



INCEPTION REPORT

Oct 2014

Evaluation of the CGIAR Research Program on WHEAT



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Independent
Evaluation
Arrangement

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LIST OF ABBREVIATIONS

| | |
|--------|--|
| AARI | Anatolia Agricultural Research Institute (Turkey) |
| CRP | CGIAR Research Program |
| BGRI | Borlaug Global Rust Initiative (Global) |
| CIMMYT | International Maize and Wheat Improvement Center (Mexico/Global) |
| CRIFC | Central Field Research Institute for Field Crops (Turkey) |
| CSIRO | Commonwealth Scientific and Industrial Research Organisation (Australia) |
| EPMR | External Program and Management Review (CGIAR) |
| DRRW | Durable Rust Resistance in Wheat (Cornel University global project) |
| ICARDA | International Center for Agricultural Research in the Dry Areas |
| IEA | Independent Evaluation Arrangement (Rome) |
| MC | Management Committee (WHEAT at CIMMYT) |
| NGO | Non-governmental organization (general) |
| PMU | Program Management Unit (WHEAT at CIMMYT) |
| SRF | Strategy and Results Framework (CGIAR) |
| SLO | System-Level Outcome (CGIAR) |
| SC | Stakeholder Committee (WHEAT) |
| W1 | Window 1 funding type (CGIAR) |
| W2 | Window 2 funding type (CGIAR) |
| W3 | Window 3 funding type (CGIAR) |
| WHEAT | CGIAR Research Program on Wheat |

1. INTRODUCTION

1.1. Rationale for the Evaluation

As part of the CGIAR reform and structure approved in 2009, the Strategy and Results Framework (SRF), first approved in 2011, is intended to guide CGIAR research. In the SRF, four high-level goals are established for CGIAR research, referred to as System-Level Outcomes (SLOs):

1. Reduction of rural poverty
2. Increase in food security
3. Improved nutrition and health
4. More sustainable management of natural resources

Currently 15 multi-partner CGIAR Research Programs (CRPs) have been established to conduct agricultural research for development. CRPs conduct R&D through the 15 CGIAR Centers and also through numerous partners and collaborators. Each CRP R&D is currently administered by a Lead CGIAR Center. The CRPs are intended to advance the six reform principles of the CGIAR¹:

1. Pursuit of a clear vision with focused priorities that respond to global development challenges
2. Center collaboration
3. Streamlined and effective system-level governance with clear accountability
4. Strong and innovative partnerships with National Agricultural Research Systems (NARS), the private sector and civil society that enable impact
5. Strengthened and coordinated funding mechanisms that are linked to the CGIAR System's agenda and priorities
6. Stabilization and growth of resources

Under the new CGIAR reform structure, the Independent Evaluation Arrangement (IEA) Office is responsible for System-level external evaluations. The main mandate of the IEA is to lead the implementation of the CGIAR Policy for Independent External Evaluations, through the conduct of strategic evaluations of the CGIAR CRPs and institutional elements of the CGIAR and through the development of a coordinated, harmonized and cost-effective evaluation system in the CGIAR.

The IEA's first four-year Rolling Evaluation Work Plan 2014-17, approved in November 2013 by the Fund Council, foresees the evaluation of up to 10 CRPs over 2013-2015. The CIMMYT-led CRP WHEAT was chosen as one of the first CRPs to be evaluated. This CRP was approved in 2012 and is therefore relatively new in existence as a CRP.

A major part of the research, however, carries forward or builds on long-term research conducted by CIMMYT and ICARDA, the two Center partners. Their research was last evaluated in CIMMYT's External Program and Management Review (EPMR) in 2004 and ICARDA's EPMR in 2007. This CRP evaluation therefore contains a summative part of research implemented mostly under the Center programs and a formative part of the current CRP research.

The Inception Report is the joint responsibility of the Evaluation Team Leader and the Evaluation Manager at the IEA. It sets out the detailed plan for the evaluation of the CRP WHEAT. It provides key information on the context for the evaluation, and background to the Program to be evaluated.

¹ Performance Implementation Agreement for WHEAT, November 17, 2011

It specifies the purpose and scope of the evaluation and lays out in detail the planned approach and methodology for the evaluation aligned with the key evaluation questions. It presents a “road map” for the evaluation that clarifies the logic of the evaluation methodology and applicability of the evaluation results. It also presents a plan for engaging stakeholders and communicating findings and evaluation results. The Inception Report builds on the evaluation Terms of Reference (TOR) elaborating on the scope, focus and main evaluation questions more generically presented in the TOR.²

1.2. The CGIAR reform process

The CGIAR reform was set in motion in 2008, the CGIAR donors, in a Joint Declaration agreed on the following main principles for the reform³:

1. To harmonize our approach to funding and implementing international agricultural research for development through the CGIAR Fund (the Fund), the SRF and the consortium established by the Centers (the Consortium), respectively
2. To manage for results in accordance with the agreed SRF and the Mega Programs that derive from the SRF
3. To ensure effective governance and efficient operations in the provision and use of our resources
4. To collaborate and partner with and among funders, implementers, and users of SRF research, as well as other external partners supporting the SRF

In the approval process, CRPs were both developed and appraised following a set of common criteria that addressed: (i) strategic program coherence; (ii) focus on delivering outcomes and impacts towards the SLOs; (iii) quality of science; (iv), management of partnerships, including both research and development partners; (v) efficiency of program management; and (vi) accountability, sound financial planning and efficiency of governance.

Under Consortium Office coordination, Intermediate Development Outcomes have been developed since 2012 both at the CGIAR System level and at the CRP level for linking the CGIAR research to the SLOs and for facilitating priority setting, again both at the System and at the CRP levels. Simultaneously, CRPs have been instructed to restructure the program by Flagship Projects, and cluster of activities within the FPs, each FP designed to contribute to one or more CRP IDOs through an impact pathway and to the SLOs through a Theory of Change. The CRPs were instructed to define the IDOs also in terms of clear target domains (agro-ecologies and end user groups) and measurable results at the outcomes level.⁴ The WHEAT CRP is in the process of restructuring ten Strategic Initiatives described in the 2011 approved proposal into five FPs along with IDOs, impact pathways and measurable targets for each FP. These FPs were presented in the extension proposal for 2015-16.

The internal CGIAR context is also important for understanding the WHEAT funding. The funding sources available to CRPs are explained in Box 1.

² <http://iea.cgiar.org/publication/tors-wheat-crp-evaluation>

³ https://library.cgiar.org/bitstream/handle/10947/5033/FINAL-from_Printer_jointdeclar_standalone.pdf?sequence=1

⁴ The CGIAR Strategy and Results Framework Management Update endorsed by the CGIAR Fund Council at FC11

Box 1. Major Sources of Funding in the CGIAR System

To maximize coordination and harmonization of funding, donors to CGIAR are strongly encouraged to channel their resources through the CGIAR Fund. Donors to the Fund may designate their contributions to one or more of three funding “windows”:

- Contributions to Window 1 (W1) are the least restricted, leaving to the Fund Council how these funds are allocated to CGIAR Research Programs, used to pay system costs or otherwise applied to achieving the CGIAR mission.
- Contributions to Window 2 (W2) are designated by Fund donors to specific CGIAR Research Programs.
- Contributions to Window 3 (W3) are allocated by Fund donors to specific CGIAR Centers.

Participating Centers also mobilize financial resources for specific activities directly from donors and negotiate agreements with their respective donors for the use of these resources.

Source: CGIAR website: <http://www.cgiar.org/who-we-are/cgiar-fund/>

The CGIAR processes control both the total funding for which the CRP was approved and the level of unrestricted funding (W1/W2) granted. In the approved proposal WHEAT made a case for full funding scenario where the annual funding in 2013 would have reached nearly USD 100 million. At the request of the Consortium, WHEAT also presented lower funding scenarios, at about 50% level of the full funding estimate. Funding level of 56% of the full funding scenario was considered by the Fund Council where W1/W2 comprised about 28% of the budget. An “expanded” funding component covered about 44% of the proposed funding.

W1/W2 components of the budget are the least restricted. Their level was set on basis of the core funding in the period preceding the CRP (2009, 2010) used for funding the corresponding research. The two funding windows are coupled, which means that successful resource mobilization to W2 leads to lower level of W1. In the absence of CGIAR System level priority setting mechanism that would guide W1 fund allocation, the criteria by which W1 funds have been allocated are not completely clear.

The internal reform context has also involved development of guidelines and templates for annual reporting to the Consortium that concern all sources of funding. This reporting has not yet replaced the requirement of reporting to bilateral donors, often following donor-specific requirement. Given that bilateral funding has remained a major source of funding, the reporting burden remains currently considerable.

2. BACKGROUND ON WHEAT

2.1. WHEAT origins

WHEAT was formally launched in the beginning of 2012, after approval (with conditions) of the Proposal Document by the Fund Council in July 2011. WHEAT is currently in its 3rd year of implementation. Although WHEAT, like the other CRPs, was designed as a program of at least ten years duration, only the first three years were funded and had detailed work plans and budgets.

An extension proposal of the first phase of the CRP for 2015 and 2016 was submitted to the Consortium Board in April 2014 and has been reviewed by the Independent Science and Partnership Council (June 2014) and the Consortium Office (July 2014).

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While the CRP extension is an “intermediate solution”, the second phase proposals will be assessed in a two-stage approach with the pre-proposals to be submitted in early 2015 and full-proposals in 2016.

The WHEAT Strategy which was outlined in the Proposal Document (2011) aims to ensure that “publicly-funded international agricultural research helps most effectively to dramatically boost farm-level wheat productivity and stabilize wheat prices, while renewing and fortifying the crop's resistance to globally important diseases and pests, enhancing its adaptation to warmer climates, and reducing its water, fertilizer, labor and fuel requirements”.

WHEAT's Theory of Change is based on two distinct research strategies: one on Germplasm (new tools and genetic resources) and one on Sustainable Intensification which focuses on wheat based farming systems and local partners, farmers and value chain participants

In its initial Proposal WHEAT set the following impact targets:

- Raise the annual rate of wheat yield growth globally to 1.6% and lessen the volatility of wheat prices in developing countries, helping to ensure affordable prices for the approximately 1.2 billion wheat-dependent to 2.5 billion wheat-consuming poor.
- Adapt wheat production in South Asia and other regions that have sizeable areas susceptible to climate change impacts through mitigating measures (agronomy, breeding, policy). This is vital to protect food supplies for about one-seventh of the world's population.
- Strengthen the sustainability of wheat production despite the continual emergence of damaging rusts and other diseases.
- Reduce poverty and childhood malnutrition in selected areas where wheat-based farming systems are important; the aim is to benefit 42 million malnourished children with stunted growth.

2.2. WHEAT structure and evolution

The program initially structured into 10 different thematic areas, called Strategic Initiatives (SIs).⁵ Six of these were related to genetic improvements and associated tools, and two were associated with wheat crop management and sustainable wheat farming systems. Two SIs were associated with targeting WHEAT for greater impact and strengthening capacity of partners to improve WHEAT impact.

In response to guidance from the CGIAR Consortium Office, a set of intermediate development outcomes (IDOs) were developed in 2013 to guide the development of impact pathways, link the CRP activities to the System Level Outcomes (SLOs) and provide basis for managing performance both at the CRP and the System levels.

The WHEAT IDOs are as follows, addressing the common CGIAR IDOs for productivity, food security, income, gender and capacity strengthening⁶:

- IDO -1: Accelerated varieties release scale-out

⁵ SI 1: Technology targeting for greatest impact; SI 2: Sustainable wheat-based systems; SI 3: Nutrient- and water-use efficiency; SI 4: Productive wheat varieties; SI 5: Durable resistance and management of diseases and insect pests; SI 6: Enhanced heat and drought tolerance; SI 7: Breaking the yield barrier; SI 8: More and better seed; SI 9: Seeds of discovery; SI 10: Strengthening capacities.

⁶ High-level indicators are provided but there is still no attempt to provide metrics and specific indicators. It has to be mentioned also that the CGIAR working group on IDOs is currently working on a common set of indicators.

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- IDO -2: Farmers minimize unsustainable effects on soil, environment and improve their household income
- IDO -3: Farmers have more and better access to quality seed [of improved varieties] and use them
- IDO-4: Smallholders' adoption of modern wheat varieties translates into higher, more stable yields in WHEAT target regions
- IDO -5: Faster and more significant genetic gains in breeding programs worldwide, using more effective approaches for complex traits

Table 1: WHEAT Flagship Projects (POWB, 2014)

| Flagship Project | Main activities POWB 2014 | 2012-13 SIs |
|---|---|----------------------|
| FP 1: Maximizing Benefits for Poor Women, Children, and Men | Impact Foresight, Assessment and Targeting Initiatives, Impact Assessments and Gender Normalizing Initiatives | SI 1 |
| FP 2: Novel Diversity and Tools to Adapt to Climatic and Resource Constraints | Heat and Drought Tolerant Wheat and to combat Climate Change, seeds of discovery for new traits and affordable hybrid varieties (with private sector) | SI 6 SI 7 SI 9 |
| FP 3: Global Breeding Partnerships to Meet Future Food Demands | Several global breeding programs (Durable Rust, etc.) aimed at higher annual gains in genetic potential for grain yield and fewer losses due to diseases and other stresses | SI 4 SI 5 |
| FP 4: Sustainable Intensification of Wheat-based system | Wheat/cereal-based systems in South Asia and East Asia (CSISA) and "Take it to the farmer" (MasAGRO™) | SI 2 SI 3 |
| FP 5: Engaging and strengthening | Build impact pathway capacity, seed scale-out and a new generation of wheat leaders among our partners in South Asia, CWANA, SSA, | SI 8 SI10 |

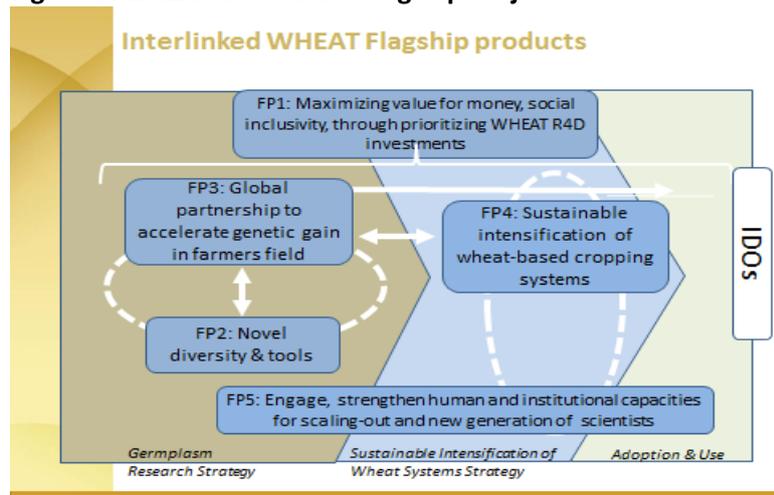
WHEAT submitted an Extension Proposal for two years (2015-2016) to the Consortium Office on 25 April 2014. WHEAT proposes five interlinked Flagship Projects (please see Table 1 above) continuing its two primary strategies: Enhanced Varieties and Sustainable Intensification of Wheat (Production) Systems.

