users and their associated impacts.
Figure 1 - Draft Integrated Framework for a Performance Management System for CGIAR Research

Sphere of Control
- Foresight & Initial stakeholder engagement
- MEL for Research Relevance & Quality
- Rapid assessment and learning loops

Sphere of Influence
- Research, innovations & services
- Changes in capacity (KAS) & aspirations
- MEL for Research Use & Effectiveness

Sphere of Interest
- Sub-IDOs, IDOs, SLOs
- Changes in practice
- Direct/indirect benefits
- Improved well-being & eco-system health

SDGs

Stakeholder Engagement

MEL for Development Effectiveness
For each sphere, we consider users and uses of information and measurement issues (what to measure, data collection responsibilities and methods for analysis) as indicated in table 1 below.

**Table 1: Complementary to the draft integrated framework to show purpose, users and use for the identified spheres**

<table>
<thead>
<tr>
<th>Domain:</th>
<th>Research Quality &amp; Relevance</th>
<th>Research Use &amp; Effectiveness</th>
<th>Development Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>User</td>
<td>CRPs management</td>
<td>CRPs management, System, Funders</td>
<td>System, Funders</td>
</tr>
</tbody>
</table>
| Description of Indicators | • CRP Performance Assessment (developed by MEL CoP) and Annual Reporting template (System Management Office)  
• Others set by e.g. IEA | • PIM table D outcomes and annual milestones (requires consistency in terms and scale)  
• Selected indicators (if relevant) | • Selected indicators, preferably from SDSN and/or other multilateral organizations |
| Data Collection Responsibility | • Centers  
• CRPs | • CRPs  
• Trends of secondary sources  
• Other multilateral organizations | • SPIA,  
• National governments,  
• other multilateral organizations |
| Evaluative approaches | • Baseline  
• Output monitoring | • Outcome monitoring  
• Adoption studies  
• Contribution analysis  
• External evaluations | • Adoption studies  
• Contribution analysis  
• External evaluations  
• Impact assessments |

Taking each sphere in turn:

**Sphere 1: Research quality and relevance**

Research quality and relevance are at the core of CGIAR and important to all stakeholders, inside and outside the system, for a range of purposes from performance management to resource allocation to partnership selection.

How science quality is measured is complex, and is the subject of ongoing work led by the ISPC, with involvement of other System level organizations such as IEA. IEA’s evaluations currently look at science quality in terms of inputs (staff, labs, and other infrastructure), outputs (technologies, knowledge, capacity development, stakeholder engagement) and processes (peer review of proposed research, ethical review/IRB). Many aspects of science quality are in the domain of CGIAR Centers, who measure them regularly and use the results as part of annual performance assessments of staff and through center management and governance. CRPs may have input into these processes, and compile information from Centers for their own reporting.
CGIAR compiles such information at the level of the system. Periodic external evaluation commissioned by CRPs and by the IEA often analyze data collected by Centers and CRPs and may supplement that information with their own data collection and analysis.

While some people consider relevance to be an aspect of science quality, given the CGIAR AR4D mandate, it is worth looking specifically at relevance. IEA defines relevance as “the extent to which the objectives of a development intervention are consistent with global and national priorities and policies, as well as those of intended beneficiaries, partners and donors. In these Standards, it also refers to the extent to which the program is consistent with the goals, the System Level Outcomes, comparative advantage and reform agenda of the CGIAR, and program activities are consistent with the objectives of the program and its Intermediate Development Outcomes”.

For CGIAR, relevance can be broadly understood as contributing to the outcomes in the SRF. As with science quality, all stakeholders have an interest in research relevance. Demonstrating research relevance means providing evidence that the research being undertaken in CRPs is likely to contribute to improvements in development outcomes. This is achieved through having a credible theory of change that is supported by evidence, including ex ante impact assessment to inform prioritization. Responsibility for developing and regularly updating the ToC and evidence base lies — as part of an overall learning agenda-- with CRPs, with periodic review and validation by external evaluations (IEA) and internal advisory bodies. Exactly how CRPs can assess relevance and show improvements in the ToC, and how this can be reported to external stakeholders, is an active area of work within CRPs and MEL CoP.

