



**WHEAT-Independent Steering & Management Committees Response to  
Final Evaluation Report  
(21<sup>st</sup> April 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 Wheat.

1. The WHEAT Independent Stakeholder Committee (WHEAT-ISC) and Management Committee (WHEAT-MC) greatly appreciate the time and effort invested by the Reviewers and IEA. Their task was huge, whilst also having to deal with shifting realities within the CGIAR System. WHEAT-MC, scientists and partners enjoyed the interaction with the Reviewers. While the review recognizes many positive developments, there are a wide range of valuable recommendations that WHEAT will build on for Phase II.
2. We welcome the recognition that long-term impact relies on the germplasm improvement and sustainable intensification research strategies to be synergistic – and in that context the positive review comments on the WHEAT leadership role in the area of sustainable intensification (see p. 39) across the CGIAR (which is indeed a joint WHEAT & MAIZE leadership role).
3. The evaluation concludes that WHEAT is contributing sufficient value from CGIAR's research investments to generate results warranting continuation during the extension-phase (2015-16) and beyond. We want to reinforce the term "sufficient". Independent evaluations have ascribed at least 50% of the wheat germplasm related productivity increases to CGIAR efforts complementing those of NARS and a fledgling private sector. A recent review (donor contracted external review of MasAgro) ascribed 50% higher adoptions of novel sustainable intensification approaches managed in the frame of WHEAT (and MAIZE) than in other projects. Similarly, the recent external review of CSISA Phase II highlighted its innovative design and approaches, recognizing the significant progress in placing sustainable intensification technologies and options in context (impact pathways), with appropriate public and private partnerships already leading to impact at scale. Also note that unrests in North Africa and Middle East were spurred at the height of wheat food prices. Wheat is by area the most widely grown staple. Crop diversification in many parts of the world will depend to a large extent on successfully increasing wheat systems productivity, to free land for other crops. Likewise, nitrogen fertilizer use and research to increase its use efficiency in wheat will influence greenhouse gas emissions, simply given the scale on which wheat is grown. Hence, withdrawing funding from WHEAT might imply negative impacts on future food security, climate change mitigation and adaptation, and poverty reduction among over 2 billion wheat consumers with incomes of less than US\$2 per day.
4. The Review proposes increased investments in implementing the gender strategy, data management, impact assessment and capacity building, to name some key areas – many of which will likely need to be funded by W1&2. This is not balanced with recommendations for deemphasizing other areas which we interpret that many of them are seen as essential. The reviewers noted that the CGIAR Reform has not met its promise with respect to outcomes-driven programmatic vs. bilateral donor funding. They also noted that W1&2 funding, though enhancing coherence (see p. 98), has been considerably less than originally proposed by WHEAT and has been declining as a percentage of total funding. Indeed, following the various cuts WHEAT operates at a funding level of only 66% of the W1&W2 levels approved in the extension proposal for 2015-2016. This puts implementation of review recommendations at the considerable risk, for lack of funding. The review recognizes that "*global development challenges clearly drive WHEAT's R4D strategies while funding opportunities drive the FPs' scientific project activities.*" The Review recognizes that low W1&2 funding "*has been*

*challenging for WHEAT in terms of its ability to maintain and enhance program coherence*". The more donors support WHEAT's R4D strategies (versus pursuing somewhat dissociated sub-strategies), the more impactful WHEAT and donors' own investment can be.

5. In agreement with the Review, WHEAT considers the growing alignment between CIMMYT and ICARDA (248), and to better align partners' and collaborators' contributions towards the same purpose (in the case of partners and collaborators *"to the extent possible"*), as ways to accelerate output diffusion and associated outcomes. WHEAT will develop a more explicit partner strategy, increase efforts to discuss bottlenecks in the impact pathways with partners and collaborators and find solutions that overcome these bottlenecks.
6. We are very pleased that the review recognized *"high quality thinking in research project design and use of state of the art methodologies in project execution. Program approaches build on latest scientific thinking and latest research results, and in some of its exploratory projects on novel approaches, but more generally use either most appropriate or most cost efficient methodologies."* It will be our challenge to continue to stay at the forefront of science, project design and management in germplasm development, sustainable intensification and socioeconomic approaches.
7. We welcome the comments and findings on capacity development, which remains critical in the eyes of many and which could benefit from greater use of modern approaches and technologies.
8. Going forward, WHEAT agrees that *"the sustainability of WHEAT being able to continuously provide solutions that the intermediate and ultimate beneficiaries need"* will be defined by:
  - a. Defining and addressing current and anticipating future needs and constraints of farmers, processors and consumers.
  - b. Achieving widespread farm level adoption of integrated technologies.
  - c. Addressing constraints in wheat impact pathways.
  - d. WHEAT's ability to interact effectively among its ARI, CRP and NARs partners.
  - e. Continued and stably growing funding of WHEAT's R4D agenda.