The first strategy pursues germplasm enhancement through genomic selection, molecular markers and de-centralized precision phenotyping (FP 2) and development of more highly productive and stress tolerant (disease, drought, nutrients and heat) varieties for farmers directly or through the provision of enhanced germplasm to numerous public and private sector partners (FP 3).

The second strategy (sustainable intensification of wheat production) pursues better crop management and farming systems for wheat including better nutrient management to conserve resources and system adjustments to improve/protect wheat production from climate change (FP4). In this FP, WHEAT collaborates with other CRPs on 45 innovation platforms.

Both research strategies are combined in FP 5 which focuses on seed system innovations at national level, building diverse partner coalitions to further adapt and scale out of appropriate integrated technology packages and strengthening WHEAT partners' capacities.

Figure 1: WHEAT Interlinked Flagship Projects



Source: WHEAT Extension Proposal

In the beginning of 2013, the CO approved a **gender strategy** for WHEAT, which outlines the process and approach that the CRP has adopted in order to strengthen the integration of gender considerations in wheat research for development. A revised Gender Strategy, as required by the Consortium, has been presented to the CO on 2nd May 2014.

2.3. WHEAT funding and expenditures ⁷

The full funding scenario presented in the WHEAT proposal (2011) was USD 228 million for three years including a steep increase in funding by the third year to USD 93.4 million annual budget. However, the proposal was approved at a lower funding scenario (50% of the “full funding”) of a total of USD 113.885 million with the remaining amount added as “expanded funding component”.⁸

Across the first two years of implementation (2012 and 2013) and including the 2014 approved budget⁹, WHEAT will have spent 37.304 million of W1&W2 funding (Table 2). Fifty eight percent will be spent for research at CIMMYT, 17% for research at ICARDA, 17% for research by partners and 8% for CRP Management. In the case of W3&Bilateral funding in 2012 and 2013 (Table 3), 65% was spent at CIMMYT, 17% at ICARDA and 18% with Partners. Of the total WHEAT expenses in 2012 and 2013 (USD 74.678 million) 31% was from W1&W2 and 69% from W3&Bilateral. Figure 3 shows expenditures for 2012 to 2013 and budget estimates for 2014 (from POWB) and 2015-2016 (from Extension Proposal) per funding source. The additional W1/2 requirement figures refer to the budget which goes beyond the W1/2 allocation as defined in the CGIAR Financial Plan 2015-2016 and which WHEAT requests for the extension period.

⁷ Please note that expenditure figures are only available per Strategic Initiative and only from 2014 WHEAT will report per Flagship.

⁸ See the Program Implementation Agreement between the Consortium and CIMMYT dated February 2012: Year 1: 36.1 million, Year 2: 37.9 million, Year 3: 39.8 million.

⁹ Sources: Financial Reports for 2012 and 2013; WHEAT-MC minutes.

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Table 2: WHEAT W1&W2 actuals (2012-2013) and approved budget (2014), USD 000'

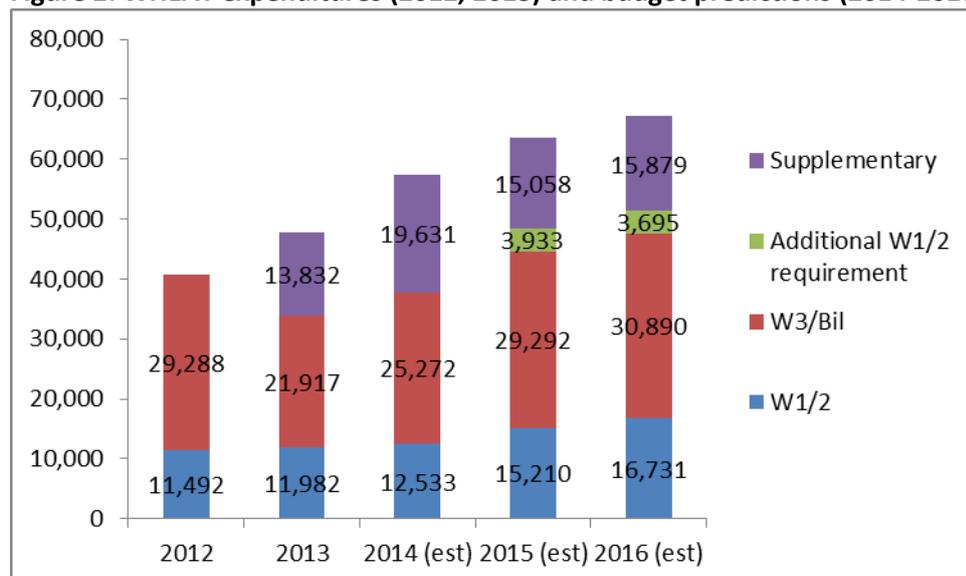
| WHEAT Partners | Expenses 2012 | Expenses 2013 | Budget 2014 | Total 2012-14 | Percentage 2012-14 |
|----------------|---------------|---------------|---------------|---------------|--------------------|
| CIMMYT | 6,926 | 6,780 | 7,848 | 21,554 | 58% |
| ICARDA | 1,692 | 2,379 | 2,307 | 6,378 | 17% |
| Partner | 1,635 | 2,094 | 2,675 | 6,403 | 17% |
| CRP Management | 1,240 | 728 | 1,000 | 2,968 | 8% |
| Total | 11,492 | 11,982 | 13,830 | 37,304 | 100% |

Table 3: WHEAT W3&Bilateral actuals (2012-2013), USD 000'

| WHEAT Partners | Expenses 2012 | Expenses 2013 | Total 2012 - 2013 | Percentage 2012 - 2013 |
|----------------|---------------|---------------|-------------------|------------------------|
| CIMMYT | 20,669 | 12,703 | 33,371 | 65% |
| ICARDA | 3,729 | 4,732 | 8,461 | 17% |
| Partner | 4,890 | 4,482 | 9,372 | 18% |
| CRP Management | 0 | 0 | 0 | 0% |
| Total | 29,288 | 21,916 | 51,204 | 100% |

In 2013, WHEAT started to report part of its bilateral and W3 funded projects outside the CRP due to the fact the CO requested CRP Lead Centers to identify bilateral projects, which are non-CRP; also WHEAT expenditures exceeded the W3/bilateral amount approved by the Fund Council, as per Program Implementation Agreement (USD 113.9 million for the first three years). The funding declared as outside or “supplementary to” the CRP was funding for activities not envisioned in the original proposal and which included mostly investments in seed scale-up and other development type funding. Because they are aligned with the impact pathway for WHEAT and in some instances aligned by donors with the CRP, CIMMYT proposed to the Consortium Office to define them as “CRP-supplementary”. Essentially, WHEAT went deeper along the impact pathway than envisioned in the CRP proposal which describes the CRP strategic research. These expenditures referred to as supplementary amount to almost USD 14 million (thus 33%) of total spend in 2013. They will be around USD 19 million in 2014 (according to POWB). According to the Extension Proposal, WHEAT will continue to report part of the project portfolio of CIMMYT as supplementary, while the rest is classified as in-CRP strategic research.

Figure 2: WHEAT expenditures (2012, 2013) and budget predictions (2014-2016), USD 000'



Source: Financial Reports 2012 and 2013 (L101), POWB 2014, Extension Proposal 2015-2016.

The cumulative expenditures (2012 and 2013) per Strategic Initiatives are shown in Figure 4.

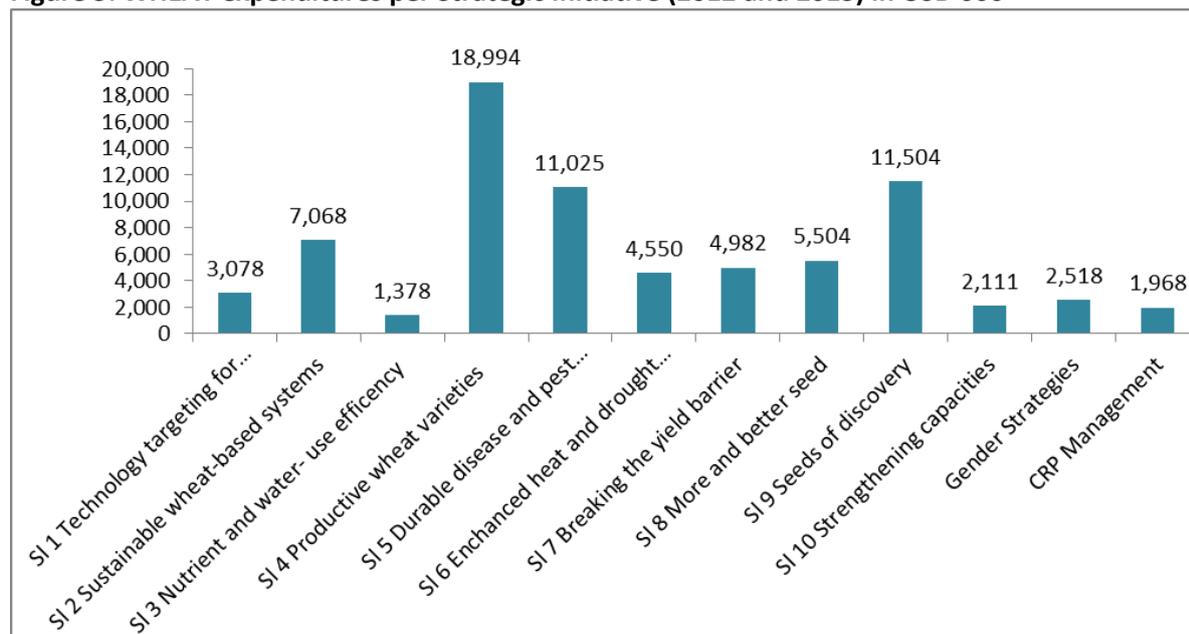
SI 4 on Productive wheat varieties/FP 3: Global partnerships to meet increasing food demands, accounts for by far the largest spending; one fourth of the total expenditures so far. A large part of two of the biggest bilateral projects, CSISA (total budget of around USD 27 million) and MasAgro (total budget of USD 10 million) contribute to SI4.

SI 9 on Seeds of Discovery/FP 4: Novel diversity and tools to adapt to climate change and resource constraints, is largely funded by the MasAgro component called “Seeds of discovery” (total budget of USD 10 million). It has been the second largest SI until 2013.

SI 5 on durable diseases and pest resistance/FP 3: Global partnerships to meet increasing food demands includes the Durable Rust Resistance in Wheat - Phase II project (in collaboration with Cornell University) with a total budget of USD 7.7 million to which also ICARDA contributes and which contributes around 65 percent to this Strategic Initiative.

SI 2 on sustainable intensification/FP 2: Sustainable intensification of wheat-based systems includes mainly the conservation agriculture components of MasAgro and CSISA. ICARDA does not contribute to this SI/FP since its conservation agriculture activities are within the Dryland Systems CRP.

Figure 3: WHEAT expenditures per Strategic Initiative (2012 and 2013) in USD 000'



Source: Financial Reports 2012, 2013 (L131)

In 2012 and 2013, 28% and 35% of WHEAT total expenditure was W1/2-funded, which is among the lowest shares of core funding¹⁰. Only MAIZE, the other CIMMYT led CRP, received less core funding so far. The reason the share was higher in 2013 was that the supplementary funding which was reported outside the CRP decreased the relative share of W3 and bilateral expenditures.

Gender activities, which are funded by W1/2, had almost no expenditure in 2012 but almost USD 2.5 million was spent on gender activities in 2013 when a UNDP aligned DAX indicator was introduced to assess gender related expenditures. The CRP Management expenditures (USD 1.5 million in 2012, compared to budget of 0.672 million; 0.728 million in 2013) include the salaries of the CRP management unit, governance and management meeting costs, travel costs, contributions to Lead Center support services including communications and ICT systems.

Looking at the funders of WHEAT (as reported in Annual Financial Reports), the largest donors have been SAGARPA, which funds the MasAgro project (shared with MAIZE), USAID and USDA and the Bill and Melinda Gates Foundation (BMGF) which fund CSISA (Table 4). The Cornell University's share of the "Durable Rust Resistance in Wheat" project funding is actually passed over from BMGF and thus Cornell should be seen more like a research partner than a donor. In that regards it is important to repeat that a large share of bilateral funding was reported outside the CRP in 2013 and thus funding was lower in 2013 than 2012.

¹⁰ For comparison: CCAFS: 65%, Dryland Cereals 47%, Roots, Tubers and Bananas: 42%, GRiSP and Grain Legumes: 36%, MAIZE: 19%.