**Sphere 2: Research use and effectiveness**

Measures of research use and effectiveness are important for different types of stakeholders for learning, decision-making, performance assessment and accountability.

Use refers to use of research outputs by others, whether they be other researchers using CRP-developed tools; methods or data; development implementers using CRP-generated evidence on program design or delivery; policymakers using data and evidence in policy processes; or farmers using CRP-development technologies. Anticipating, planning for and documenting outcomes is an important responsibility for CRPs. It is closely related to CRP plans regarding the stakeholder identification and engagement, partnerships, and capacity strengthening activities needed to achieve their target outcomes. Documenting outcomes is not a new concept for CGIAR but is higher priority in CRPs, both in terms of the rigor used to document outcomes and focus on setting outcome targets in advance, and document their achievement.

While revision of outcomes and standardization of indicators is likely, a first outline of proposed progress markers, proposed indicators and targets for 2017, disaggregated to flagship are proposed by the 11 approved CRPs (see Annex 4) represents the CRPs initial attempt to identify...
outcomes for which they agree to be held accountable during Phase 2. These outcomes will be part of CRP annual planning and reporting. It is possible that in some cases outcomes related to use and effectiveness might be collected by secondary sources (e.g. national statistics) but in most cases it will be the responsibility of CRPs and partners. It is important to note that the degree to which specific outcome are outside the control of researchers may vary by program. Where CRPs have funds and a mandate to implement development activities (e.g., seed multiplication and distribution) these would be considered outputs rather than outcomes. Where CRPs need to rely on partners to do these things, then they would be outcomes that are outside the control but not the influence of researchers. Additional outcomes may be defined by other processes (e.g. Task Force on Indicators) or documented by external evaluations.

Research effectiveness looks at whether research outputs perform as expected. This is assessed during the research process as well as when research outputs are being taken up and used in pilots and at scale. Rigorous evidence on effectiveness, whether experimental studies, theory-based or participatory approaches, should be conducted as part of research to fill gaps in the evidence underlying the ToC (link to research relevance). Effectiveness should also be assessed as part of documenting outcomes, validating experimental evidence of effectiveness (where available) in different contexts.

**Sphere 3: Development Effectiveness**

CGIAR’s Strategy and Results Framework and the 2017 - 2022 CGIAR Portfolio are designed to ultimately meet three system level outcomes (SLOs) which are at the same level as the Sustainable Development Goals. These are long term development effectiveness goals of: 1) Reducing poverty, 2) Increasing food and nutrition security for health, and 3) Improved natural resources and ecosystem services.

The system has also developed a set of specific targets for a sub-set of outcomes for 2022 and 2030 that should lead to the achievement of these three system level outcomes. CGIAR’s research is expected to contribute to these development outcomes over many years, but recognizes that these impacts fall beyond their spheres of control and influence in their sphere of interest where research outputs have been taken to scale. In addition, there are many other donors, governments, organizations and individuals working towards these same outcomes, so CGIAR system’s impacts represent only direct or indirect contributions in the global context. Nevertheless, it is important that the CGIAR system as a whole acknowledges its accountability in first clearly describing how its work will contribute to these goals, and measuring progress and contributions to these impacts for its own accountability and learning, and for accountability to donors and to national governments that it works with. Furthermore, this information is expected to support donors in building an investment case for CGIAR and serve as a resource mobilization tool.
CGIAR’s Taskforce for Indicators is responsible for identifying relevant international indicators (primarily at the national level) that will help the system as a whole to tell a story about how it is collective work is contributing to reducing poverty, supporting food and nutrition security, and improving natural resources and ecosystem services. In order to do this, the taskforce is developing generic impact pathways that represent how diverse CGIAR CRPs are individually expected to contribute to these three development outcomes along their specific impact pathways. Then, indicators will be selected to measure outcomes along these impact pathways and at the end of these pathways within CGIAR’s sphere of interest to monitor how the system is eventually contributing to development impacts. It is expected that the system will collect this monitoring data through SPIA, through national governments’ own data collection, and from other large international organizations that are collecting data on the SDGs. As the impact pathway moves in the sphere of interest, the relevant data are expected to be at a scale of collection that are well beyond the capacity and mandate of the System, and hence the expectation that the indicators and the data underpinning them will increasingly be drawn from existing indicators maintained by other actors.