This has been and will stay the focus of our attention so as to continue to meet the expectations of farmers, processors, consumers, partners, governments and investors.

We note that formal consideration of this Evaluation by the Fund Council has recently been postponed, apart from the pre-FC13 evaluation workshop on 28<sup>th</sup> April, but hope that CGIAR donors will have access to the Evaluation as soon as possible.

The following Annex shows in more detail CRP Management's comments and follow-up actions to the Review – **to the 12 Recommendations, which have been accepted in full**, but for one.



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**Management Response Matrix/Action Plan**

Evaluation Recommendation (numbered)	Management Response to the Recommendation	Management Follow up			
		Action to be taken (each action should have a reference no.)	Who Responsible for Action	Timeframe	Additional Funding required to implement recommendation?
<p>1. WHEAT should improve the refinement of its strategies, and better alignment and management of projects (activities) that enable priority WHEAT IDOs and SLOs objectives within its strategies. Each proposed FP project should define its intended output(s), its impact pathway, details of its ToC with critical assumptions, and checkpoints (points in time when assumptions can and should be validated). WHEAT should determine priority of projects based on their costs and risk-adjusted contribution to the Program priority IDOs. The FP projects should be integrated at the level of WHEAT research strategies. Validation of assumptions and progress along the impact pathway should be used by WHEAT management for learning and adjusting plans, and re-prioritizing projects when assumptions prove wrong or better options arise.</p> <p>For FP overview, see Fig. 2-1, p.28, in the Final Evaluation Report</p>	<p><b>Partially agreed.</b> This recommendation is already in process. Theory of Change workshops are ongoing for each Flagship Project. As reviewers noted, bilateral donors exert substantive influence on project development and alignment is sometimes not easy to achieve.</p> <p>WHEAT priorities are to be aligned with IDO and SLOs – which have been a moving target during 2012-14 and still in 2015.</p> <p>With regard to priority-setting, we believe additional criteria should be used, to assure that a CRP Portfolio includes low cost / high impact and high cost / high impact projects across the R-to-D continuum, such as: ‘Appropriate mix of upstream and downstream R&amp;D (25/75%?) – to generate pipeline for future (10-20 years) downstream R4D’.</p>	<p>1.1 Implementing Impact pathway/Theory of Change workshops per FP by mid-June &amp; aggregation by W-MC; led by newly-hired CRP M&amp;E&amp;L senior specialist, who is W-MC member since Jan. 2015.</p>	<p>WHEAT-MC</p>	<p>To July 2015</p>	<p>TBD</p> <p>2015: Yes, given the 19% CRPs budget cut in 2015.</p>
<p>2: Bilateral funding remains critical to WHEAT’s sustainability and therefore building donor confidence through improved management,</p>	<p><b>Accepted in full.</b> This is an ongoing challenge. Stronger W1&amp;2 funding would help here. The recent</p>	<p>2.1 Maintain successful alignment efforts with important projects: IWYP</p>	<p>WHEAT-MC</p>	<p>Ongoing</p>	<p>Yes, in terms of W1&amp;2 as a % of total funding.</p>