Table 4: Largest donors for WHEAT (in USD 000')

| DONOR | 2012 | 2013 | Comments (main activities) |
|---------------------|--------|-------|---|
| BMGF (Window 3) | 822 | 2,122 | CSISA |
| European Commission | 1,031 | 672 | Enhanced small-holder wheat-legume cropping systems to improve food security under changing climate, EC IFAD NARS Operations (both ICARDA) |
| Cornell | 5,291 | 3,645 | Durable Rust Resistance in Wheat - Phase II |
| GIZ | 996 | 1,143 | Utilization of wild relatives of wheat in developing salinity tolerant winter wheat with improved quality for Central Asia |
| GRDC | 1,445 | 400 | Enhancement of CIMMYT wheat breeding strategy for drought tolerance and genotypes of relevance to rainfed areas of Australia, ACRCP- CIMMYT delivery of resistant germplasm and surveillance for resistance in Australian cultivars |
| Hplus | 1,034 | 0 | was integrated into CRP A4NH in 2013 |
| IRRI | 2,354 | 705 | Parts of CSISA go through IRRI |
| SAGARPA | 11,016 | 5,954 | MasAgro |
| USAID (Window 3) | 1,244 | 2,115 | Agricultural Innovation Program (Pakistan), parts of CSISA, Rapid Deployment of High Yielding and Rust Resistant Wheat Varieties for Achieving Food Security in Ethiopia |
| USDA | 5,296 | 409 | Pakistan Wheat Production Enhancement Program |
| IITA (AfDB) | | 990 | Development of Strategic Crops for Africa |

Source: Annual Funding Summary 2012 and 2013 (L106 of Financial Reports)

2.4. WHEAT project portfolio

The current WHEAT program includes projects funded by bilateral donors and Window 3 as well as a number of W1/2 activities which are in most cases spread over a duration of three years (from 2012 to 2014). As shown in Table 5, the portfolio currently includes a total of 155 projects/activities of which there are 72 bilateral projects (55 from CIMMYT and 17 from ICARDA) and 22 W3 funded projects (15 from CIMMYT and 7 from ICARDA).

Table 5: Overview of WHEAT project portfolio (budget in USD million and number of projects)

| Funding Source | Number of WHEAT projects | | | WHEAT BUDGET (USD) | | |
|-------------------|--------------------------|------------|-----------|--------------------|-------------|-------------|
| | Total | CIMMYT | ICARDA | Total | CIMMYT | ICARDA |
| Bilateral project | 76 | 56 | 20 | 51.1 | 45.3 | 5.8 |
| W3 projects | 22 | 15 | 7 | 30.6 | 28.3 | 2.3 |
| W1/2 activities | 57 | 47 | 10 | 30.0 | 22.9 | 7.1 |
| TOTAL | 155 | 118 | 37 | 111.7 | 96.6 | 15.1 |

Source: WHEAT project database, as of 1 August 2014.

With regards to the different Flagships, as shown in Table 6, the largest Flagship currently is Flagship 3 on Global Partnerships with several large bilateral projects as well as a high share of W1/W2 funding. The Flagship which is dominated by W1/2 funding is Flagship 1 on Targeting, which includes impact assessments, strategic studies and gender mainstreaming activities.

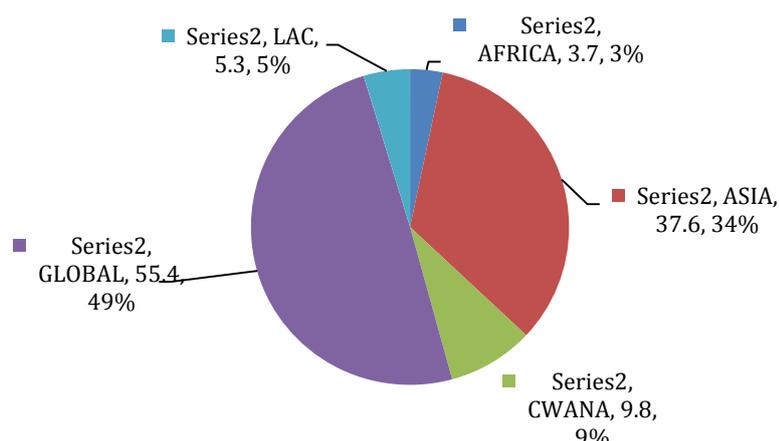
Table 6: Overview of WHEAT Flagship Projects budgets (in USD million, 2012 & 2013)

| FP | Title | Former SI | TOTAL | | W1/2 | | W3 / Bilateral | |
|--------------|--|----------------------|--------------|------------|-------------|-----------|----------------|-----------|
| | | | Budget | No | Budget | No | Budget | No |
| 1 | Targeting for Impact including Women & Children through prioritization | SI 1 SI 8 | 5.7 | 14 | 5.5 | 12 | 0.2 | 2 |
| 2 | Diversity and Tools to Adapt to Climate and Resource Constraints | SI 9 SI 7 SI 6 | 24.0 | 36 | 5.8 | 13 | 18.3 | 23 |
| 3 | Global Partnerships to Accelerate Genetic Gains | SI 4 SI 5 | 33.8 | 53 | 13.8 | 23 | 20.0 | 30 |
| 4 | Sustainable Intensification of Wheat | SI 2 SI 3 | 20.8 | 30 | 4.1 | 6 | 16.7 | 24 |
| 5 | Engaging & strengthening human & institutional capacity | SI 8 SI 10 | 27.4 | 22 | 1.0 | 3 | 26.4 | 19 |
| TOTAL | | | 111.7 | 155 | 30.0 | 57 | 81.7 | 93 |

Source: WHEAT project database. as of 1 August 2014.

Figure 4 (below) shows that WHEAT is indeed a global program since almost half of the portfolio has global relevance. Region-wise CIMMYT focuses on Asia, while ICARDA is more active in CWANA. The most important region is Asia, which includes a lot of CIMMYT bilateral projects with high budgets: CSISA in India and Bangladesh, the USDA-Pakistan wheat production enhancement program and Agricultural Innovation Program in Pakistan and ACIAR-Wheat & Maize Production in Afghanistan.

ICARDA's WHEAT activities are divided among global, CWANA, Asia and Africa. ICARDA has a lot of regional breeding projects that target the Arab world and CWANA and its winter wheat program is based in Turkey. The African Development Bank funded project "Development of Strategic Crops Africa" and the "Rapid Deployment of High Yielding and Rust Resistant Wheat Varieties for Achieving Food Security in Ethiopia" funded by USAID are two large activities in Africa.

Figure 4: Geographical distribution of WHEAT budget

Source: WHEAT project database. as of 1 August 2014.

It is important to note that some projects also contribute to other CRPs and are not accounted for 100% in the project portfolio (Table 7). For example, ICARDA reports almost half of its "Development of Strategic Crops Africa" (SARD-DC) project under the CRP on Dryland Systems (DS). Equally, parts of

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the CIMMYT projects CSISA and MasAgro Take it to the farmer are reported under MAIZE; to mention two examples.

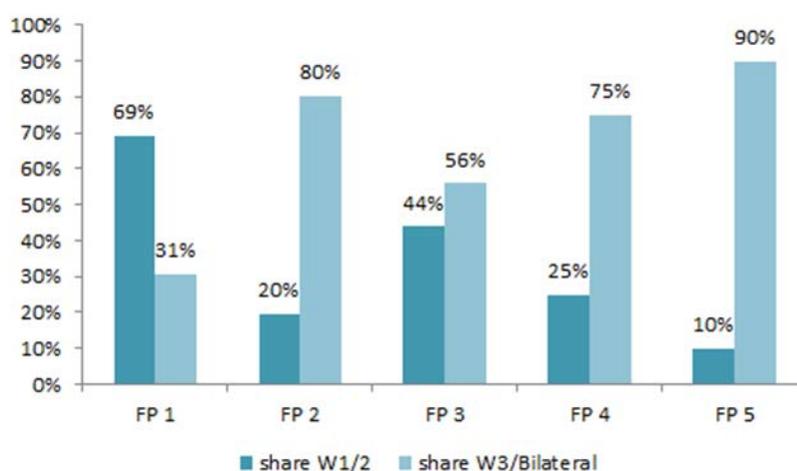
Table 7: Major Multi-crop shared projects

| Project Title | BUDGET | % WHEAT | Comment |
|--|--------|---------|---|
| CSISA II and related projects | ~21 m | | CSISA has a much smaller MAIZE share |
| IRRI/USAID-CSISA expansion in Bangladesh | ~2.5 m | 40% | |
| MASAGRO, several components | ~20 m | 25% | Mostly MAIZE share, Seeds of Discovery is equally split |
| Cornell: Genomic Selection: The next frontier for rapid gains in maize and wheat improvement | ~1 m | 50% | Equally split |
| Integrated breeding platform | ~1 m | 50% | Small expenditures in 2013, but overall high budget |
| Development of Strategic Crops Africa | ~4.8 m | 50% | Led by ICARDA, 44% is part of CRP on Dryland Systems |
| Enhancement of Food Security in the Arab Region, AFESD Support | ~1.2 m | 75% | Mostly WHEAT |

Source: WHEAT Project database, as of 1 August 2014.

W1/2 funds are assigned to research activities, partners and CRP management, as well as gender-related, and so reported as ‘planned’ in the Program of Work and Budget template at the beginning of the financial year. CRPs are obliged to report on major deviations to plan. Thus, W1/2 funds are also restricted, but can be managed as CRP activities within and across FPs (compared to W3/bilateral funding earmarked to a specific project), which has implications for the evaluation. W1/2 aims to make the program more coherent and to enable WHEAT to pursue an overall strategy. W1/2 is relatively more important in some Flagships than in others. The largest share is with Flagship 1 which is called “Maximizing benefits for the poor, women and children” and includes the socio-economics research which WHEAT conducts. The smallest W1/2 shares are in Flagship 2 on “Sustainable intensification of wheat-based systems”, which includes mostly bilaterally funded wheat systems research (like CSISA) and Flagship 5 which is about partnerships and capacity building.

Figure 5: Share of W1/2 and W3/bilateral funding per Flagship (WHEAT Project database)



Source: WHEAT project database, as of 1 August 2014.

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WHEAT received an average of 31 % of W1/2 funding in its first two years of operations. In 2013, the total USD 11.461 million W1/2 funds spent included the USD 1.887 million passed through to ICARDA. Also, it included around USD 600,000 for WHEAT management, USD 74,000 for communications and knowledge management. Furthermore, gender related activities are almost exclusively funded by W1/2 and WHEAT reported around USD 2.5 million for 2013 under gender.

WHEAT spent USD 1.635 million of W1&W2 funding on new partner grants and one regional partner event in 2012. In 2013, it was able to fund the 2nd year of these grants (USD 1.87 million *budget*), which started 2012, but could not grant new projects. The Consortium Office established/clarified in June 2013 a new rule that did not allow to carry-over funds committed and held on behalf of partners from 2012 to 2013. Faced with a severe W1&W2 budget cut mid-year and income insecurities (only 90% of the 2013 budget were guaranteed), the WHEAT Management Committee decided to put priority on funding CGIAR Centers' ongoing research and competitive grant partners' R4D in 2013. New competitive partner grants were only again funded in 2014.

2.5. WHEAT governance and management

WHEAT is governed by a set of formal Agreements: The CGIAR Fund Council and the Consortium signed a **Joint Agreement** in April-May 2011 that sets out the umbrella terms which govern the submission and approval of CRP proposals and the transfer and use of W1/2 funds to CRPs, and a **Consortium Performance Agreement** in relation to WHEAT, in which the Consortium assumes overall financial and programmatic responsibility for the implementation of WHEAT.

The **Program Implementation Agreement** (PIA) is between the Consortium Board (CB) and CIMMYT. CIMMYT is accountable to the Consortium for the use of the W1/2 funds that are transferred to CIMMYT, and for the satisfactory performance of WHEAT. The **Program Participant Agreement** (PPA) is signed by CIMMYT and ICARDA outlining the individual Center use of W1/2 funds.

Program implementation is guided by a **WHEAT Management Committee** (MC) which includes CIMMYT global program directors, one research program director from ICARDA and three non-CGIAR Primary Research Partners: BBSRC-UK, ACIAR-Australia, ICAR-India. The MC is chaired by the two DDGs for research of CIMMYT and ICARDA. Decisions cannot be made by one Center alone and have to be supported by the non-CGIAR partners.

The **WHEAT Stakeholder Committee** (WHEAT SC) which provides independent oversight and overall governance is made up to a large extent of non-CGIAR partners (7/10 non-CG members). It is chaired by the CIMMYT's DG. Starting September 2013, the CIMMYT Program Committee Chair attended the WHEAT Stakeholder Committee meeting as a non-officio observer and reports its findings to the subsequent CIMMYT Board of Trustees (BoT) meeting.

All decisions on fund allocations, choice and allocation of competitive partner grants (i.e. change of strategic research areas and their budgets) are done by the WHEAT Management Committee within the Fund Council approved budget. The Management Committee reviews annual workplans and reports. Supervision of WHEAT resident research at the Centers is hence with their Research Leaders. Monitoring of partner grants is with selected scientists in CIMMYT and ICARDA (scientific) and the WHEAT Program Management Unit (administratively). The CIMMYT DDG for Research and Partnerships, Marianne Banziger, supervises the day to day management operation of the WHEAT and MAIZE Project Management Unit. Fund Council minutes show that the Fund Council explicitly requested the two CRPs to be managed together. It rejected for WHEAT to receive a management budget that was similar to MAIZE or other CRPs.

As a result, WHEAT is managed by a small management team, headed by a Program Manager (Victor Kommerell) and based within CIMMYT. In addition, the team includes two full-time and two part-time staff (shared with MAIZE). WHEAT management is responsible for CRP administration and communication; coordination among the CIMMYT Global Program directors, ICARDA, SI/FP Leaders,

and Donors and Collaborators; and – as a large part of their work – coordination with and reporting to the CGIAR Consortium.

A recent, IEA commissioned Review on CRP Governance and Management concluded that in general the CRP governance and management arrangements did not give CRP leaders sufficient powers to manage for results. The Review emphasized the need for independence, accountability, legitimacy and fairness of the CRP governing bodies that should exercise programmatic oversight of the CRPs while reporting to the lead-Center Board. The review concluded that in CIMMYT's case, WHEAT SC and MC are consolidated within CIMMYT management, thus leaving the CIMMYT Board with no independent source of oversight for the program.¹¹ In its recent meeting, CIMMYT Board discussed the CRP leadership and reporting arrangements to better align the CIMMYT practice with the recommendations of the Review.

