

**Independent Evaluation Arrangement Evaluation of CGIAR Research Program on  
MAIZE: Management Response and Action plan  
April 20, 2015**

Dear FUND Council members, Consortium Board, Reviewer Team and IEA colleagues:

We are pleased to send herewith the Management Response to the Evaluation of the CGIAR Research Program on MAIZE.

1. The MAIZE Independent Stakeholder Committee (MAIZE-ISC) and Management Committee (MAIZE–MC) thank the evaluation team and the Independent Evaluation Arrangement for the conscientious and professional implementation of the review. We thank the many researchers and partners who took time to provide input. We also appreciate the candid and useful feedback received from the evaluation team, which will be used to frame the MAIZE Phase II Proposal.
2. Management noted with satisfaction the team’s conclusions, in particular that
  - a. “MAIZE is an effective and efficient program that is oriented towards results and impact” and that its “success rests on strong partnerships and good quality science”.
  - b. “MAIZE is currently on target regarding its milestones and on the basis of its observations of MAIZE field operations, partnerships and science quality, the Evaluation Team considers it highly plausible that MAIZE and its partners will reach the medium term goal, which is to increase maize productivity in the two MAIZE target groups by 7% in 2020 and 33% in 2030”.
  - c. “the added value from MAIZE compared with the pre-CRP center-based approach is clear and becoming more evident as MAIZE evolves”.
  - d. “MAIZE is a strong program that is addressing appropriate research issues for meeting the challenges to increasing maize productivity and maize systems’ sustainability, and it continues to contribute substantially to the goals of the CGIAR”
3. Management appreciates the team’s acknowledgement that with “19% of MAIZE funding from W1/W2” MAIZE had a “relatively small proportion of unrestricted (W1/2) funding”. We would have appreciated to have a stronger endorsement to increase such funding, especially as these would go a long way to implement review recommendations. Currently MAIZE operates at <55% of the W1/W2 budget approved by the FUND Council. It is hence not surprising that strategic and global progress is occasionally limited for having to rely largely on a portfolio of bilateral funding.
4. We confirm the observations of the reviewers that CIMMYT and IITA are close to establishing a single global maize program, led by the MAIZE CRP Director. This will integrate efforts of the two centers and improve the efficiency and effectiveness of MAIZE.

Please see below the detailed Management Response Matrix / Action Plan.

## Management Response Matrix / Action Plan

Evaluation Recommendation	Management Response to the Recommendation	Management Follow up			
		Actions to be taken	Who Responsible for Action	Timeframe	Is additional funding required to implement recommendation?
<p><b>Recommendation 1:</b> Given the evolution of the private sector, MAIZE will need to continue to assess its target smallholder groups, ecologies, geographies and commercial seed markets. This assessment should aim at: 1) Accurately defining the germplasm products and associated technologies needed – regarding delivery of improved lines, parental lines, hybrids (finished products) and technical issues of maturity, disease and stress tolerance, and grain quality attributes and its unique support of managed stress networks, and; 2) Establishing ‘rules’ to customize and change MAIZE roles and involvement, e.g. default focus should be delivery of regionally-adapted improved lines and expert science/capability development in markers, traits and phenotyping.</p>	<p><b>Accepted in full.</b></p>	<p>1.1 Undertake analyses to determine recommendation domains for specified MAIZE germplasm outputs and technical support.</p>	<p>MAIZE Management Committee.</p>	<p>Undertake analyses every three years.</p>	<p>Yes. A minimum of US\$250k per (re-)assessment is required every 3 years. If additional funding is not forthcoming, resources would need to be redistributed from existing Windows 1&amp;2 activities in FP3 and FP4.</p>
<p><b>Recommendation 2:</b> MAIZE should review its priorities in FPs 4 and 5</p>	<p><b>Partially accepted.</b> MAIZE in principle does not engage and use international</p>	<p>2.1 Undertake analyses of maize</p>	<p>MAIZE Management</p>	<p>Undertake</p>	<p>Yes (see 1.1 above).</p>