<p>strategy and portfolio focus is important. WHEAT should use its recently improved program management and ISC functions, and refined regional and global strategies, as tools to mobilize bilateral support for highest priority activities within its strategies while also being selective to keep its portfolio focused</p>	<p>program reorganization permits WHEAT to present a more “united” front to donors.</p> <p>We would have appreciated Reviewer guidance about how to balance high-risk FP2 bilateral funding popular with some donors against bilateral funding for more downstream research closer to farmers.</p>	<p>funded by BBSRC-USAID, DRRW (BMGF/Cornell), CSISA (USAID-BMGF), HeDWIC, BNI (JIRCAS) and MasAgro (Mexican MoA); Put on next W-MC agenda, to discuss how to jointly fundraise with R&amp;D partners.</p>			
<p>3: In order to accelerate synthesis and programmatic progress, WHEAT, particularly in the Sustainable intensification strategy, should enhance lateral learning to accelerate the rate of knowledge gain. The mechanisms should include information exchange feeding into new project design rather than occurring at the close of projects, synthesis of studies to span space and time dimensions, engagement with other CRPs and other crops, and better integration among disciplines within WHEAT.</p>	<p><b>Accepted in full.</b> Enhancing lateral learning is critical to sustainable intensification (SI) research quality and relevance. Low availability of W1&amp;W2 funding curtails scientist time and financial resources that are available to implement internal lateral learning. Hence, this is an important, but challenging recommendation. The importance of stable, long term funding for many such activities is mentioned in this report but not visible in the recommendation.</p>	<p>3.1 Increase efforts to link with other CRPs pre-Phase II; maintain strong collaboration with CCAFS; increase lateral learning across MAIZE and WHEAT; develop partnership models for regional lateral learning.</p>	<p>WHEAT-MC (FP4 strategy lead); CIMMYT-CAP</p>	<p>Ongoing</p>	<p>Highly dependent on additional W1&amp;W2 funding. This activity was planned. However, in 2015, W1&amp;W2 WHEAT budgets are at 71% of the approved extension proposals which has led to curtailing such investments even further.</p>
<p>4: WHEAT should improve its data management and infrastructure, as part of enhancing the utility of the RMS for researchers and Program-level management. Institutionalizing comprehensive data management starting from project inception is a prerequisite for high quality science in data-intensive research domains, such as those of WHEAT. This upgrading should involve development of repositories, workflows, standards, preservation and data curation mechanisms, as well as policies to make data searchable, retrievable, reusable, and inter-operable.</p>	<p><b>Accepted in full.</b></p>	<p>4.1 Maintain ongoing efforts to implement Open Data Management Policy, e.g. setting up of Open Access internet sites, promptly publishing in peer-reviewed journals, ongoing IWIN data analysis.</p> <p>4.2 Collaboration with the James Hutton Institute (UK) on SeeD data management.</p> <p>4.3 Implement Breeding Management System.</p> <p>4.4 Contribute to wheat data interoperability global</p>	<p>WHEAT-MC, CIMMYT-GRP</p>	<p>Ongoing</p>	<p>Yes. In 2015, W1&amp;W2 WHEAT budgets are at 71% of the approved Extension Proposals. Several planned data management activities can hence not be implemented, including the BMGF/Cornell Back Office Data project.</p>

		working groups. Pursue recent initiative regarding knowledge/data management with ORNL (USA).			
5: WHEAT should establish internal mentoring within the CRP for safe-guarding the quality of science in the face of rapid programmatic growth and institutional integration. This is needed especially to strengthen the Program during transitions that involve management, staff increases, de-centralization of ICARDA and restructuring wheat programs into WHEAT. Mentoring is also an important reciprocal mechanism for team progress and delivers benefits also for mentors from mentees who are often source of untapped, innovative thinking	<b>Accepted in full.</b> This is sensible and meets a concern from younger researchers (as per survey), but requires additional time/effort.	5.1 Put on CIMMYT-/ICARDA-MC agenda. WHEAT will consider linking this with John Porter's idea of internet delivery of training and will determine whether mentoring needs to be met in-house, or if there can be a formal role for others, outside of WHEAT.	CIMMYT-MC, ICARDA-MC	TBD	TBD, as this requires Centers to react, which are the employers of scientists.
6: WHEAT should establish an inter-FP special traits team to accelerate delivery of multiple genes for multiple traits into multiple high performance lines. Delivery of improved traits governed by 1-3 genes into useful lines normally involves backcross breeding. The process takes 6-10 generations and minimum population sizes defined by acceptable failure rates, numbers of genes and associated linkages. Processes to transfer multiple traits into multiple lines are complex. Time and cost efficiencies require sound prioritization and special skills (defined by the processes-, traits- and impact pathways-involved). Such a team would accelerate and probably magnify IDOs and impact of many and important FP2 trait improvement targets going forward.	<b>Accepted in full.</b> WHEAT is doing this where possible, e.g. for core traits stem and yellow rust resistance, heat and drought tolerance plus disease resistance (bilateral funding), fusarium head scab and yield (W1&2).  What the review suggest is highly desirable and should be a core function for WHEAT, but the current funding modus (80% special project funding) does not allow for multi-trait projects (except for heat drought + leaf blight) by which WHEAT and its partners can identify high priority trait combinations to be addressed. Full implementation requires a change of the current funding modus, which is highly single trait / project-driven.	6.1 On next W-MC and CIMMYT-ICARDA collaboration agenda  6.2 Identify options to increase program funding vs project funding  6.3. Strengthen the germplasm building options that arise from CIMMYT-ICARDA co-operation	CIMMYT-ICARDA	TBD	Yes, to involve partners; change in source of funding
7: To improve wheat genetic yield progress in future, WHEAT should, over the next two years, review the current approaches in FP3, and those	<b>Accepted in full and ongoing.</b> Note that IWYP is now a US\$ 70M project (aiming for \$100M) to do exactly this	7.1 Follow-up from external review of CIMMYT breeding	CRP Director		Yes, to maintain and grow bilateral and W1&2 funding for genomic selection project and