3. PURPOSE AND SCOPE OF THE EVALUATION

The primary purpose of this evaluation is to enhance the contribution that WHEAT is likely to make towards reaching the CGIAR goals and towards reducing poverty and improving food security for people whose livelihoods depend on wheat and wheat-based systems. To these ends, the evaluation will also provide recommendations that will:

- Assist program management, its funders and partners in making decisions with respect to the continuation, expansion, and structuring of the program during the extension phase of 2015–16;
- Support the development and later on the appraisal of the proposal for call of the Fund Council for the second round of CRPs in 2016; and
- Contribute to the next System-Wide Evaluation of the CGIAR, tentatively scheduled for 2017.

The strategic issues and evaluation questions that address the main evaluation criteria are structured around **two dimensions**: Research/programmatic Performance and Organizational Performance. The criteria and aspects related to these two dimensions are outlined in Section 4 while the more specific evaluation questions are presented in detail in the Evaluation Matrix (Annex 1).

The evaluation will cover **two main time frames**:

- The time period since WHEAT was approved in December 2011 (and during which WHEAT has been set up as a multi-partner CRP with newly defined objectives, program structure, and impact pathways).
- The outputs, outcomes, and impacts of wheat research activities at CIMMYT and ICARDA that began prior to the establishment of WHEAT and were transferred into the new WHEAT program.

The evaluation of the first time frame will be primarily **formative** in nature reviewing program design and processes, progress, gender mainstreaming, governance and partnership aspects as well as other innovative modalities of work introduced with the CGIAR Reform. The evaluation of the second time frame will be primarily **summative** in nature looking at achievement to-date. This part of the evaluation draws on existing studies, impact assessments, and other information to assess the achievements of research that started before but has and continued since WHEAT was established.

¹¹ Review of CGIAR Research Programs Governance and Management FINAL REPORT, March 2014

The **selection of field sites** and projects for sampling and in-depth analysis will reflect the WHEAT regional focus in Asia and CWANA, with some initiatives in Sub-Saharan Africa with limited attention in Latin America. The global research will be addressed in the evaluation.

4. EVALUATION ISSUES AND QUESTIONS

4.1. Emerging issues

During the inception phase the evaluation team identified the following emerging issues:

1. Does WHEAT operate as an integrated program (programmatic-level thinking, strategy and management)? In WHEAT, project development processes are apparently initiated by Donor expression(s) of funding opportunity followed by project proposal(s), including work plans, definition of milestones, key performance indicators, and project budget as well as linkages with IDO and various approvals (donor, program directors, management committee). In these processes, concepts of program design and management, including project prioritization, sequencing and output sequencing, timing, and program alignment between and within SIs and FPs with program priorities are not prominent (as described). However; there is evidence that some appropriate program-level decisions have been implemented (growing list of free and funding collaborators, and contracted partners presumably to fill capacity gaps; international shuttle breeding and evaluation trials to improve time efficiency; development of some evaluation platforms serving multiple SIs/FPs, and interphases with other CRPs to avoid duplications of effort and improve over-all cost efficiency).
2. Has the implementation of WHEAT (its strategies, integrated partners/collaborators capabilities, management and governance processes, and funding mechanisms) elevated the program's comparative advantage and improved its prospects to achieve its objectives and contribute more efficiently towards the program's intended IDOs and the CGIAR System-level Outcomes?
3. Have CGIAR reforms assisted WHEAT deliver its objectives, achieve program IDOs and contribute to System-level Outcomes?
4. Have W1/W2 funding mechanisms sufficiently helped WHEAT achieve its Impact- oriented Objectives?
5. On its own account, WHEAT has experienced disappointingly low levels of Window 1 & 2 funding, high transactional costs, and heavy management burden associated with the CRP program reforms (and associated reporting dialogues) in comparison to other bilaterally-funded initiatives: If true, how can these aberrations be managed?

4.2. Evaluation criteria and issues

As indicated in the previous chapter, the evaluation issues and questions are structured around two major dimensions: (a) research/programmatic performance and (b) organizational performance. This chapter provides an overview of the evaluation issues and approaches to addressing these issues and criteria.

Research/Programmatic Performance

As part of programmatic performance, the evaluation will look at the following evaluation criteria: relevance, quality of science, likely effectiveness of the CRP as currently designed and implemented, impact of past research and the effort made in documenting it, and the sustainability of benefits.

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Within programmatic performance three cross-cutting topics are specifically addressed: gender, capacity building and partnerships.

Relevance

The assessment of relevance relates to the strategic coherence of WHEAT regarding its strategy, Flagship Projects and Intermediate Development Outcomes. It also includes the coherence with CGIAR's strategy and the SLOs and WHEAT's objectives; its relevance in the global context of agricultural development and research priorities, and priorities within its target agro-ecologies and beneficiary groups; and the comparative advantage of WHEAT partners to conduct the activities and generate international public goods.

The evaluation will assess four dimensions of relevance, as follows:

- **Supply-side relevance and design** — The extent to which WHEAT's objectives, strategies, and impact pathways are coherent and consistent with the Program's IDOs and the CGIAR's SLOs? How realistic and plausible are the articulated impact pathways, including their underlying assumptions?
- **Demand-side relevance** — The extent to which WHEAT's objectives, strategies, and impact pathways are consistent with the needs and priorities of intermediary users and ultimate beneficiaries of WHEAT's activities.
- **Comparative advantage** — The extent to which WHEAT, CIMMYT and ICARDA are playing up to their comparative advantages in the global wheat research system.
- **Value added** — The extent to which WHEAT is furthering the six reform principles of the CGIAR as articulated in the Performance Implementation Agreement?

Supply-side relevance and the design of the Program are assessed against WHEAT objectives and IDOs as well as the general CGIAR SRF, since WHEAT and the other CRPs are the principal modality for implementing the SRF.

On the demand side, the intermediary users of WHEAT's activities are generally NARS (extension and research), development organizations, entities involved in technology commercialization (seed industry), government regulatory agencies and government.¹² The ultimate beneficiaries are the final users (smallholder farmers, consumers).

With respect to comparative advantage, the CGIAR in general and CIMMYT's wheat program have a long history of success and played a major role in the green revolution. How does WHEAT perceive its role and comparative advantage in the global wheat research? What gaps is it trying to address? To what extent is the program competing with other programs or entities that are conducting similar types of research, and how is WHEAT performing in relation to these other suppliers?

As already indicated, the value added of WHEAT in relation to the CGIAR reform principles is an overarching question the answer to which will draw upon all the analysis and findings of the evaluation.

Quality of science

The evaluation of science quality will look at several dimensions of quality from research management and incentives to assure quality to team and leadership competences to quality of research design and the knowledge and outputs generated.

¹² See WHEAT Proposal Document, ANNEX B Figure 1: Research interventions, outputs, outcomes and impacts for WHEAT.

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Does the CRP have in place sufficient processes and incentives for ensuring high research quality across program components and partners? Is the quality and track record of team leaders sufficient and are the competences among research staff and in teams appropriate? Given the high recruitment rate particularly at CIMMYT, are research staff adequately mentored, oriented and motivated to enable high quality inputs? Does program design at project level demonstrate state-of-the-art knowledge of research area and sufficient extent of novelty?

The quality of research outputs will be evaluated. It is acknowledged that germplasm constitutes a major output of WHEAT, in addition to improved understanding of germplasm, new crop production technologies and farming system and policy options as communicated through scientific, technical, policy and training publications.

Quality of science will be assessed at several levels: The program as a whole; Flagship; and discipline (which to a large extent is aligned with Flagships).

Effectiveness

Effectiveness is assessed from the point of view of current and likely effectiveness of the program, rather than past impact. The evaluation will look at the program design and will seek to understand and assess the realism and the plausibility of impact pathways and theories of change of the Program and its Flagships; the extent to which assumptions are realistic and risks have been taken into account; whether the program has considered constraints to uptake or adoption of results, and other factors that influence outcomes, scaling-up and scaling-out, and impacts. As such, it will look at the extent to which the program is addressing constraints, for instance by incorporating capacity building into research activities, engaging appropriate partners linking where appropriate with other CRPs and addressing gender specific constraints. The evaluation will explore the extent to which the theories of change distinguish the long-term goals to which the Program is contributing from the short-term outputs and outcomes for which the program is directly accountable. It will also look at the extent to which there is a common understanding among the Program's major partners of the long-term goals, how these will be reached, and what will be used to measure progress along the way.

The evaluation will also assess progress towards milestones and outputs from a sample of projects across the research portfolio. It will assess the M&E systems and the extent to which these systems are used by management to adjust research plans and impact pathway designs.

Impact and likely sustainability

An important part of the summative component of the evaluation will be to assess the extent to which past research has led to outcomes and impact. There are, however, limitations to this component of the evaluation as it is restricted by the availability of evidence of impact. The assessment of impact will look at the claims made by WHEAT of adoption, outcomes and impacts and the evidence to support such claims. The credibility of the evidence and quality of studies will be assessed. This assessment will take into account the challenges related to attribution of long-term impacts to research. The evaluation will also consider the adequacy of impact assessments by the CRP and participating Centers. On the basis of available evidence, the evaluation will consider the overall magnitude of impacts from past research.

In addition to assessing past impact, the evaluation will also assess the processes in place for facilitating impact assessment in the future; such as collecting baseline data and budgeting for adoption and impact assessments.

To the extent possible, the evaluation will look at the sustainability of benefits from WHEAT research; particularly how sustainability has been addressed in the theories of change and what measures are taken in program implementation for enhancing sustainability.

4.3. Cross-cutting issues

Gender

As indicated in chapter 3, WHEAT has developed an explicit CRP gender strategy, and expended W1/2 funding on gender-related activities and also on integrating gender into its research and operational frameworks and general staff awareness.

The evaluation will assess the implementation of the gender strategy in terms of the quality and sufficiency of gender analysis across the research portfolio and gender-specific research; and the extent to which gender is taken into consideration in targeting research (SI 1/FP 1); in research implementation and data collection (all FPs); and in documenting lessons and impact.

Partnerships

WHEAT brings together the partner networks of CIMMYT and ICARDA and states that it collaborates with more than 200 partners (NARS, Universities, Regional and international organizations, ARIs, Private sector, NGOs and CBOs and CG host countries). WHEAT also engages in competitive partner grants which are supposed to fill research gaps.

The evaluation will assess the relevance, effectiveness and efficiency of WHEAT's partnerships, including those which are established on the basis of competitive partner grants, since they are CRP driven (funded by Window 1/2).

It will assess issues such as: strategic prioritization of partnerships; incentives for partners to contribute to WHEAT; involvement of partners in research decision-making, funding, coordination, and joint ownership of results; and transaction costs; etc.

Capacity building

Capacity strengthening is another important component of WHEAT's impact pathways, and WHEAT had a Strategic Initiative on capacity strengthening (SI 10) which was integrated into the Flagship Project 5 on Engaging and Strengthening particularly as related to impact pathways and scale-out.

The evaluation will look at how capacity building is prioritized for addressing partners' needs within the boundaries of available resources; the incorporation of capacity building into research activities for mentoring and enhancing the relevance and likely uptake of research results; the consideration of capacity issues among assumptions and risks related to the theories of change; equity in targeting capacity, for instance training and skills development.

4.4. Organizational Performance

Governance and Management

The evaluation of organizational performance pertains to governance and all aspects of management that affect the CRP's performance and ability to produce results in timely and effective manner. The evaluation will look at the proficiency of the program's governance and management structures, functions, and processes in facilitating the achievement of the program's objectives efficiently and effectively.

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With reference to the principles of good practice in the governance and management of large partnership programs¹³ and following the methodology of the recently completed CRP Governance and Management Review, the evaluation will assess WHEAT governance and management arrangement and functions for efficiency, accountability, transparency and fairness and - governance in particular - for independence and legitimacy. The evaluation will draw from the above mentioned Review, which also provides cross-CRP comparison and reference.

As part of the organizational performance, the evaluation will assess the efficiency (cost effectiveness) and, when applicable, effectiveness (in terms of enhancing the programs ability to perform towards its objectives) of the WHEAT governance and management functions. Several aspects of management will be covered by the evaluation. These include:

- program management and leadership;
- the CIMMYT research management system in serving the CRP needs;
- accountability and reporting;
- monitoring and evaluation system in informing management decisions (learning) and for reporting;
- financial management and resource mobilization;
- management of intellectual property;
- partnership management
- risk management

Human resource management, including staff performance assessment, is the responsibility of each participating Center, and therefore human resource management aspects will be evaluated in the context of the CRP and its ability to perform well.

The evaluation will also investigate issues that have emerged from the initial interviews with CIMMYT and WHEAT management, namely, the management of conflicts of interests and the host relationship between CIMMYT and WHEAT. It will also look at CIMMYT in its leadership position regarding the WHEAT CRP. The CRP Governance and Management Review highlighted two issues that CIMMYT BoT and management are considering in terms of changes that may be required in the oversight and management arrangements regarding the two CRPs that CIMMYT is leading, MAIZE and WHEAT. One is the recommendation to assure the independence (and other attributes of good governance and management listed in the Review) of the CRPs' governing bodies. The other recommendation was to strengthen the CRP leaders' powers to manage for results. In its assessment of the governance and management arrangements and functions this evaluation will consider the CIMMYT BoT's and WHEAT SC's discussions in September meetings and the decisions from those meetings.

5. EVALUATION APPROACH AND METHODOLOGY

The evaluation will pursue a mixed method approach, using both qualitative and quantitative data collection methods that allow for breadth and depth in its data collection and analysis. Data and information will be collected at multiple levels, depending on the criterion and evaluation questions. The evaluation will gather and analyze information across the portfolio of activities mapped to WHEAT to provide breadth, and undertake in-depth analysis of selected case studies to provide for a more detailed evaluation of important dimensions of the CRP.

¹³ See the IEG/DAC 2007 Sourcebook for Evaluating Global and Regional Partnership Programs (GRPPs)

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The WHEAT project portfolio and list of activities as mapped to the Flagship Projects as of 1 August 2014 is the primary sampling basis for assessing several criteria and issues. Some analysis can be done across the entire portfolio (see portfolio analysis). For the analysis of CRP processes and factors which are influencing the performance of the CRP, the evaluation will collect evidence by conducting in-depth case studies. Furthermore, an analysis of a set of sampled projects which is given in Annex 4 will shed light on their alignment with the CRP objectives, Flagships and IDOs and other aspects of relevance; and their impact pathway design, partnerships, progress to-date and delivery strategy and other aspects influencing likely effectiveness. In-depth analysis will be conducted for a small subset of projects.