In addition to this system level work, individual centers and CRPs will be conducting impact assessments to document the impact of their research on development outcomes. Each CRP submitted a plan for impact assessments as part of the Phase 2 proposal.

SPIA supports impact assessment in centers/CRPs and commissioned impact assessment to fill priority gaps in the evidence base on ex-post impact of CGIAR research (see website for SPIA workplan).
Annex 2 - Summarized Progress of the Task Force on Indicators
(For identifying and operationalizing
CGIAR Strategy and Results Framework target pathways and indicators)

The Task Force on Indicators (TFI) was put together in April 2016. In a first phase (Apr-Jun) an approach was developed and approved to be tried for identifying a small set of indicators that could measure the CGIAR system’s development impact at a high level taking the new proposed portfolio into account towards an operationalization of the Strategy and Results Framework (SRF) 2016-2030.

The second phase (Jul-Sep) the TFI made significant progress in testing the approach and developing products drafts to share for wider consultation. These include:

- Consolidated generic pathways of work which will outline and link the portfolios proposed work and contribution to the defined System Level Outcomes (SLO) described in the SRF
- Derived at a set of 20-25 high level indicators, from the consolidated outcomes of the identified key pathways under each SLO (SLO 1 Reduced Poverty; SLO 2 Improved Food and Nutrition Security for Health; and SLO 3 Improved Natural Resources and Ecosystems Services) mapped with the sub-Intermediary Development Outcomes of the SRF (p. 22, 31).
- Tested the robustness and quality of the SLO 1 (Reduced Poverty) identified indicators against a set of criteria: annually measurable, aggregable, affordable/ feasible to measure, and
- Mapped the test indicators with the three spheres of control, influence, and interest to ensure that they are high level.
- Near full fleshed example for SLO 1 (Reduced Poverty)

The task force identified the following steps to take this work further:

- Refine products described above and follow the same process for SLO 2 and 3.
- Consult with CRP and flagship leaders to ensure technical appropriateness and quality for the indicators
- Provide further detail on each indicator, including a definition for each, caveats and limitations, standardized methodologies to measure them (where available, draw from expertise within CGIAR and beyond, e.g. building on SDSN)
- Clarify system-wide roles and responsibilities on MEL
- Provide an update at the MEL CoP meeting in October and see if we can get some further validation through the MEL expertise
- Explore developing a handbook for these outcomes and indicators and some other strategies for socializing the indicators product, e.g. webinar, ppts
- Present to the System Council and System Management Board in November
### Table 2.1: Indicators related to Breeding Pipeline Pathway to SLO1

