

TERMS OF REFERENCE

For the Evaluation of CGIAR Genebanks
CRP April 2016



Independent
Evaluation
Arrangement



1 Background

1.1 Rationale and context of the Evaluation

In the CGIAR, agricultural research for development (AR4D) is implemented by 15 research Centers and their partners through CGIAR Research Programs (CRPs). The 2016-2030 CGIAR Strategy and Results Framework (SRF) approved in April 2015 sets three goals for the CGIAR research in the CRPs, termed System-Level Outcomes: reduced rural poverty, improved food and nutrition security for health, improved natural resources systems and ecosystems services. It also identifies targets for CGIAR research at a level of Intermediate Development Outcomes (IDO). Research is funded through a pooled funding mechanism in the Fund¹, and through bilateral funding to centres.

The Independent Evaluation Arrangement (IEA) of the CGIAR is responsible for external evaluations that aim to provide accountability, support to decision making, and lessons for improving quality and effectiveness of agricultural research for development outcomes. The IEA's Rolling Evaluation Work Plan (REWP) for 2014-17, approved in November 2013 by the Fund Council, foresees the evaluation of the CRP for Managing and Sustaining Crop Collections (hereafter the Genebanks CRP). This is a comprehensive 5-year research support program for the management and sustainable funding of the *ex situ* collections² of plant genetic resources held by 11 CGIAR centers in their genebanks. The CRP is a partnership between the members of the CGIAR Consortium and the Global Crop Diversity Trust (the Crop Trust) that manages the program.

1.2 The international framework for conservation of plant genetic resources

The policy context in which the CGIAR genebanks operate has evolved significantly in the past two decades. The Convention of Biological Diversity (1993) shifted emphasis from global heritage to national sovereignty over genetics resources. Subsequently, the FAO Commission of Genetic Resources for Food and Agriculture negotiated the International Treaty on Plant Genetic Resources for Food and Agriculture (the Treaty) to legislate for exchange of agriculturally important plant

¹ The CGIAR Fund is a multi-donor, multi-year funding mechanism that provides funding to (i) CRPs through two "Windows"; Window 1 across CRPs as per Consortium decision and Window 2 to donor-specified CRP; and to (ii) donor-specified Centres through Window 3.

² "Ex situ conservation" means the conservation of plant genetic resources for food and agriculture outside their natural habitat.

genetic resources under a Multilateral System of Access and Benefit Sharing.³ The Treaty is aimed at guaranteeing food security through the conservation, exchange and sustainable use of the world's plant genetic resources for food and agriculture, as well as the fair and equitable benefit sharing arising from the use of these resources. Access is provided solely for conservation and use in research, breeding and training for food and agriculture. The Governing Body of the Treaty has regular sessions every two years and it receives a report from the CGIAR.

FAO's Global Plan of Action for plant genetic resources for food and agriculture (first from 1996, second from 2011) has provided a guide and reference to conservation of genetic resources at national level and for genebanks.

The 2010 Nagoya Protocol is the most recent international agreement under the CBD that has implications also to plant genetic resources and implementation of the Treaty.

1.3 The CGIAR as custodian of plant genetic resources

In 1989, the FAO Commission called for the creation of an International Network of Ex Situ collections. In 1994, eleven of the International Agricultural Research Centers of the CGIAR signed agreements with FAO, placing most of their collections into the International Network, "in trust for the benefit of the international community".

Through Article 15 of the Treaty, the international community recognizes the importance of the *ex situ* collections of the CGIAR for the Treaty, and in turn the Centers recognize the authority of the Governing Body to provide policy guidance related to their collections, subject to the provisions of the Treaty.

As the Treaty entered into force in 2004, the CGIAR centers signed agreements with the Treaty to put their collections (even those not included in Annex 1 of the Treaty) under Article 15 as part of the Multilateral System under the purview of the Treaty.⁴

There are 11 Centres that hold *ex situ* collections of plant genetic resources (Table 1), totaling approximately 726,700 accessions. These collections are made up largely of farmers' landraces and local varieties, but include also crop wild relatives and breeding lines. Some 59% of the accessions are landraces.