Project sampling has also influenced the choice of field sites where information and perceptions will be collected specifically on the projects in addition to other aspects of the CRP.

5.1. Data collection and analysis

Document review

The evaluation will use several sources and several kinds of documents for basic information about the program, its approval process, design and evolution; governance, management and financial arrangements and decision-making; the CGIAR reform context and its evolution; guidance regarding expectations from the CRPs; and the evaluation conduct in the reformed CGIAR (see evaluation matrix, Annex 1).

The team is reviewing documents on the following areas:

- development and approval of WHEAT (original and revised WHEAT proposal; ISPC comments and CO recommendations);
- governance and management processes (organisational handbooks; ToR and minutes of meetings of Center Boards, MC and SC, Programme Teams, Country Teams and Committees)
- progress of WHEAT (annual reports, etc.);
- extension of WHEAT and structural changes;
- issues within the CGIAR and other CRPs relevant to WHEAT.

Semi-structured stakeholder interviews

Team members interview a representative selection of partners, external stakeholders and peers, donor and other individuals knowledgeable of the CGIAR, WHEAT and global wheat research in agricultural development context. Most of these interviews will be conducted during the field visits (see countries in Table 9). However to get a broader perspective of stakeholders, each team member will also interview around 15 additional stakeholders per telephone/skype. These interviews will focus on partners from Pakistan, Afghanistan, Kazakhstan, Turkey, Mexico, USA (particularly universities), China, Iran and Iraq since those countries have lots of WHEAT activity. The list of interviewees to be finalized after the inception phase draws from information on project and WHEAT partners, suggestions from the Reference Group, IEA and other suitable sources. The final choice should be representative in terms of institutional background, geography, gender and discipline.

These interviews will cover the entire range of evaluation issues and questions. Interview templates will be developed for each category of stakeholder (partners, researchers, donors, international peer), specifying the context and the purpose for the interview (e.g. programmatic in general, quality of science, gender, management, governance)

Semi-structured interviews will be used for the evaluation in general or as part of the in-depth case studies.

WHEAT researcher survey

WHEAT evaluation will undertake a survey of WHEAT researchers (CIMMYT and ICARDA) which will cover the research/programmatic performance of WHEAT, addressing, in particular, aspects of relevance, quality of science and likely effectiveness, but also other aspects such as efficiency of management and cross-cutting issues (gender, partnerships and capacity strengthening).

The survey will be confidential, conducted online through Survey Monkey. The surveys will be tested and launched in the first part of the inquiry phase to allow for cross-validating quantitative findings in the subsequent in-depth data collection approaches. The survey will be administered in early November.

In-depth case studies

The evaluation will conduct four in-depth case studies (Table 8) on specific clusters of projects closely aligned with key program objectives in order to assess Program Management function of WHEAT. The case studies have been chosen so they cover different timeframes (transferred versus new research streams), the two major strategy streams (germplasm/varieties and sustainable intensification) and the variety of Flagship Projects.

The case studies will include projects and supporting activities associated with both major (and interrelated) WHEAT strategies (advancement of wheat varieties and improved wheat crop management in selected farming systems).

In the germplasm/variety improvement strategy, the activities and projects focused on durable rust resistant wheat will provide a relatively mature objective set initiated prior to CGIAR-reform and a set of projects related to abiotic stress tolerances (heat, drought, nutrient) will serve as a more recent set of post CGIAR-reform objectives.

In the agronomy/sustainable intensification strategy, the cluster of projects and activities associated with a new wheat cropping system to avoid heat and provide improved water and nutrient utilization efficiency in portions of India and Bangladesh will provide a relatively mature objective set (rooted pre-reform) while the harvest mechanization projects/activities may (depending of available documentation) provide a post-reform objectives set.

Table 8: In-depth case study orientation and team responsibility

| FP | Strategy stream | Maturity | Research strategy | Team members |
|-------------|---|----------|------------------------------------|--|
| FP 2/3/5 | germplasm with tolerance to biotic stresses | mature | Germplasm/Varieties/Seed Scale-out | Wallace Beversdorf and Deborah Templeton |
| FP 2/3/5 | germplasm with tolerance to abiotic stresses | recent | Germplasm/Varieties/Seed Scale-out | Wallace Beversdorf and Deborah Templeton |
| FP 3/4 | Promotion of new cropping patterns/crop combinations to support sustainable intensification | mature | Sustainable intensification | Sylvia Brouder and Rasheed Sulaiman |
| FP 3/4 | Promotion of new, improved farm machinery to support intensification | recent | Sustainable intensification | Sylvia Brouder and Rasheed Sulaiman |

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The case studies will be based on field visits observations, semi-structured interviews (with associated program directors, projects leaders and key R&D staff, support staff, partners/collaborators and beneficiaries) and documentation analysis (proposals and progress reports for projects, external reviews, and competitive contract grants for inclusion in case studies).

The analysis will focus on:

- Relevance or key drivers (theory of change, targeting and impact assessments or narratives) justifying the project investment(s) and anticipated outputs (relative to desired program-level outcomes)
- Coherence, quality and efficiency of project design relative to anticipated project outputs (including gender normalization, if any)
- Appropriateness of project prioritization, project sequencing, and project funding relative to program-level IDOs
- Rationale for choice of partners (up- and down-stream)
- Definition and quantitative verification of project outputs handed-off (what, to whom, where, when, and why)
- Associated capacity building or maintenance including training and technical or financial support of essential partners/collaborators (including gender normalization)
- Adjustments in impact pathway management and impact narratives based on project progress (learning)
- Appropriateness of deployed institution motivators for efficiency or gender normalization (if any)
- Evidence of appropriate lead institutional support for FTO (IP and/or regulatory), if necessary for anticipated output conversion to IDO.

Country visits

The country visits allow an in-depth look at particularly the four specific cases (Table 9). They allow the team to look at important dimensions of the CRP in depth and to gain better understanding of processes and factors that are affecting program results. The sample of countries has been selected from the WHEAT project database based on various criteria:

- Level of WHEAT activity in the country
- Potential of observation of W1/2 and bilateral activity and their inter-linkages
- Potential of observation of important characteristic of program (like gender, competitive partner grants, legacy and new research)

Table 9: Field visit sites for data gathering and in-depth analyses of project clusters

| Country | Dimensions to look in depth | Projects |
|------------|--|---|
| India | Regional projects; long CIMMYT history; breeding and conservation agriculture; Interaction with W1/2 funded activities; competitive partner grants sample. | CSISA Phase II; CPG*: Deciphering phyto-hormone signaling in modulation of resistance to spot blotch disease (IISER – Kolkata); Spot blotch of WHEAT: Delivering resistant WHEAT lines, and diagnostic and molecular markers (Banars Hindu University, Varanasi, India) |
| Bangladesh | CSISA (largest project), conservation agriculture/ sustainable intensification; bilateral and also W1/2 | CSISA mechanization and irrigation; W1/2: farm and landscape scale intensification options/challenges in three CIMMYT priority systems looking more specifically at system |

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| | | |
|----------|---|--|
| | activities, gender dimension, and partner interactions upstream and downstream | approaches to CA principles, Climatic stress and Sustainable Intensification; Scoping study on the integration of gender and social equity in R4D on WHEAT-Based Systems in South Asia |
| Turkey | Interactions with W1/2 and bilateral funds for winter wheat improvement particularly in Durable Rust Resistance; including Competitive contracts and partner grant, as well Winter Wheat development and scale-out. | CPG: Enhanced Quality and Healthy Seed Testing System for International Winter Wheat Improvement Program (IWWIP), and 2 projects (Bahri Dagdas International Agricultural Research Institute) and interface of DRRW and BGRI, CRIFC, and AARI/GFAR and WHEAT |
| Morocco | ICARDA Wheat platform, research activities | Spring wheat breeding, Coordination EU-IFAD project, On-farm trial specialist |
| Lebanon | ICARDA breeding station; research activities; highest number of staff; seed health lab and staff. | In situ FP4 conservation/sustainable intensification projects, FP2 (new diversity and tools) and FP 5 capacity and Impact Pathway scale-out) staff interviews. |
| Ethiopia | Wheat for Africa, potential, investments from W1/2, CRP driven activities and impact pathway scale-out | FP3 performance and rust resistance platforms, and rust trial facilities, FP1 targeting and FP5 engaging and strengthening (staff interviews) |
| China | Observation of WHEAT governance body meetings | WHEAT Stakeholder Committee Meeting. 19 Sept 2014 CIMMYT BoT Program Committee and general BoT Meeting, 21-23 Sept 2014 |

Quality of Science analysis

The evaluation will assess the quality of science at different levels: the program as a whole and Flagship level. Quality within disciplines will also be looked at. The framework for evaluating science quality has four dimensions: (i) processes for assuring quality; (ii) input quality; (iii) output quality; and (iv) perceptions of quality. For some of these dimensions, assessment is done through sample projects assessment.

In the assessment comparisons will be primarily internal, looking at variability among WHEAT components; and judged against peer expectation of quality of international research of excellence. The assessment of different dimensions and the CRP as a whole aims at identifying variability within the CRP, highlighting areas of excellence and identifying areas where improvements could be made.

Processes in place

This assessment will be done at program level. The assessment aims at determining whether MAIZE management explicitly addresses quality through processes and whether this could be improved.

The evaluation will look at all internal processes that are explicitly aimed at assuring quality. These include:

- Internal peer processes and how they function;

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- Use of external evaluations/reviews as management tool;
- Staff performance assessment (CIMMYT and ICARDA) and to what extent it is used for enhancing quality and as a talent management process;
- Incentives for assuring and stimulating high quality;
- Competitive grants process; the extent to which it is used for enhancing quality.

Inputs to science quality

This assessment will be done at FP level, with contribution from sample project analysis, and it will include research staff that have team leader responsibilities; research support, resources and data; and research design.

- Team leaders include all Principal Investigators, Flagship and Cluster Leaders, and Focal Points. For these lead scientists, information about their scientific track record will be assessed;
- The adequacy of research support and resources;
- Quality of data management;
- Research design for sampled projects. ISPC comments on science quality will be taken into account (original proposal and extension proposal).

Output quality

Evaluation will look at both the quantity and the quality of science outputs, including publications and breeding material. The publications analysis will draw from a recent study conducted by Elsevier on Center publications output, and for the period when the CRP has been operating, list of publications mapped to the CRP.

This analysis will include:

- Qualitative assessment of a random sample of publications
- Quantitative assessment (bibliometric analysis) of publications
- Germplasm assessment: assessing breeding approaches and rate of gain advancement toward program objectives

Perceptions of quality

The evaluation will draw on perceptions of quality for assessing processes, inputs and outputs and as an important means for assessing science quality as it relates to breeding (research and breeder partners and peers). Other aspects will include overall science quality reputation: excellence and ambition, critical mass and comparison with other organizations.

Portfolio analyses

The portfolio analysis will analyze the whole portfolio of activities (projects) mapped to WHEAT according to various characteristics to provide an analysis of Program-level thinking. It will build upon the information already provided in this Inception Report (e.g., on allocation of funding) and provide a more comprehensive characterization and assessment of the portfolio of activities pursued under WHEAT. Inputs will include:

- Lead center/main implementing institution
- Start date and end date
- Maturity of the project
- Flagship Project (former Strategic Initiative)
- Type of activity (impact assessment, genetic, conservation agriculture, capacity building), which is most likely aligned with the Flagships
- Geographical scope of activity (global, regional and country-level)

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- Total budget and proportion of WHEAT budget
- Source of funds: W1-2, W3, and bilateral
- Principle investigator and other research staff
- Partners (research, implementing, outreach, and donor partners)

These will provide an overview of the entire portfolio. These may also identify of relevant gaps, patterns and trends in the portfolio to help answer how WHEAT has assimilated, prioritized and funded the various components and levels at which it works.

Analysis of sample projects

The evaluation will undertake a review and analysis of a sample of 40 individual W3/bilateral projects and W1/2 activities (for list see ANNEX 4) which were selected as follows:

- 10 largest projects in the Portfolio
- 30 randomly selected projects by Flagship

As the main input, the review will use Project Documents/Proposals and Progress Reports. It will focus on

- (i) relevance and coherence of individual activities, by assessing how well activity objectives match with the overall program objectives and Flagship/cluster objectives (or with the equivalent strategic initiatives for the previous years), (
- (ii) quality of science by looking at project design;
- (iii) likely effectiveness by looking at the realism of impact pathways and progress towards results; and
- (iv) cross-cutting topics related to relevance and effectiveness.

Some of the information collected will be factual, and some will represent evaluative judgments. Analysis of sample projects will include both scorings as well as qualitative information to be further analyzed. An IEA Evaluation Analyst will extract factual information about each activity from the activity proposals and progress reports, and the core team members responsible for each Flagship will undertake the evaluative assessments of relevance and coherence. As with other components involving evaluative judgment by team members, comparability among team member assessments will be assured through use of templates and clear assessment guidelines.

The sample of activities which the matching analysis covers consists of the 10 largest projects and another 30 projects which were randomly selected. This should ensure that the matching analysis adequately covers the WHEAT project portfolio in terms of source of funding, budget size, project maturity, thematic area/flagship project, geographical area and lead center. Annex 4 shows the list of activities which have been selected.

Impact narratives and evidence

Assessment of impact and sustainability addresses results from past research and includes uptake, adoption and use of results, and outcomes and impact. It includes early results from the CRP if any and otherwise results from past research that continues in the CRP or has relevance for the CRP. The assessment framework is based on as three dimensions:

- Assessment of CRP narrative and claims of impact (from use and adoption to longer term impacts) against evidence provided by the CRP;
- Team assessment of the coverage of monitoring and impact documentation across main program areas;

- Assessment of the volume of influence, outcomes and impact (team assessment and perceptions)

Governance and management analysis

The evaluation will draw heavily from existing documents, for example: the CRP proposal, commentaries from the ISPC and Fund Council, contractual agreements and guidance document from the Consortium and Fund Council. The evaluation will build upon the recently IEA – commissioned CRP Governance and Management review¹⁴ and the data and information collected for the Review. Other means for collecting data and information include structured interviews among selected stakeholders and members of the WHEAT Management Committee and WHEAT Stakeholder Committee, researcher survey; analysis of the terms of reference of the WHEAT governance and management bodies; review and analysis of the minutes of CIMMYT and ICARDA Boards, and the WHEAT MC and WHEAT SC. The methods, including specific documents to be reviewed, are indicated in detail in the Evaluation matrix. During field visits team member will gather observations and information related to management issues.