<p>where it has less comparative advantage and where smallholders already have a certain access to appropriate technology. This needs to be considered in the light of the large proportion of W3 funding. In particular, MAIZE needs to consider reducing efforts in final product (hybrid) delivery where the private sector is strong. MAIZE should also consider reducing investments in the non-germplasm components of FP5 areas of aflatoxin and postharvest storage research where other agencies have greater comparative advantage.</p>	<p>public funded capacities where strong national or private sector are engaged. Even where the seed sector is strong (e.g., in Asia or Latin America), their efforts are targeted towards the wealthier farmers in more favourable markets with highest margins. MAIZE efforts in Asia and Latin America are targeted towards developing and deploying (through partners) high-yielding stress resilient cultivars that can make a difference to the rainfed maize productivity, which is often considered as an “unfavourable market” environment by the private sector institutions (= large players with breeding strength). The abiotic stress tolerance network of MAIZE is not reciprocated by the private sector. Also the small and medium sized seed companies that are willing to target lower margin markets and those in areas unattractive to the multinational breeding sector typically do not have a breeding program.</p>	<p>seed sector evolution in the contrasting target environments of Africa, Asia and Latin America for the next 10 to 15 years and the role and comparative advantage of suppliers of international public goods with relevant traits (like CIMMYT and IITA) vis-à-vis private sector; such an analyses must include relevant assumptions, for proper forecasting.</p> <p>2.2 The role of Aflatoxin and post-harvest storage research in FP5 will be reviewed as part of the development process of the MAIZE Phase II proposal.</p>	<p>Committee.</p> <p>MAIZE Management Committee and Independent Steering Committee.</p>	<p>analyses every three years.</p> <p>June 2015-December 2016.</p>	<p>No</p>
<p><b>Recommendation 3:</b> MAIZE should establish pro-active research and monitoring capability to provide foresight on emerging issues in diseases and to support environmental characterization.</p>	<p><b>Partially accepted.</b> Whilst this recommendation is sound in principle, but it has significant resource implications and would require strong and sustained commitment from the donor community.</p>	<p>3.1 Discuss importance of, and funding modalities for, establishing capacity in MAIZE for foresight on emerging issues in diseases and to support</p>	<p>Consortium Board and Fund Council.</p>	<p>June 2015-December 2016.</p>	<p>Yes, significant additional resources would be required beyond those approved in the extension proposal.</p>

		<p>environmental characterization.</p> <p>3.2 Recruitment of senior Foresight and targeting specialist (part-time for MAIZE, co-funded MAIZE for WHEAT) to develop foresight portfolio for MAIZE, including emerging biotic stresses</p>	CIMMYT	2015	No, provided MAIZE is funded at approved levels. Currently MAIZE operates at < 55% of the W1/W2 budget approved by the FUND Council.
<p><b>Recommendation 4:</b> MAIZE should Improve deployment of new phenotyping technologies into breeding and extend <b>science</b> into trait dissection, plant-based phenotyping and modelling for adaptive traits through engagement with other CRPs and groups of excellence. A study to benchmark research activities in MAIZE with best-practice in private sector should be conducted to identify opportunities for improvement.</p>	Accepted in full.	<p>4.1 Opportunities for the deployment of new phenotyping technologies into breeding and the extension of science into trait dissection, plant-based phenotyping and modelling for adaptive traits will be reviewed on an annual basis by the FP2&amp;FP3 team.</p>	FP2&FP3 team	Annual	Yes for conducting a study into comparing MAIZE with best-practice in private sector to identify opportunities for improvement. Estimated costs: US\$ 30,000 to 50,000
<p><b>Recommendation 5:</b> MAIZE should continue to support the deployment of a broad array of germplasm options and genetic resources and broaden the funding base for discovery and development of high-value trait</p>	Accepted in full	<p>5.1 The role of fee-based consortia or other income generating mechanisms are being assessed to the extent they do not contradict</p>	MAIZE Management Committee and Centre Boards	June 2015- December 2016.	No.