³ Annex 1 of the Treaty includes 64 crops

⁴ Article 15 of the Treaty regulates the Ex Situ Collections of Plant Genetic Resources for Food and Agriculture held by the CGIAR Centers and other International Institutions

Table 1 Collections at CGIAR centers⁵

Center	Crop	Accessions in 2015
AfricaRice	Rice	19,990
Bioversity International	Banana, plantain	1480
CIAT	Beans, cassava, tropical forages	67,080
CIMMYT	Maize	>28,000
	Wheat	>140,000
CIP	Potato, sweet potato, Andean roots and tubers	17,270
ICARDA	Barley, wheat, legumes, temperate forages	146,350
ICRAF	Fruit and multipurpose trees	9,090
ICRISAT	Sorghum, millets, chickpea, pigeon pea and groundnut	119,080
IITA	Maize, banana, cassava, yam, legumes	30,390
ILRI	Tropical forages	18,720
IRRI	Rice	121,600

The Centers have agreed not to claim legal ownership over the material in their collections. The Standard Material Transfer Agreement (SMTA), stating the terms and conditions for provision and receipt of plant genetic material accessions from the genebanks accompanies each request for samples binds the recipient to the same terms, including species in CGIAR collections that are not in Annex 1.

According to the 2015 CGIAR Consortium report to the Governing Body of the Treaty⁶, the CGIAR Centers in 2014 accounted for approximately 94% of all materials transferred globally using the SMTA. The report shows that, since January 2007, CGIAR Centers have transferred over 2,680,000 samples under SMTAs to recipients in about 160 countries. Approximately one quarter of the material transferred by Centers has been from the ‘in trust’ collections and the rest Center-improved materials. The vast majority of Center transfers are to public sector organizations in developing countries and countries with economies in transition.

1.4 The Crop Trust

The Global Crop Diversity Trust was recognised through an agreement with the Governing Body of the Treaty as an element of the Treaty’s funding strategy regarding *ex situ* conservation.⁷ The endowment established by the Crop Trust is intended to support the conservation of the most important crop

⁵ The accessions data are estimates and to be updated during the Inception Phase.

⁶ <http://www.planttreaty.org/sites/default/files/gb6w20e.pdf>

⁷ <http://www.planttreaty.org/content/report-governing-body-international-treaty-plant-genetic-resources-food-and-agriculture-1> . Report of the First Session of the Governing Body of the International Treaty on Plant Genetic Resources for Food and Agriculture, Appendix M

diversity in perpetuity. Conservation is done through existing genebanks that are eligible for endowment funding at the time when the endowment will start to be used. Currently about USD 170 million has been raised for the fund while the target for supporting the international collections is estimated to require USD 500 million.⁸ The Crop Trust has an executive board.

For addressing the need of sufficient funding of the CGIAR genebanks before the endowment fund is complete, the Crop Trust and the CGIAR Consortium formed a partnership for implementing the Genebanks CRP with the aim to manage and provide sustainable support for the crop collections held at CGIAR Centers. In 2013, the Crop Trust funded about 16% of the routine activities of the crop collections for that year, with the CGIAR funding the remainder.

In addition to its support to CGIAR plant genetic resources collections and other key collections of priority crops, the Crop Trust provides support to the Svalbard Global Seed Vault⁹ (which represents a back up of the world's genebank collections) and maintains and develops Genesys, a global online portal for genebank accessions data. The Crop Trust's headquarters are in Bonn, Germany.

1.5 CGIAR genetic resources activities prior to reform

Until establishment of the Genebanks CRP, the individual genebanks were independently managed at each center and funded largely from the center's core funding, with broad coordination through the Inter-Centre Working Group on Genetic Resources (ICWG-GR) established in 1987. The Systemwide Genetic Resources Program (SGRP) that operated from 1994 until 2010, focused on collective action among CGIAR genebanks with the following aim: effective management of genetic resources as global public goods and the generation of knowledge, technologies and information for enhancing the conservation and sustainable use of agricultural, forest and aquatic biodiversity, through system-wide actions. SGRP's activities included developing system-wide policies and practices, generating technology and information, and maintaining the information database SINGER. The SGRP annual budget was around USD 6 million. The ICWG-GR acted as Steering Committee of the SGRP; after the SGRP was terminated, ICWG-GR rebranded itself as the Article 15 Group of Genebank Managers (A15G) in recognition of the importance of the agreements concluded in Article 15 of the Treaty.

The Genetic Resources and Policy Committee (GRPC) of the CGIAR also operated over the same period as the SGRP, 1994-2010. GRPC aimed at enhancing the openness and transparency of discussions on genetic resources policy issues within the CGIAR community and recommended action to the CGIAR. It monitored and analyzed policy developments concerning genetic resources (with focus on political, legal and ethical issues) at the national level and in relevant international fora (the Convention on Biological Diversity, UPOV, WIPO, among others). GRPC focused particularly on CGIAR's contribution to negotiation and implementation of the Treaty, development of the SMTA, and implications of the Treaty to the centers and CGIAR. It also drafted intellectual property guidelines for the CGIAR and helped establish the Crop Trust. In its final minutes, GRPC considered

⁸ For covering the 11 CGIAR collections and other prioritized collections, the Crop Trust was targeting a fund of USD 850 million in total.