5.2. Main Limitations or Constraints of the Evaluation

The main constraints of this evaluation reflect limited time against the complexity and dynamics of WHEAT. The review will evaluate WHEAT and legacy activities for a period during which current WHEAT activities transitioned from two somewhat independent programs, one global and the other regional in scale into a single CRP with associated (new) management, stakeholders and financial arrangement. Since initiation of the CRP in 2012, WHEAT as experienced a number of issues in governance and management, lead institute support functions, partner/collaborator R&D contracts, and staff turnover. It is also in the process of transitioning 10 activity clusters (strategic initiatives) into five more integrated flagship project clusters as discussed in section 3 (above). The lead institute legacy project management system, though apparently robust for project management, is less than fully implemented and appears to have limited functionality for program management.

The evaluation team does not have direct access to the project management system(s) nor the document warehouses of the partner institutions, they will be highly dependent of CRP manager, SI leaders and support staff to obtain follow-up documents and gain understanding of project and program components including contracted and non-contracted partners/collaborators supporting documents from housed in separate institutions. Other issues such as project sampling for matching analyses and in-depth analyses may involve some biases, particularly since the number of projects is large (approximately 140) and vary greatly in scale and duration (within and among SI's and FP's).

The team's ability to assess past results at outcome and impact level is limited to the availability of documented evidence of such results. Although the team can gather perceptions of past effectiveness and impacts the validity of such evidence is more limited than with rigorous studies.

There are, however, limitations to this component of the evaluation as it is restricted by the availability of evidence of impact.

¹⁴ See <http://iea.cgiar.org/publication/final-report-crp-governance-and-management-review>

6. ORGANIZATION AND TIMING OF THE EVALUATION

6.1. Team Composition/Roles and Responsibilities

The Evaluation is conducted by a team of five independent external experts (see Table 10 below and Annex 2 for profiles). The Evaluation Team Leaders and Members have experience in complex evaluations. Collectively they possess necessary skills and experience to evaluate the SI/Flagship R&D project areas, management and governance of WHEAT.

For Program-level evaluation and analyses, the Team will work collectively to address most assessment criteria related to R&D. Due to the diverse skills associated with different Flagship/Strategic Initiative project, individual members of the Evaluation Team (chosen to encompass the appropriate skills and experiences) will apply their individual skills and experiences as indicated in Table 10. Each member will also have secondary leadership roles which are also provided in the Table.

Governance and Management Processes will be evaluated by Dr. Sachdeva, who is familiar with the CGIAR reform processes and multi-Center programs, with Dr. Beversdorf serving as a secondary lead in these processes.

Dr. Beversdorf will serve as the Lead in evaluations of Germplasm and Breeding Flagships/SI.

Each team member will prepare a background paper summarizing the major findings and lessons for his/her Flagships, based on the data collection and analysis described in this chapter, in particular, based on the matching analysis of W1-2 funded activities in their respective Flagships, and on their in-depth case studies. These background papers will follow a similar outline and will form the basis for the final evaluation report.

Table 10: WHEAT Evaluation Team Members and their Lead/Secondary roles

| Name | Lead and secondary Roles |
|-------------------|---|
| W.D. Beversdorf | Team lead. Lead on germplasm/breeding assessments (FP2-3 going forward. Secondary on G, M and ME; and Assist all others as needed. |
| Sylvie Brouder | Lead on sustainable intensification assessments (FP 4 going forward). Secondary of impact pathway and development stakeholder issues and Regional/NARS partnering; and Assist all others as needed |
| Pammi Sachdeva | Lead on assessments of governance structures and management oversight; and management processes (HR/IP/ME/IT) that interphase with WHEAT |
| Rasheed Sulaiman | Lead in development stakeholder issues, regional NARS partnering including extension and scale-out (FP5 going forward) and gender mainstreaming. Secondary on sustainable intensification (FP4); and Assist all others as needed |
| Deborah Templeton | Lead impact targeting (SI1/FP1), impact assessments and impact narratives, economic components of case studies; impact pathway analyses; Secondary on gender mainstreaming; and Assist all others as needed. |

6.2. Evaluation governance: roles and responsibilities

The evaluation team leader has final responsibility for the evaluation report and all findings and recommendations, subject to adherence to CGIAR Evaluation Standards. The evaluation team is responsible for submitting the deliverables as outlined in more detail below.

The IEA will be responsible for planning, initial designing, initiating, and managing the evaluation. The IEA will also be responsible for the quality control of the evaluation process and outputs, and dissemination of the results. The IEA will take an active role in the preparatory phase of the evaluation by collecting background data and information and by carrying out preliminary analysis

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on the CRP on Wheat. An evaluation manager supported by a evaluation analyst will provide support to the team throughout the evaluation.

A **Reference Group** has been set-up to work with the IEA evaluation manager to ensure good communication with, learning by, and appropriate accountability to primary evaluation clients and key stakeholders, while preserving the independence of evaluators. The Reference Group composition is shown in Table 11.

Table 11: WHEAT Evaluation Reference Group

| Name | Category | Organization |
|--|---|--------------|
| Victor Kommerell | CRP Program Manager | CIMMYT |
| Marianne Banziger | W/M-Management Committee Chair | CIMMYT |
| Tony Fischer | W-SC member | Independent |
| Michael Baum, with cc: Maarten van Ginkel, Co-Chair W-MC | ICARDA focal point | ICARDA |
| John Snape | Lead Center BoT, Program Committee Chair | Independent |

WHEAT management (including the WHEAT Leader) has a key role in helping provide for the evaluation team's informational needs. It provides documentation and data, information on all WHEAT activities, access to staff for engagement with the evaluators, and information on partners and stakeholders. It facilitates arrangement of site visits and appointments within the lead Center and other stakeholders. WHEAT management is also responsible for giving factual feedback on the Draft Report and for preparing the Management Response to the Final Report. It assists in dissemination of the report and its finding and lessons and it acts on the accepted recommendations. While the evaluation is coordinated with WHEAT management, CIMMYT as the lead Center is a key stakeholder in the evaluation. It encompasses most part of the research done within WHEAT. Its leadership and board are expected to make themselves available for consultations during the evaluation process.

6.3. Quality assurance

In order to ensure technical rigor to the evaluation, the following quality assurance will be implemented during the evaluation exercise:

- The IEA will work closely with the Evaluation Team throughout the evaluation, and will ensure that the tools and methodologies, as well as the process followed, are in line with the CGIAR IEA Evaluation Policy and Standards.
- Quality Assurance Advisory Panel: In accordance with the IEA's Evaluation Policy, two Senior Evaluation Experts will provide peer-review feed-back on the evaluation to the IEA at different milestones, including the Inception Report and the Draft Report.

6.4. Timeline and deliverables

The CRP evaluation timeline is shown in Table 12.

Table 12: Proposed timeline for evaluation

| Phase | Period | Main outputs | Responsibility |
|-------------------------|---------------------|---|-----------------------|
| Preparatory Phase | Jan 2014 – May 2014 | Final ToR Evaluation team recruited | IEA |
| Inception Phase | May 2014 – Sep 2014 | Inception Report | Evaluation team |
| Inquiry phase | Sep 2014 – Nov 2014 | Various analysis products as defined in inception report; | Evaluation team |
| | 8-9 Dec 2014 | Preliminary findings presented to WHEAT stakeholders | Evaluation team |
| Reporting phase | | | |
| Drafting of Report | Nov 2014 – Jan 2015 | Draft Evaluation Report | Evaluation team |
| | March | Feedback on Draft Report | IEA, WHEAT management |
| Final Evaluation Report | March 2015 | Final Evaluation Report | Evaluation team |
| Management Response | April 2015 | Management Response | CRP Management |
| Dissemination phase | June 2015 | Communications products | IEA CRP Management |

The Evaluation Report will be the main deliverable of the evaluation. Its recommended length is maximum 100 pages, excluding Annexes. It will describe the findings and conclusions that are based on the evidence collected within the framework defined for the evaluation criteria and issues and for addressing the specific evaluation questions (Annex 1). It will present a set of recommendations that are prioritized, focused and actionable, indicating the stakeholders that are responsible for their implementation. The main findings, conclusions and recommendations will be summarized in an executive summary.

6.5. Feedback and Responses to the Evaluation

Adequate consultations with WHEAT stakeholders will be ensured throughout the process. In particular, debriefings on key findings will be held at various stages of the evaluation. Consultations, feedback and finalization of the Evaluation Report will take place as per IEA guidance on “CRP Evaluation Process for Finalization, Feedback and Response”.

WHEAT management will prepare a response to the evaluation for the consideration of the Consortium Board. The Management Response will contain both an overall response to the evaluation, as well as response to each recommendation. The Consortium (Consortium Office, with approval of the Consortium Board) will review the Evaluation Report and WHEAT Management Response and provide their response on the Evaluation Report recommendations, Management Response and Action Plan.

The Final Evaluation Report, WHEAT Management Response and the Consortium Board Response will be considered by the **Fund Council’s Evaluation and Impact Assessment Committee (EIAC)** that will lead the Fund Council discussion on the Evaluation Report and the WHEAT Management Response and Consortium Board Response, and propose the decisions to be taken. The Fund Council will endorse on the evaluation recommendations, responses, action plans and proposed follow-up.

6.6. Dissemination plans

The Team leader will prepare **presentations** for disseminating the Evaluation Report to targeted audiences. Several events will be organized to disseminate the evaluation results, including but not limited to:

- Virtual presentation to WHEAT management on the **preliminary findings** (Dec 8-9 2014);
- **Presentations of the Draft Report** to WHEAT Reference Group, WHEAT Stakeholder Committee (now Independent Advisory Committee), CIMMYT Management and Board; Consortium (February 2015);
- **Presentation of the Final Report** to the Evaluation and Impact Assessment Committee (EIAC) and the Fund Council (May 2015).

ANNEX 1 – EVALUATION MATRIX

Research/Programmatic Performance

| Evaluation Issues and Questions | Data Collection and Analysis |
|--|---|
| <p>Overarching questions</p> <ul style="list-style-type: none"> • Does WHEAT operate as an integrated program (programmatic-level thinking, strategy and management)? • Has the implementation of WHEAT (its strategies, integrated partners/collaborators capabilities, management and governance processes, and funding mechanisms) elevated the program’s comparative advantage and improved its prospects to achieve its objectives and contribute more efficiently towards the program’s intended IDOs and the CGIAR System-level Outcomes? • Have CGIAR reforms assisted WHEAT deliver its objectives, achieve program IDOs and contribute to System-level Outcomes? • Have W1/W2 funding mechanisms sufficiently helped WHEAT achieve its Impact- oriented Objectives? • On its own account, WHEAT has experienced disappointingly low levels of Window 1 & 2 funding, high transactional costs, and heavy management burden associated with the CRP program reforms (and associated reporting dialogues) in comparison to other bilaterally-funded initiatives: If true, how can these aberrations be managed? | <p>To be addressed through the more detailed questions and data analysis below</p> |
| Relevance | |
| <p>Coherence</p> <ul style="list-style-type: none"> • Is WHEAT strategically coherent and consistent with the main objectives of the CRP and the goals and System Level Outcomes presented in the CGIAR’s Strategy and Results Framework? • Is there clear rationale for the five Flagship Projects and are they internally coherent? • Is the core funding (Windows 1 and 2) used strategically in key areas of the program, and for leveraging bilateral funding, to align bilateral projects within program strategy? • Is WHEAT defining, developing and prioritizing bilateral projects which are targeting its program objectives? | <p>Desk review of the CGIAR’s Strategy and Results Framework (SRF); the approved WHEAT proposal; WHEAT POWB 2014, WHEAT 2015-16 Extension proposal; ISPC commentaries on original and extension proposal; CO commentary on extension proposal</p> <p>Analysis of sample projects In-depth case studies Stakeholder interviews</p> |
| <p>Comparative advantage</p> <ul style="list-style-type: none"> • What is the comparative advantage of WHEAT (across its Flagships and activities) - in terms of the | <p>Desk review as above In-depth case studies Stakeholder interviews</p> |

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CGIAR's mandate of delivering international public goods – relative to other international initiatives and research efforts, including the private sector, partner country research institutions and development agencies?

- In the different areas of research (Flagship Projects, Clusters of Activity) does WHEAT play an appropriate role as global leader, facilitator or user of research compared to partners and other research suppliers?
- Does WHEAT engage with appropriate partners, given their roles in implementation and achieving the objectives of the program
- What is the WHEAT comparative advantage and its expected future evolution across the research and development stages (i.e. from basic research to product delivery).
- How does WHEAT perceive its role and comparative advantage in the global wheat research? What gaps is it trying to address? To what extent is the program competing with other programs or entities that are conducting similar types of research, and how is WHEAT performing in relation to these other suppliers?

Program design

- Does the program target an appropriate set of Intermediate Development Outcomes (IDOs) and are the activities relevant, of highest priority for targeting the IDOs?
- Do the impact pathways logically link the principal clusters of activities to the IDOs and are the IDOs linked to the SLOs through plausible theories that take into account trade-offs between multiple objectives? Have constraints to outcomes and impacts been considered in the program design, for example through assessment of the assumptions and risks in reliance on policies, actions of national institutions, capacity and partnerships?
- Have the WHEAT research activities been adequately prioritized, in line with resource availability?
- Is WHEAT implementing program management? How?

Desk review of WHEAT IDOs and impact pathways
Interviews of WHEAT management and principle investigators
Researcher survey
Analysis of sample projects

Quality of Science

- Do the research design, problem-setting, and choice of approaches reflect high quality in scientific thinking, state-of-the-art knowledge and novelty in all areas of research?

ISPC commentaries
Publications analysis
In-depth project analysis
Interviews of peers

- Is it evident that the program builds on the latest scientific thinking and research results?