<table>
<thead>
<tr>
<th>SLO 1</th>
<th>IDOs</th>
<th>Sub-IDOs</th>
<th>Proposed Indicators</th>
</tr>
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<tbody>
<tr>
<td>Breeding Pipeline</td>
<td>1.4 Increased productivity</td>
<td>1.4.1 Reduced pre- and post production losses, including those caused by climate change</td>
<td>Increase in number of breeding programs that have met or exceeded the proposed station-level genetic gain by targeted country</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.4.3 Enhanced genetic gain</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.4.4 Increased conservation and use of genetic resources</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.1 Improved diets for poor and vulnerable people</td>
<td>2.1.1 Reduced biological and chemical hazards in the food system</td>
<td>Increase in number of farm households using new varieties, trees, livestock or fish breeds by targeted country</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.1.2 Improved household nutrition</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.1 Natural Capital enhanced and protected especially from climate change</td>
<td>Increase in land or water area with new varieties, trees, livestock or fish breeds by targeted country</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.1.1 Land, water and forest degradation (including deforestation) minimized and reversed</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.1.2 Enhanced conservation of habitats and resources</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.2 Enhanced benefit from ecosystem goods and services</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.2.2 Agricultural systems diversified and intensified in ways that protect soils and water resources</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.2.3 Enrichment of plant and animal biodiversity for multiple goods and services</td>
<td></td>
</tr>
</tbody>
</table>

### Table 2.2: Indicators related to Improved technologies, Sustainable Management and Intensification Strategies pathway to SLO1

<table>
<thead>
<tr>
<th>SLO 1</th>
<th>IDOs</th>
<th>Sub-IDOs</th>
<th>Proposed Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved technologies, Sustainable Management and Intensification Strategies</td>
<td>1.3 Increased incomes and employment</td>
<td>1.3.1 Diversified enterprise opportunities</td>
<td>Increase in number of farm households using sustainable management and intensification practices by targeted country</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.3.2 Increased livelihood opportunities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.4 Increased productivity</td>
<td>1.4.2 Closed yield gaps through improved agronomic and animal husbandry practices</td>
<td>Increase in land or water area under sustainable management and intensification practices by targeted country</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.4.5 Increased access to productive assets, including natural resources</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.2 Improved food safety</td>
<td>2.2.1 Reduced biological and chemical hazards in the food system</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.2.2 Appropriate regulatory environment for food safety</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.1 Natural Capital enhanced and protected especially from climate change</td>
<td>3.1.1 Land, water and forest degradation (including deforestation) minimized and reversed</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.1.2 Enhanced conservation of habitats and resources</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.3 More sustainably managed agro-ecosystems</td>
<td>3.3.1 Increased resilience of agro-ecosystems and communities, especially those including smallholders</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.3.3 Enhanced adaptive capacity to climate risks</td>
<td></td>
</tr>
</tbody>
</table>
Table 2.3 Indicators related to Value Chain Improvement pathway to SLO1

<table>
<thead>
<tr>
<th>SLO 1</th>
<th>IDOs</th>
<th>Sub-IDOs</th>
<th>Proposed Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Increased resilience of the poor to climate change and other shocks</td>
<td>1.1.1 Increased household coping capacity to cope with shocks</td>
<td>Increase in number of people who have exited poverty as a consequence of CGIAR technologies and practices for targeted country and sex</td>
</tr>
<tr>
<td></td>
<td>1.2 Enhanced smallholder market access</td>
<td>1.2.1 Improved access to financial and other services</td>
<td>1.2.2 Reduce Market Barriers</td>
</tr>
<tr>
<td>1.3</td>
<td>Increased incomes and employment</td>
<td>1.3.1 Diversified enterprise opportunities</td>
<td>1.3.2 Increased livelihood opportunities</td>
</tr>
<tr>
<td></td>
<td>1.4 Increased productivity</td>
<td>1.4.1 Reduced pre- and -post production losses, including those caused by climate change</td>
<td>1.4.5 Increased access to productive assets, including natural resources</td>
</tr>
</tbody>
</table>

Table 2.4: (following) Testing of the robustness and quality of the SLO 1 (Poverty) high-level identified indicators against a set of criteria

* 1 = control, 2 = influence, 3 = interest (as described in the MEL Integrated Framework)

** Is the information measured by the CGIAR (M), collected by national statistics departments and available for the CGIAR (A) or needs to be extrapolated based on local pilot project (E)