<p>lines. More <b>focused</b> product design, network trial results and seed market assessments should be used to decide when to withdraw to a 'regional role'. A study should be commissioned on collaboration models, such as fee-based hybrid consortia, to explore options for funding support toward the development of parental lines.</p>		<p>the CGIAR Intellectual Asset Principles.</p> <p>5.2 More focused product design; network trial results and seed market assessments will be included in the analyses above in relation to 1.1.</p>	<p>MAIZE Management Committee.</p>	<p>Undertake analyses every three years.</p>	<p>Yes. See 1.1 above.</p>
<p><b>Recommendation 6:</b> MAIZE should institute <b>management</b> measures to ensure efficiency and effectiveness in management of staff and research activities over the long term. These measures should include: 1) processes for engaging and motivating staff in delivery oriented research through mentoring, training, and cross disciplinary and cross-institutional lateral learning; 2) protocols for data collection and management; 3) streamlined processes for linking exploratory science and research outputs through multiple stages to intermediate products and final products delivered by MAIZE, and; 4) integration of project implementation to program objectives over medium- and long-term through innovation platforms</p>	<p><b>Partially accepted.</b> A major disincentive for this to happen is the lack of stable longer term funding and high levels of direct costing imposed by donors that often pursue a very short-term project focus. In the case of W1/W2, MAIZE is currently funded at less than 55% of the W1/W2 budget approved by the FUND Council.</p>	<p>6.1 Allocate a greater proportion of W1/W2 to coordinate cross-disciplinary and cross-institutional learning activities and events.</p> <p>6.2 Develop and operationalise protocols for data collection and management. This process is already initiated.</p> <p>6.3 Role specialization within the breeding team (for optimization of</p>	<p>MAIZE Management Committee.</p> <p>ICT/Knowledge management departments with FP2/FP3/FP4 teams.</p> <p>FP2/FP3/FP4 Leadership</p>	<p>Instigate during 2016</p> <p>2016</p> <p>2015 to 2017</p>	<p>Yes. Cost = approximately USD\$150,000 per year.</p> <p>No, provided MAIZE is funded at approved levels. Currently MAIZE operates at &lt; 55% of the W1/W2 budget approved by the FUND Council.</p> <p>No</p>

<p>and long-term field trials.</p>		<p>breeding pipelines through discovery, validation and deployment), and necessary linkages between specific stages of product development, have been devised and the process of implementation is already underway.</p> <p>6.4 Review project alignment / misalignment and suggest opportunities to promote greater alignment. Ensure alignment with ongoing discussions regarding the development of Site Integration Plans.</p>	<p>FP &amp; Strategy Leads</p>	<p>June 2015 to December 2015.</p>	<p>No</p>
<p><b>Recommendation 7:</b> MAIZE should improve its links in agronomy research with other CRPs such as Humid Tropics. This would serve development of sustainable intensification indicators and metrics.</p>	<p><b>Accepted in full.</b></p>	<p>7.1 Expand current work on the standardisation of indicators and metrics with commodity-focused CRPs to systems CRPs (Humid Tropics and Dry Land Systems). This is presently taking place</p>	<p>CRP Management Office.</p>	<p>June 2015 to December 2015.</p>	<p>Yes. Cost = approximately USD\$150,000.</p>

		<p>under leadership of Africa Rising (i.e. recent USAID San Diego convening on indicators and metrics for SI attended by CIMMYT, IITA, ILRI, CIAT,...). Given the importance of Landscape scale approaches stronger linkages with CRP Water, Land and Ecosystems is also desirable.</p>			
<p><b>Recommendation 8:</b> MAIZE should take action to improve its gender orientation. It should maintain investments in gender/social inclusion and sharpen its focus on gender analysis at project level. MAIZE should take measures to enhance the employment of women scientists at all levels by improving recruitment, and by developing an enabling environment to attract and retain women scientists.</p>	<p><b>Accepted in full.</b></p>	<p>8.1 Implementati on newly approved MAIZE gender strategy – which includes entry points per flagship and identifies investment needs in gender and social inclusion.</p> <p>8.2 Increase investment on gender analysis at project level. Includes gender-relevant projects proposing adequate budget lines for gender analysis.</p>	<p>CIMMYT; IITA</p> <p>MAIZE Management Committee.</p>	<p>2015 onward.</p> <p>2016 onward.</p>	<p>Yes. Cost = approximately USD\$500,000 per year in addition to fully funding MAIZE W1/W2 at their FUND Council approved levels.</p> <p>No – if adequately budgeted by project and accepted by donor.</p>