In-depth project analysis

- Are the internal processes and conditions, including research staff and leadership quality, adequate for

Interviews about internal processes
H-index analysis

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| assuring science quality | Researcher survey |
| <ul style="list-style-type: none"> • Are the research outputs, such as publications, of high quality and what role do CRP scientists have in the publication? • Is the WHEAT CRP participating in state of the art breakthrough research initiatives with leading institutions? <ul style="list-style-type: none"> Does the CRP have in places sufficient processes and incentives for ensuring high research quality across program components and partners? Is the quality and track record of team leaders sufficient and are the competences among research staff and in teams appropriate? Given the high recruitment rate particularly at CIMMYT, are research staff adequately mentored, oriented and motivated to enable high quality inputs? Does program design at project level demonstrate state-of-the art knowledge of research area and sufficient extent of novelty? | Analysis of publications and other outputs |
| Likely effectiveness | |
| <ul style="list-style-type: none"> • Has the CRP stayed on track in terms of progress and milestones toward outputs, and along the impact pathway toward outcomes? | Review of WHEAT Annual reports and performance reports Analysis of sample projects |
| <ul style="list-style-type: none"> • Is the monitoring system used effectively for adjusting the program on basis of lessons learned? | Interviews with CRP management and FP leaders Assessment of M&E systems and its use in program adjustment |
| <ul style="list-style-type: none"> • Have adequate constraint analyses and lessons from ex post studies informed program design for enhancing the likelihood of impact? | Review of impact pathways and theories of change and their use in program design and adjustment Analysis of sample projects |
| <ul style="list-style-type: none"> • Is the CRP adequately addressing enabling factors for scaling up outcomes? • Are processes clearly defined and quality reviews conducted to improve effectiveness? <ul style="list-style-type: none"> The evaluation will explore the extent to which the theories of change distinguish the long-term goals to which the Program is contributing from the short-term outputs and outcomes for which the program is directly accountable. It will also look at the extent to which there a common understanding among the Program's major partners of the long-term goals, how these will be reached, and what will be used to measure progress along the way. | Review of impact pathways and theories of change and their use in program design and adjustment Interviews with partners during site visits Analysis of sample projects |
| Impacts and Likely Sustainability | |
| <ul style="list-style-type: none"> • What has been the record of the participating centers engaged in research on wheat and wheat-based systems, measured as both outcomes and impacts from past research? What is the impact of WHEAT | Review of WHEAT impact narrative and evidence provided in support to the claims |

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| research and how is it been estimated? | |
| <ul style="list-style-type: none"> Have there been sufficient efforts to document outcomes and impact from past research, with reasonable coverage over all research areas? | Same as above. Interviews with stakeholders |
| <ul style="list-style-type: none"> What can be concluded from the findings of ex post studies, regarding the magnitude of impact in different geographical regions—and the equity of benefits? | Same as above |
| <ul style="list-style-type: none"> To what extent have benefits from past research been—or to what extent are they likely to be—sustained? | Interviews with stakeholders |
| Gender | |
| <ul style="list-style-type: none"> Has gender been adequately considered in research design in terms of relevance to and effect on women? | Assessment of gender strategy, gender-related IDOs and impact pathways in terms of gender considerations. Analysis of gender research Analysis of incorporation of gender issues in sampled projects Interviews Researcher survey. |
| <ul style="list-style-type: none"> Has gender been adequately considered in the impact pathway analysis, in terms of the differential roles of women and men along the impact pathway, generating equitable benefits for both women and men and enhancing the overall likelihood enhancing the livelihoods of women? The evaluation will assess the implementation of the gender strategy in terms of the quality and sufficiency of gender analysis across the research portfolio and gender-specific research; and the extent to which gender is taken into consideration in targeting research (SI 1/FP 1); in research implementation and data collection (all FPs); and in documenting lessons and impact. | Same as above |
| Capacity Strengthening | |
| <ul style="list-style-type: none"> To what extent do capacity building efforts address partners' needs? To what extent is WHEAT training new people who continue to contribute to the CRP? | Assessment of capacity building strategy and consideration of capacity in the FP impact pathways Analysis of incorporation of capacity building in sampled projects Interviews Researcher survey. |
| <ul style="list-style-type: none"> Does capacity building target women as well as men adequately and their differential needs taken into account | Same as above |

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| <ul style="list-style-type: none"> To what extent are capacity issues taken into account in the impact pathway analysis? | Same as above |
| <ul style="list-style-type: none"> Are capacity building efforts integrated with the research mandate and delivery of the CRP? | Same as above |
| <ul style="list-style-type: none"> Are the capacity building efforts and incentives among partners adequate for enhancing the long-term sustainability of program effects? <p>The evaluation will look at how capacity building is prioritized for addressing partners' needs within the boundaries of available resources; the incorporation of capacity building into research activities for mentoring and enhancing the relevance and likely uptake of research results; the consideration of capacity issues among assumptions and risks related to the theories of change; equity in targeting capacity, for instance training and skills development</p> | Same as above |

Partnerships

| | |
|---|---|
| <ul style="list-style-type: none"> To what extent are the partnerships relevant and cover the relevant partner groups to achieve program objectives? | Assessment of FP impact pathways Interviews at country sites |
| <ul style="list-style-type: none"> Are the partnerships chosen and managed so as to maximize efficiency and effectiveness and mutual benefits? | Same as above |

The evaluation will assess the relevance, effectiveness and efficiency of WHEAT's partnerships, including those which are established on the basis of competitive partner grants, since they are CRP driven (funded by Window 1/2).

It will assess issues such as: strategic prioritization of partnerships; incentives for partners to contribute to WHEAT; involvement of partners in research decision-making, funding, coordination, and joint ownership of results; and transaction costs; etc.

Organizational performance

Governance and Management

| | |
|---|---|
| <p>Legitimacy</p> <ul style="list-style-type: none"> To what extent do the governance and management arrangements permit and facilitate the effective participation and voice of the different categories of stakeholders in the governance and management decisions, taking into account their roles and responsibilities? | Desk reviews of the minutes of Fund Council, Consortium Board, CIMMYT Board, WHEAT StC, and WHEAT MC. Interviews with selected staff from the Fund Office, Consortium Office, CIMMYT and ICARDA; WHEAT StC members, MC members. Review of CRP Governance and Management Review report |
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| | and relevant recommendations of PWC review. Interviews with partners. |
| Accountability <ul style="list-style-type: none"> To what extent are the lines of accountability within the program well-defined, accepted, and being followed? Are there any significant gaps in either programmatic or fiduciary accountability? | Same as above Direct observation of the work of CIMMYT Board and WHEAT StC meetings in Beijing Review of CIMMYT Board decisions following the Beijing meeting |
| Transparency <ul style="list-style-type: none"> To what extent are the program's decision-making, reporting, and evaluation processes open and available to the general public, subject to confidentiality requirements in scientific research and in human resource management? | Same as above Desk review of WHEAT planning documents, strategies, presentations, and report Review of the WHEAT website |
| Conflicts of Interest <ul style="list-style-type: none"> To what extent are conflicts of interests being identified and managed transparently? | Same as above Desk review of CGIAR, CIMMYT, and WHEAT policies on conflicts of interest |
| Efficiency <ul style="list-style-type: none"> Are the WHEAT institutional arrangements, management and governance mechanisms efficient? Is the significant growth, including recruitment of new staff, managed efficiently? | Interviews and survey with selected CIMMYT Board, WHEAT SC and MC members Direct observation of the work of CIMMYT Board and WHEAT SC meetings in Beijing |
| Management effectiveness <ul style="list-style-type: none"> Does WHEAT research management provide effective leadership, culture and ethos for advancing the program's objectives? <i>Is the significant growth, including recruitment of new staff, managed effectively?</i> How is quality management conducted? What are the policies and processes? | Draws from CIMMYT "organizational culture" review planned for mid-2014 Interviews with WHEAT staff (from ICARDA and CIMMYT) during site visits Researcher survey |
| Financial management <ul style="list-style-type: none"> To what extent does the program have good financial management, budgeting, and reporting? | Desk review of CGIAR and CIMMYT financial guidelines and audit reports Interviews with CIMMYT and ICARDA financial staff and SC members |
| Resource mobilization and allocation <ul style="list-style-type: none"> How effective and efficient have been the criteria and the procedures for allocating the program's resources? How have the resource allocation processes and timing affected the implementation of the program's research activities? | Desk review of resource allocation criteria, procedures, and results. Desk review of minutes of MC meetings. Interviews with relevant managers and research leaders. |

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| <ul style="list-style-type: none"> • How effective has been the mobilization of financial resources for the program? | |
| <p>Effects of CGIAR reform</p> <ul style="list-style-type: none"> • To what extent have the reformed CGIAR organizational structures and processes increased (or decreased) efficiency for successful program implementation • What lessons can be learned to date regarding the effectiveness of the new governance and management arrangements of the CGIAR influencing WHEAT? | <p>Interviews with CRP leadership, WHEAT SC and MC members Draws on findings of the previous CGIAR and CRP level reviews</p> |
| <p>Collaboration</p> <ul style="list-style-type: none"> • Is the level of collaboration and coordination with other CRPs appropriate and efficient for reaching maximum synergies and enhancing partner capacity | <p>Desk review of WHEAT proposal and Annual reports Interviews with stakeholders</p> |
| <p>M&E and reporting</p> <ul style="list-style-type: none"> • Is WHEAT management using a monitoring and evaluation system efficiently for recording and enhancing CRP processes, progress, and achievements? | <p>Review of RMS Interviews with CIMMYT and ICARDA managers and lead CRP scientists</p> |
| <p>Risk management</p> <ul style="list-style-type: none"> • Are CRP implementation and sustainability related risks adequately identified and managed? | <p>Review of CIMMYT risk analysis related to CRP, and decisions on actions (September update) Interviews with concerned CIMMYT, ICARDA and CRP managers and WHEAT SC/CMMYT Board members</p> |
| <p>IP management</p> <ul style="list-style-type: none"> • Is the management of Intellectual property used or generated by the CRP appropriately managed? | <p>Review of CIMMYT and ICARDA IP policies Interview of IP staff and relevant research managers</p> |

ANNEX 2 – TEAM MEMBER PROFILES

Wallace (Wally) Beversdorf – Team Leader

Since 2005 Wally has been an independent consultant, involved in several reviews of research, including CSIRO Flagship program reviews and 2007 mid-term review of the Generation Challenge Program. Before 2005 he worked over 10 years in the private seed sector, including positions as Head of Novartis world-wide R&D, Head of Syngenta Plant Science and Vice President for Syngenta Biotechnology. He has also worked in the academia, holding positions at the Guelph University. He has a PhD in plant breeding and genetics.

Members

Paramjit (Pammi) Sachdeva

Pammi is specialized in program and institutional assessment and HR management with expertise also in capacity development, systems analysis and organizational design. Since 2001 he has worked as an independent consultant and been involved in a number of external reviews of CGIAR Centers and programs, and in international development project and human resource management consultancies. Previously he worked at the World Bank as senior management specialist and advisor and earlier in his career at ISNAR as senior research officer. He has a PhD in social systems sciences.

Sylvie Brouder

Since 2005 Sylvie has served as Professor of Agronomy at Purdue University where she has been working for nearly 20 years. She is also Director of the Purdue University Water Quality Field Station. Her research interests include crop nutrient use efficiency, agroecosystem viability and sustainability and ecophysiology linked to abiotic stress tolerance. Through her teaching, outreach and consultancy activities she has been involved in international agricultural research and science agenda development. She has PhD in ecology.

Deborah (Debbie) Templeton

Until September 2013 Debbie worked for ACIAR for over 10 years primarily managing the Impact Assessment program. Between ACIAR employment, Debbie also worked for 3 years as social scientist (impact assessment specialist) at IRRI. She has experience in capacity building in research evaluation and impact assessment and in managing and conducting impact assessments. She has PhD in economics.

Rasheed Sulaiman

Rasheed is the Director of the Centre for Research on Innovation and Science Policy in India (since 2006). Prior to that, he worked as senior scientist at the National Centre for Agricultural Economics and Policy Research at ICAR. He has expertise in agricultural extension systems and policy, and agricultural innovation system. His research also covers the role of private sector and public-private partnerships, developing new approaches to reaching rural women and evaluation of ICTs in agriculture. He has a PhD in agricultural extension.