<p>used by partners in order to (i) efficiently and systematically explore advanced wheat germplasm sources that can contribute to productivity; (ii) optimize the balance of population number and population size based on the divergence among advanced (elite) parents to improve utilization of both additive, and additive X additive interactions among wheat's genomes; and (iii) more efficiently advance populations to homozygosity for subsequently application of selection, while permitting greater learning about yield relevant germplasm and the gene actions and interactions that make them elite.</p>	<p>(ii); With regard to (ii). DH are used for mapping populations and single seed descent for winter wheat. The shuttle breeding approach is indeed very difficult to beat for efficiency. We estimate that greater gains could be made by the increasing number of descendants and using genomics and remote sensing tools to reduce number of descendants selected for harvest.</p> <p>WHEAT, with Cornell and Kansas State Universities, conducts the globally largest study in public sector on efficiency of Genomic Selection to support breeding.</p>	<p>*B. Angus / BMGF)</p> <p>7.2 Maintain biggest public sector validation experiment on Genomic Selection for wheat</p> <p>7.3 Co-implement the International Wheat Yield Partnership (IWYP; governed and managed independently from WHEAT)</p>	<p>FP3 strategy lead</p>		<p>partners</p>
<p>8: WHEAT and its sustainable intensification (SI) flagship should help narrow the gap between potential and realized wheat production. In planning for Phase II of the CRP reform FP4 should, re-establish its priorities (regions and focus) in the context of CGIAR reform, and evolving and related CRPs. SI should continue to refine how farmers can best manage nutrient, genetic, water, mechanization, and crop protection resources, deal with climatic constraints, and better cropping systems to enhance both farm returns and regional food security. WHEAT should understand the drivers of farm decisions (economic, environmental and cultural), and through its linkages, more effectively guide and support those decisions. Both technical refinements and effective decision support are necessary to narrow the potential vs. on-farm yields gap across its target regions</p>	<p><b>Accepted in full.</b> Significant efforts have been allocated to strategic thinking related to Sustainable Intensification (for MAIZE and WHEAT) through a series of SI strategy meetings, involving bio-physical scientists and socio-economists from Asia, Africa, Latin America, during 2014 and in March 2015. Meeting outcomes already served to develop the WHEAT (and MAIZE) extension proposals and have increased lateral learning.</p>	<p>8.1 On agenda for FP4 strategy team and ongoing 'framework analysis development' projects (e.g ATTIC project with KIT/Wageningen and other projects).</p>	<p>FP4 strategy lead</p>	<p>Ongoing</p>	<p>Yes; W1&amp;2 funding is required for improved targeting and prioritization investments across the FP4 bilateral project portfolio.</p>
<p>9. WHEAT should develop a clear impact assessment strategy for learning and accountability. The strategy should be based on the needs and priorities of the key audiences for these assessments to assure that the studies and evaluations are both useful and utilized. The impact</p>	<p><b>Accepted in full</b></p>	<p>9.1 Complete global variety release and adoption study for 2002-2014.</p>	<p>CIMMYT consultant contracted for global study</p>	<p>Completed by mid-2015.</p>	<p>No</p>
		<p>9.2 Recruitment of full time</p>	<p>CIMMYT SEP</p>	<p>Recruitment during first</p>	<p>No, provided:</p>