*** measured or available by country; geographic mapping still needs to be done and secondary data availability explored

+/- means that for these 4 indicators on this specific criteria (aggregable) an overlapping and consequently possible double counting is frequently possible
## Annex 2
Summarized Progress on Task Force on Indicators

<table>
<thead>
<tr>
<th>Indicators for SLO1</th>
<th>Mapped into MEL spheres</th>
<th>Measured (M)</th>
<th>Available (A)</th>
<th>Extrapolated (E)</th>
<th>Aggregable</th>
<th>Affordable</th>
<th>Country level***</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1) Increase in number of breeding programs(^1) that have met or exceeded the proposed station-level genetic gain (by country)</td>
<td>1</td>
<td>Yes (M)</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2) Increase in number of farm households using new varieties, trees, livestock or fish breeds by [targeted country]</td>
<td>2</td>
<td>Yes (M/A)</td>
<td>+/-</td>
<td>Yes</td>
<td>yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3) Increase in land or water area with new varieties, trees, livestock or fish breeds by targeted country</td>
<td>2-3</td>
<td>Yes (E)</td>
<td>+/-</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.4) Increase in number of farm households(^3) using sustainable management and intensification practices(^2) by targeted country</td>
<td>1-2</td>
<td>Yes (M/A)</td>
<td>+/-</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5) Increase in land or water area under sustainable management and intensification practices by targeted country</td>
<td>2-3</td>
<td>Yes (E)</td>
<td>+/-</td>
<td>yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.6) Increase in CGIAR-supported risk-reduction strategies used by farm households by country</td>
<td>2-3</td>
<td>Yes (M/A)</td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.7) Increase in number of people who have exited poverty(^3) as a consequence of CGIAR technologies and practices by country, sex</td>
<td>3</td>
<td>Yes (A/E)</td>
<td></td>
<td>Yes</td>
<td>yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

\(^1\) Breeding programs are defined by crop x trait improvement; a useful representation could be as reported by MAIZE in 2015 and 2015 (see Figure 1)

\(^2\) Practices refers to a combination of inputs (knowledge, labor, land, capital, machinery, seed, fertilizer etc.)

\(^3\) Definition as per SRF
INTRODUCTION

The Plan of Work and Budget (POWB), is a critical document for the CGIAR. It provides the framework under which individual CRPs can outline what they plan to deliver over the coming year, with what resources, with whom and to what effect. This serves both an external purpose to help guide resource allocation, and internally to structure the work program.

As CRPs move in phase II (2017-22) the format for the POWB has evolved. Feedback on the strengths and weaknesses of the phase I format has been obtained, and revisions made to ensure that it is as relevant, robust and light a document as possible, while serving the purposes outlined above for which it was intended. It is, for 2017, an interim document. During 2017 we will be reviewing the needs more thoroughly, including looking at the feasibility of moving to multi-year planning. There may, therefore, based on consensus, be some changes to the format in 2018, but only if it represents a commonly held improvement.

What is new about the 2017 POWB from the phase I version:

- Focus on results rather than actions. This includes more emphasis on how what is planned will contribute along the results pathway depicted in theories of change. This will chart change from key outputs (present in phase I POWB) to key outcomes and annual outcome milestones (outlined in Table D of the full phase 2 proposals); to research outcome indicators under the SRF sub-IDO level (asked for in the RBM annex of phase 2 proposals). This will enable better internal and external scrutiny of the relevance of selected investments.
- Focus on the use of different resources. The specific use of windows 1 and 2 resources is requested, vis-à-vis the use of windows 3 and bilateral funding. The aim is to make clear how different sources of funding are being used towards the results, to ensure the best application of these funds.
- A reduced, more concise format as a whole – focusing on key issues and providing the basis for a reporting structure (at year-end) to match the plan more closely than in phase I2.

The following guidance note provides the structure for the presentation of the POWB. It asks for two levels: an aggregated level (n) for the whole CRP and for each flagship (n-1) that – in combination represent the totality of CRP efforts.