		<p>8.3 Continue to pro-actively explore and implement measures to the employment of female scientists.</p> <p>8.4 Operationalise key recommendations from Gender Competency Framework and Modular Capacity Strengthening Program Report (currently being developed in 2015).</p>	<p>CIMMYT &amp; IITA senior Mgt</p> <p>MAIZE Management Committee.</p>	<p>2015 onward.</p> <p>2016</p>	<p>Yes – to be determined.</p> <p>Yes – to be determined.</p>
<p><b>Recommendation 9:</b> MAIZE should develop a strategy for impact assessment that sets clear priorities for focusing such assessments, provides an analytical framework and elaborates on the use of impact pathways in planning and documenting scaling up of results and impact.</p>	<p><b>Accepted in full.</b></p>	<p>9.1 Develop comprehensive strategy for MAIZE impact assessment.</p>	<p>CRP Management Office with key FP5 leaders.</p>	<p>By December 2015.</p>	<p>No, provided MAIZE is funded at approved levels. Currently MAIZE operates at &lt; 55% of the W1/W2 budget approved by the FUND Council.</p>
<p><b>Recommendation 10:</b> MAIZE should <b>enhance</b> the conduct and use of impact assessment. The steps to be taken include: 1) Adequate resources are allocated in major project proposals to enable</p>	<p>Accepted in full. Challenge though for funding through bilateral project resources – given proper ex post impact assessment normally occurs several years AFTER the project completion.</p>	<p>10.1 Implement the new comprehensive strategy for MAIZE impact assessment (see Rec 9), including</p>	<p>CIMMYT (PMU and RMS) and IITA (Proposal Development Unit and Project Admin</p>	<p>By December 2015.</p>	<p>No, provided MAIZE is funded at approved levels. Currently MAIZE operates at &lt; 55% of the</p>



<p>ex-post impact assessment at the end of project support and strengthen feedback to MAIZE for portfolio development; 2) Proactive planning is done to ensure that results from adoption and impact studies feedback to specification of desired technology characteristics in project design, and; 3) More systematic studies are conducted on the impact of gender on technology adoption and its implication for technology design.</p>		<p>its adequate resourcing. All new MAIZE proposals developed with a total budget of more than USD\$5,000,000 will propose an adequate budget line for ex-post impact assessment. All substantial projects (US\$&gt;=1.5 million) will propose adequate budget lines for adoption monitoring.</p> <p>10.2 Operationalize feedback mechanisms of the new comprehensive strategy for MAIZE impact assessment (see Rec 9). Includes active multi-disciplinary participation starting in project design. Use impact pathways in planning and documenting scaling up of results and impact. Enhance constructive feedback platforms/processes/opportunities.</p>	<p>Office).</p> <p>CIMMYT (PMU and RMS) and IITA (Proposal Development Unit and Project Admin Office).</p>	<p>By December 2015.</p>	<p>W1/W2 budget approved by the FUND Council.</p> <p>W3/bilateral projects will be sought to provide a compliment/partial substitute.</p> <p>No</p>
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		<p>10.3 Implementation of newly approved MAIZE gender strategy calls for proactive use of gender lens in technology design and adoption studies. Commission additional gender studies on technology adoption and ensure learning internalised through learning activities and events and through the proposal development process.</p>	<p>MAIZE Management Committee. CRP Management Office. CIMMYT (PMU and RMS) and IITA (Proposal Development Unit and Project Admin Office).</p>	<p>Initiate in 2016 onwards .</p>	<p>Yes. Cost = approximately USD\$200,000 per year in addition to fully funding MAIZE W1/W2 at their FUND Council approved levels.</p>
<p><b>Recommendation 11:</b> CIMMYT and IITA should agree on the establishment of a single global maize program in the CGIAR that integrates efforts of the two centers. This MAIZE program should be led by a director.</p>	<p>Accepted in full.</p>	<p>11.1 Subject to ratification by IITA's DG and BoT, CIMMYT and IITA senior management have already agreed to establishment of a single maize programme to be led by a director.</p>	<p>CIMMYT and IITA DGs and BoTs.</p>	<p>By December 2015.</p>	<p>No</p>