assessment strategy should ensure that all claims made about diffusion of WHEAT knowledge and outputs, adoption and impact are supported by credible evidence, and that this evidence and lessons are used in refining strategies and priorities, and for addressing impact pathway constraints through partnerships and capacity development when necessary for outcomes.		Adoption & Impact specialist for WHEAT.		half of 2015, on-board second half 2015	<ol style="list-style-type: none"> <li>1. W1&amp;2 for FP1 in 2016 and subsequent years is reinstated to at least 2014 levels (before 19% cut);</li> <li>2. 2015 pipeline projects are approved ( BMGF DNA fingerprinting Ethiopia)</li> </ol>
		9.3 Develop a WHEAT impact assessment strategy.	CIMMYT SEP	Dec 2015 (conditional on hiring impact economist)	Conditional on 9.2
		9.4 Implement the WHEAT impact assessment strategy.	CIMMYT; ICARDA	2016	Yes, an additional (i.e. new) US\$ 1.5 million p.a. W1&2 for strategy implementation. W3/bilateral projects will be sought to provide a complementary funding.
10. WHEAT should strengthen the development and implementation of the gender strategy by acquiring the necessary expertise either internally or by engaging specialists outside of WHEAT. This should include explicitly addressing gender in the Program, FP and project impact pathways towards WHEAT gender equitable outcomes, sensitizing staff and partners to the need for gender disaggregated data where possible, and promoting equitable access to capacity development initiatives.	<b>Accepted in full</b>	10.1 Revision of WHEAT gender strategy including explicit integration into FP's.	CIMMYT SEP	Endorsed by WMC December. 2014 ; Submitted December 2014; CO approved Mar 2015	No
		10.2 Recruitment of full time senior gender specialist for WHEAT (bilateral).	CIMMYT SEP	Joined Feb 2015	No, covered through a BMZ project 2015-17.
		10.3 Engagement of external gender expertise to support WHEAT, with costs shared with MAIZE, especially for global gender study and South Asia case studies.	CIMMYT (contracted consultants)	Completed December 2014 (contracted for 2015)	Beyond 2015- yes. (See paragraph 199)
		10.4 Engagement of additional gender expertise to support WHEAT, with costs shared with MAIZE.	CIMMYT SEP	1 additional recruitment on board by December 2015	Yes, up to US\$500k W1&2 and complementary funding (CIM(BMZ); MAIZE)
		10.5 Recruitment of additional gender specialists for WHEAT (bilateral).	CIMMYT SEP	1 additional recruitment 2015 S Asia; on-board first half 2016	Yes, conditional on renewal/new bilateral projects with increased gender focus.
		10.6 Implement the WHEAT gender strategy.	CIMMYT; ICARDA	2016	Yes, an additional (i.e. new) US\$ 500k p.a. W1&2 for strategy implementation. W3/bilateral

					projects will be sought to complement.
		10.7 Establish and implement guidelines and procedures in support of gender in research design and targeting (see paragraphs 192, 193, 201).	CIMMYT mgt.	2016-2017	Yes - Staff time
11. WHEAT should develop a partnership strategy that should address the following purposes and partners: program strategy development and priorities; impact pathway development and adjustments following constraint analysis (e.g. from program planning, lessons from impact analyses) including closing the knowledge diffusion gaps between scientists and those farmers, whose adoption decisions determine wheat outcomes.	<b>Accepted in full.</b> Reviewer comments on public-private partnerships, including with multinational seed companies, now and in future, and evolving partnerships with strengthening NARS, would have been helpful.	11.1 Partner meet for WHEAT program strategy development and priorities.	WHEAT-MC	December 2014 (Istanbul, Turkey)	No
		11.2 Onto W-MC agenda, after Impact Pathway / Theory of Change workshops per FP completed.	WHEAT-MC	During 2015	TBD. Developing such a strategy should involve partners, setting up implementation and monitoring tools and staff time to realize/use them.
		11.3 Online partner consultation when they review draft Phase II pre-proposal June-July 2015.	CRP Team	June-July 2015	No
12: Programmatic orientation and management focus (on results that enable IDOs and impact) should be enhanced in WHEAT. This involves reorientation of resource mobilization aligned with priorities, WHEAT oversight, strategy development and refinement, and management, including M&E, on WHEAT's purpose, and to the extent possible, aligning partners' and collaborators' contributions towards the same purpose.	<b>Accepted in full. In line with recommendations 1 and 9.</b> With regard to the key hurdles to make this possible, we reiterate point 4 in our General Comments, including the overall limited W1&2 funding exacerbated by the recent further 19% reduction.	1.1 Implementing Impact pathway/Theory of Change workshops per FP by mid-June & aggregation by W-MC; led by newly-hired CRP M&E&L senior specialist, who is W-MC member since Jan. 2015.  9.3/9.4 Develop and implement a WHEAT impact assessment strategy.	WHEAT-MC		TBD  2015: Yes, given the 19% CRPs budget cut in 2015.  Yes, an additional (i.e. new) US\$ 1.5 million p.a. W1&2 for strategy implementation. W3/bilateral projects will be sought to provide a complementary funding.