1 Budget for 2017 has still to be allocated
2 The reporting structure is being prepared and will be released in 2017.
3 Flagships are also terms Flagship Projects (FPs) in the full proposal guidelines. The terms are used interchangeably
COVER PAGE
- Name of the CRP
- Name of the Lead Center
- List of participating Centers and other key partners (including logos)

A. CRP LEVEL [3 pages maximum]

A1. Delivery [1 page maximum excluding Table 1]

A1.1 Describe the key elements of what the CRP will deliver in 2017.

A1.2 Describe key pathways in the theory of change that will be advanced during 2017, distinguishing between those that are building on past work (and therefore, for example, expect to expand or scale) and those that are new areas of investment.

A1.3 Describe any planned changes to the program of work in 2017 compared to what was described in the Phase 2 proposal, and give reasons for this (eg. updated budget projections, revised 2017 CRP targets, decision pending on funding of certain flagships, etc.)

A1.4 Indicate how W1-2 funding will be used vis-à-vis W3-bilateral. Also provide a summary financial table (see Table 1 below)

A2. Collaboration and Integration [1 page maximum]

A2.1 Describe expected contribution from each of the three Platforms4 to the CRP’s outcomes in 2017: Identify the contributions (services, materials, collaborative research or studies) that any of the three CGIAR platforms are expected to make to CRP research outputs and outcomes in calendar year 2017, identifying the amount and source of the budget where possible (CRP, platform, joint, other) for the services etc.

A2.2 Describe expected progress related to the site integration initiative of the CGIAR in 2017. How will the CRP engage with CGIAR’s site integration and in which countries? What are the priority themes for integration and how will this work be funded?

A3. Management and Governance [0.5 page maximum]

A3.1 Describe any relevant changes to the CRP compared to the proposal, such as in the governance structure, Program Management Unit, or in the administration of the MEL process.

A.5 Impact studies planned for 2017: Identify impact assessments which will be conducted or contributed to by the CRP in the calendar year, including the type and time frame of prior work on which the impact study is based, the budget for the current IA and the expected release date of the results of the study and/or publication.

---

4 Note that Platforms will report POWBs and ARs separately, and in terms of provision services and materials
Table 1: CRP planned budget by flagship for 2017

<table>
<thead>
<tr>
<th>Flagship Name</th>
<th>Planned budget 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>W1</td>
</tr>
<tr>
<td>FP1.. (one row per FP)</td>
<td></td>
</tr>
<tr>
<td>Management &amp; Support Cost</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>

B. At Flagship Project level:

Flagship [1...n] 5 [1 page excluding table per flagship]

Summary text

B.1 Describe for each flagship what is planned during 2017 to contribute towards the FP 2022 outcomes, with whom you are working (key partners) to achieve this, and how this will deliver on the corresponding SRF sub-IDO and target.

B.2 Indicate any changes to the flagship theory of change from the approved proposal, with whom the FP will work (the key CGIAR and external partners) and the delivery mechanisms.

B.3 Indicate in overall terms how W1-2 funds will be used, for what purpose, and the relationship with W3-Bilateral funds.

B.4. Provide an overview of what is planned regarding cross-cutting areas: gender, youth, capacity development, etc...

Table 2: Major outputs and milestones to be achieved in 2017 for flagship [1...n] against corresponding 2022 outcome and sub-IDO

<table>
<thead>
<tr>
<th>Key outputs* to be delivered in 2017</th>
<th>Corresponding Outcome* milestone 2017</th>
<th>W1-2 / W3-bilateral funding</th>
<th>Corresponding 2022 Outcome</th>
<th>Corresponding SRF sub-IDO</th>
<th>Target for 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

*Indicate those which are cross-cutting research outputs or outcomes

5 Those flagships that will not receive W1/2 funding in 2017 will also report their planning activities