ANNEX 3: LIST OF PERSONS CONSULTED IN INCEPTION PERIOD

Inception meeting at CIMMYT – 26 May – 30 May 2014, Texcoco, Mexico

| Name | Organization | Position |
|---------------------------|--------------|---|
| Marianne Baenziger | CIMMYT | Deputy Director General Research & Partnership |
| Ranajit Bandyopadhyay | IITA | Pathologist |
| Michael Baum | ICARDA | Director - BIGMP |
| Hans Braun | CIMMYT | Program Director Global Wheat Program |
| Ernesto Briones | CIMMYT | Senior Systems Developer |
| David Chikoye | IITA | R4D Director, IITA-Southern Africa |
| Marisa De la O Elizagaray | CIMMYT | Manager, Risk Management & International Policy |
| Olaf Erenstein | CIMMYT | Program Director, Socioeconomics Program |
| Richard Fulss | CIMMYT | Head, Knowledge Management |
| Bruno Gérard | CIMMYT | Program Director, Global Conservation Agriculture |
| Bram Govaerts | CIMMYT | Associate Director, Global Conservation Agriculture |
| Sara Hearne | CIMMYT | Senior Scientist, Maize Molecular Geneticist/Pre-breeder |
| Anna Herremans | CIMMYT | (former) Director, International Finance |
| Ylva Hillbur | IITA | DDG for Research |
| Huntington Hobbs | CIMMYT | Leader, Strategic Planning and Research Coordination, MasAgro |
| Nina Jakobi | CRP | WHEAT Program Assistant |
| Victor Kommerell | CRP | WHEAT Program Manager |
| Michael G. Listman | CIMMYT | Senior Science Writer, Corporate Communications |
| Diana Lopez | CIMMYT | Project Management Unit |
| Victor Lopez | CIMMYT | Manager of Institutional Relations TTF-MasAgro |
| Thomas Lumpkin | CIMMYT | DG |
| Sally Mallari | CRP | MAIZE Program Assistant |
| Richard Medina | CIMMYT | Director, Internal Audit Fernando |
| Fernando P Mendoza | CIMMYT | Senior Internal Auditor |
| Abebe Menkir | IITA | Team leader for maize improvement research at IITA, Focal Point for CRP at IITA |
| Ivan Ortiz Monasterio | CIMMYT | Agronomist, Wheat Harvest Coordinator |
| Patricia V Mir | CIMMYT | Risk Management Analyst |
| Thomas S. Payne | CIMMYT | CIMMYT Board Secretary |
| Kevin Pixley | CIMMYT | Program Director, Genetic Resources Program |
| B M Prasanna | CIMMYT | Program Director Global Maize Program |
| Jens Riis-Jacobsen | CIMMYT | Director of Int. Systems and Information Technology |
| Nellooli P. Rajasekharan | CIMMYT | Director, International Human Resources |
| Jose Ramiro T. Mondragon | CIMMYT | Manager, Financial Planning |
| Geneviève Renard | CRP | MAIZE and WHEAT Communication Specialis |
| Jean-Marcel Ribaut | GCP | Director, Generation Challenge Program |
| Horacio Rodriguez | CIMMYT | MasAgro Extension Coordinator |
| Thomas W. Short | CIMMYT | DDG Support Services |
| Graham Sim | CIMMYT | Director, International Finance |
| Matthew Thornton | CIMMYT | Hub Coordinator |
| Sam Trachsel | CIMMYT | Scientist, Global Maize Program |
| David Watson | CRP | MAIZE Program Manager |

EVALUATION OF THE CRP ON WHEAT, INCEPTION REPORT, OCT 2014

Borlaug Summit on Wheat for Food Security 25-28 March 2014, Ciudad Obregón, Mexico

| Name | Organization | Position |
|---------------------------|-------------------------------|---|
| Usha Barwale Zehr, Ph.D | MAHYCO | Chief Technology Officer, Maharashtra Hybrid Seeds Co. Ltd. |
| Ramesh Chand, Dr. | Banaras Hindu University | Professor-cum-Plant Pathologist |
| Ronnie Coffman, Pro | Cornell University | Principal Investigator, Durable Rust Resist. Prog. |
| Swapan K Datta, Prof. | Indian Council of Ag Research | Deputy Director General (Crop Science) |
| Etienne Duveiller | CYMMYT, New Delhi | Director of Research for South Asia |
| Pedro Figueroa, Dr. | INIFAP | Plant Pthologise in National Wheat Program |
| Jean Freymond | SASAKAWA Africa Association | Secretary |
| Bram Govaerts, Dr. Ir. | CIMMYT | Associate Director, Global Conservation Agriculture Program |
| Neal Gutterson, Ph.D. | Mendel Biotechnology | President, CEO |
| Eric Huttner, Dr. | ACIAR | Research Program Manager, Crop Improvement & Management |
| Kathy Kaan | Gates Foundation | Program Manager |
| V.K. Mishra, Dr. | Banaras Hindu University | Professor, Dept. of Genetics and Plant Breeding |
| Masaaki Miyamoto | SASAKAWA Africa Association | Chief Executive Officer |
| Wolfgang H. Pfeiffer, Dr. | HarvestPlus | Deputy Director, Operations |
| Wayne Powell, Dr. | CGIAR | Science |
| Mathew Reynolds, Dr. | CIMMYT | Head Wheat Physiology |
| Carolina Saint Pierre | CIMMYT | Scientist, Wheat Phenotyping Coordinator Seed |
| Rugema Semaana Hilary | SASAKAWA Africa Association | Coordinator, Crop Productivity Improvement |
| Rick Ward | CIMMYT | Principal Scientist, Global Wheat Program |
| Ravi P. Singh, Dr. | CIMMYT | Head, Bread Wheat Improvement & Rust Res. |

Interviews conducted by Deborah Templeton

| Name | Organization | Position |
|--------------|--------------|--|
| Nick Austin | ACIAR | Chief Executive Officer of ACIAR, Pacific Countries representative on the CGIAR Fund Council |
| Tony Fisher | CSIRO | Honorary Research Fellow at CSIRO, Member of WHEAT Stakeholder Committee |
| Eric Huttner | ACIAR | Research Program Manager for Crop Improvement and Management, Member of WHEAT Management Committee |

ANNEX 4: SAMPLED PROJECTS

| Code | Lead center | Title | Funding | Donor | FP | Budget |
|-------------------------------|-------------|---|-----------|-------------------------|----|------------|
| 10 largest | | | | | | |
| W0266 | CIMMYT | Agricultural Innovation Program (Pakistan) | W3 | USAID | 5 | 10,826,761 |
| W0250 | CIMMYT | Durable Rust Resistance in Wheat - Phase II | Bilateral | Cornell University | 3 | 7,729,027 |
| R0148 | CIMMYT | MASAGRO-Descubriendo la diversidad genética de las semillas | Bilateral | SAGARPA | 2 | 5,039,318 |
| W0265 | CIMMYT | Sustainable Wheat & Maize Production in Afghanistan (CIM/2011/026) | W3 | ACIAR | 5 | 4,967,581 |
| C0035 | CIMMYT | Cereal Systems Initiative for South Asia (CSISA)-Phase II | W3 | BMGF | 4 | 4,720,688 |
| W0239 | CIMMYT | Pakistan wheat production enhancement program (CIMMYT Int) | Bilateral | USDA | 5 | 3,725,108 |
| C0040 | CIMMYT | MASAGRO-Desarrollo sustentable con el agricultor | Bilateral | SAGARPA | 4 | 2,915,146 |
| T0083 | CIMMYT | Expansion of the Cereal Systems Initiative for South Asia (CSISA) in Bangladesh | Bilateral | IRRI | 4 | 2,425,930 |
| 1287 | ICARDA | Development of Strategic Crops Africa (A | Bilateral | AfDB through IITA | 5 | 2,412,273 |
| W0289 | CIMMYT | Rapid development of climate resilient wheat varieties for South Asia using genomic selection | Bilateral | Kansas State University | 2 | 2,183,522 |
| 30 randomly selected projects | | | | | | |
| IFPRI | CIMMYT | The potential of wheat production in Sub-Saharan Africa: Biophysical Suitability and Economic Profitability | W1/2 | CGIAR | 1 | 60,000 |
| see WORK PLAN | CIMMYT | Socioeconomics & policies for wheat futures, 6 different projects | W1/2 | CGIAR | 1 | 990,000 |

| | | | | | | |
|--|--------|---|-----------|---|---|-----------|
| | CIMMYT | Transfer wheat translocations into adapted wheat lines (wide crosses), 3 projects | W1/2 | CGIAR | 2 | 750,000 |
| W0286 | CIMMYT | Development of heat tolerant wheat for South Asia | Bilateral | Arcadia Biosciencies, Inc. | 2 | 1,888,621 |
| 1355 | ICARDA | Bread Wheat Landraces | Bilateral | CIMMYT | 2 | 69,816 |
| see WORK PLAN | CIMMYT | Evaluation of landraces and advanced wheat lines for abiotic stress adaptive traits | W1/2 | CGIAR | 2 | 750,000 |
| W0281 | CIMMYT | Evaluation of drought tolerance of wheat transformed with environmental stress tolerance genes and selection of elite lines | Bilateral | Japan International Research Center for Agricultural Sciences | 2 | 71,468 |
| | ICARDA | Joint ICARDA-ARC Wheat Improvement Program | Bilateral | Egypt | 2 | n/a |
| W0252 | CIMMYT | Genetics and physiology of wheat development to flowering: tools to breed for improved adaptation and yield potential. | Bilateral | European Community | 2 | 202,413 |
| Bahri Dagdas International Agricultural Research Institute | CIMMYT | Enhanced Quality and Healthy Seed Testing System for International Winter Wheat Improvement Program (IWWIP), 2 projects | W1/2 | CGIAR | 3 | 275,000 |
| W0283 | CIMMYT | Turkey's Contribution to CIMMYT | W3 | Turkey | 3 | 235,000 |
| W0212 | CIMMYT | Development of cereal germplasm and the screening for disease resistance and end- use quality | Bilateral | Alberta Agriculture and Rural | 3 | 317,370 |

| | | | | | | | Development |
|---------------|--------|--|-----------|---|---|---------|-------------|
| W0235 | CIMMYT | Identifying new genetic sources and evaluating United States wheat germplasm for resistance to stem rust in Eastern Africa (25856) | Bilateral | USDA | 3 | 249,343 | |
| W0204 | CIMMYT | Identification and utilization of novel sources of resistance against soil borne pathogens in wheat (CIM00014) | Bilateral | Grains Research and Development Corporation | 3 | 681,785 | |
| W0205 | CIMMYT | Enhanced delivery of CIMMYT germplasm to Australia (CIM00015) | Bilateral | Grains Research and Development Corporation | 3 | 796,799 | |
| W0276 | CIMMYT | SI5 and SI6 for Cooperation with Omsk Institute | W3 | Russia | 3 | 499,800 | |
| W0277 | CIMMYT | Identificación de líneas avanzadas de trigo cristalino y harinero con potencial de producir variedades de alta competitividad para el Estado de Sonora | Bilateral | Fundacion Produce Sonora | 3 | 96,417 | |
| W0101 | CIMMYT | Desarrollo de nuevas variedades de trigo duro, trigo harinero y triticale a partir de germoplasma procedente del CIMMYT-Phase III | Bilateral | Agrovegetal, S.A. | 3 | 682,928 | |
| see WORK PLAN | ICARDA | Development of resistant wheat germplasm to diseases and insects using conventional and molecular tools | W1/2 | CGIAR | 3 | 750,000 | |
| see WORK PLAN | CIMMYT | Evaluate pathogen and host resistance for foliar diseases (Septoria, tan spot, spot blotch) | W1/2 | CGIAR | 3 | 750,000 | |
| C0037 | CIMMYT | Cereal Systems Initiative for South Asia (CSISA)-India | W3 | USAID | 4 | 421,384 | |
| see WORK PLAN | CIMMYT | Genotype by Systems interaction research for increased system response (Nele, Bram), 3 projects | W1/2 | CGIAR | 4 | 750,000 | |

| | | | | | | |
|------------------------------------|--------|--|-----------|--|---|---------|
| 1198 | ICARDA | Enhancing Cotton Germplasm, Improving Resistance to Cotton Leaf Curl Virus and Supporting Cotton Best Management Practices for Small Farmers | Bilateral | USDA | 4 | 579,625 |
| NEW PROJECT | CIMMYT | Africa Rising: testing permanent raised bed in Tigray; small mechanization; integrated approach of several interventions in wheat systems (3 sites in the Ethiopian highlands) | Bilateral | USAID | 4 | n/a |
| 768 | ICARDA | Turkish Staff Training Domestic & International | W3 | Turkey | 5 | 117,192 |
| 1202 | ICARDA | Pakistan Wheat Production Enhancement Program (Breeding Wheat Production Pakistan) | Bilateral | USDA | 5 | 251,303 |
| Uzbek Scientific Production Center | CIMMYT | Accelerating adoption of yellow rust resistant winter wheat varieties in Central Asia (SI 4, 5 and 8) | W1/2 | CGIAR | 5 | 217,350 |
| 1313 | ICARDA | Wheat Productivity Improvement Training Year 2 Iraq (JICA) | Bilateral | JICA | 5 | 437,009 |
| W0273 | CIMMYT | Development of Korean bread wheat lines with heat tolerance and high protein | Bilateral | RDA Korea | 5 | 150,000 |
| W0269 | CIMMYT | Improvement of crops (wheat) genetic yield potential and agricultural technologies for different agroecological zones of Kazakhstan - Phase II | Bilateral | KazAgroInnovation of the Ministry of Agriculture of Kazakhstan | 5 | 799,999 |

ANNEX 5: WORK PLANS (FIELD VISITS, SCHEDULES)

The general schedule for the evaluation and presentation of conclusions is provided in Table 11 (above).

The planned schedule/progress of the document assimilation, evaluation activities and tasks are provided below:

1. The Evaluation Team (with appropriate skills and backgrounds) was assimilated during February and March, 2014. Brief background summaries for each member are provided in Annex 2 (above).
2. The Evaluation Team was oriented via a joint 6-day Team, CIMMYT/ICARDA WHEAT meeting in late-May, 2014 at CIMMYT Headquarters. This was done concurrently with the MAIZE Evaluation Team orientation with some joint meetings (e.g. support functions) or other parallel meetings (program-specific functions) for efficiency.
3. Draft individual Evaluation Team Member responsibilities (leadership and secondary roles) by Flagship/SI and cross-cutting issues were discussed in May-June, drafted in July and finalized during September (current edition is provided in Table 10 of this document). Initial documents (GGIAR Guidelines and Review Terms of Reference, Governing Agreements,) WHEAT Program-level Proposals and Annual Reports, Objectives, IDOs vs SLOs, Budgets and Expenditures, minutes of CIMMYT and ICARDA, Management Committee and Stakeholder Committee minutes have been assimilated (for the most part) during July and early-August, are available (via "Dropbox" for review by the Evaluation Team which should be completed by late August.
4. Forty WHEAT projects including the 10 largest by expenditure and a random sample of 30 among approximately 140 WHEAT projects were identified for further project evaluations and matching analyses with program IDOs in July and are awaiting more complete up to date documentation from the Research Project Management System at CIMMYT (should be available by end of August). These will provide background for additional phone and field interviews in September and October.
5. A few Program-level objectives were identified in July and early August to serve as subjects for case studies during interviews and field visits to assess program management functions during September-October.
6. Interviews of key Collaborators/Partners, Managers and key staff have been on-going since March. Interviews will intensify during September and October and should be completed by mid-November.
7. Field/Site information gathering will occur during September and October as provided in Table 9 (above). Team responsibilities for such visits are divided to minimize travel time each Team member.
8. Team members will summarize individual findings by SI and cross cutting issues for evaluation criteria in by November 10 and will initiate collective conclusions and potential recommendations during the remainder of November.

9. These finding will be presented to as discussed with stakeholders at the end of November/early December.
10. The Team will refine and draft their detailed findings during December and January.
11. The Team Evaluation Report should be available for internal reviews in February and presentations during March-April, 2015, as appropriate with public dissemination in May, 2015.