⁹ The purpose of the Vault is to store duplicates (backups) of seed samples from the world's crop collections.

that the complexity of the overall mix of policies, laws and political uncertainties required that the CGIAR had continuing access to policy advice.

In 2011, the CGIAR Consortium Board commissioned a scoping study for exploring how genetic resources issues would best be addressed in the reformed CGIAR, given that genebanks have both a research and a service role and that genebank issues generally cut across CRPs and centers.¹⁰

2 Overview of the Genebanks CRP

2.1 Purpose and principles

The Genebanks CRP is a research support program that was approved for five years (2012-2016) for management and the sustainable funding of the crop collections held in the 11 CGIAR center genebanks. The CRP is a partnership between the CGIAR Consortium and the Global Crop Diversity Trust.

The objective of this research support program is to conserve the diversity of plant genetic resources in CGIAR-held collections and to make this diversity available to breeders and researchers in a manner that meets high international scientific standards, is cost efficient, secure, reliable and sustainable over the long-term, and is consistent with the Treaty. The Crop Trust coordinates the Genebanks CRP as “Project Manager” per an agreement between the CGIAR Consortium and the Crop Trust. Bioversity International acts as “Lead Center” but its role is limited to distributing funds on instruction from the Crop Trust. Through the Genebanks CRP, the Crop Trust has oversight and financial responsibility for the CGIAR genebanks.

The Genebanks CRP feeds into the CGIAR’s System Level Outcomes through the other CRPs. The conservation and availability of plant genetic resources is a prerequisite for crop research and breeding, thereby feeding into higher order goals.

The endowment funding provided as long term grants to nine of the Centers is an integral part of the Genebanks CRP. These long-term grants are applied and administered within the framework of the Crop Trust’s Fund Disbursement Strategy. The principles of this Strategy are presented below.

- The CGIAR conservation systems, to be effective, must carry out the following functions, at a minimum: acquisition, storage and maintenance, safety, duplication, regeneration, multiplication, characterization, evaluation, documentation, distribution and promotion of the use of genetic material.
- Existing institutions and facilities constitute the starting point, and these should not be duplicated or substituted where they are already accomplishing their task.
- Activities must be based on sound scientific and technical principles, to be effective. Due account must also be taken of whether the political and social circumstances where the collection holder operates are supportive or not of the collection holder fulfilling its obligations.

¹⁰ https://library.cgiar.org/bitstream/handle/10947/2701/CGIAR_Consortium_Board-Commissioned_Genetic_Resources_Scoping_Study.pdf?sequence=1

- Increasing overall efficiency and effectiveness is to be pursued through specific system wide actions such as developing common databases, reducing unnecessary duplication, achieving a better division of labour, harmonising quality assurance standards and performance reporting, and strengthening collaborations.
- A robust global conservation system requires and benefits from concrete participation by all relevant institutions, not just those directly involved in providing long-term storage services and not just the Centers of the CGIAR. The Centers have a role in creating a rational and effective system for the conservation and availability of the gene pools of the various crops they have prioritized.

2.2 Objectives and activities

The 2012 Genebanks CRP Proposal¹¹ provides an overview of the main genebanks activities under four objectives elaborated below. The Proposal also set long term targets for the activities to guide the annual work-plans. Performance Management Indicators were also set and made subject to modifications during annual work-plans and budget reviews.

Objective 1: Crop and Tree Diversity in International Collections under Article 15 (ITPGRFA) is secured in perpetuity.

Activities:

- Long-term (LTS) and medium term storage (MTS): Routine maintenance of cold rooms and monitoring viable stock (for seed crops); Routine maintenance of cryopreserved accessions (Bioversity, CIP & CIAT), field and in vitro collections
- Safety duplication of viable accessions at another genebank (first level) and in Svalbard Global Seed Vault (second level)
- Safety duplication of cryopreserved accessions (Bioversity) and/or in vitro/field collection (CIAT, CIP, IITA)

Objective 2: Conserved crop and tree germplasm is clean, available and disseminated

Activities:

- Regeneration and characterization: growing out and characterization of accessions from LTS that have declined in viability; regular renewal of aged tissue cultures by growing out
- Disease Testing and cleaning (at the Seed Health Unit within the Center): Testing and in some cases cleaning of diseases at the Center Germplasm Health Unit for accessions entering and/or leaving the cold rooms or growth chambers.
- Introduction of new accessions: new accessions are fully integrated into the collection to fill gaps in the coverage of the gene pool
- Multiplication and Dissemination: provision of samples of accessions as requested. Where necessary multiplying samples to ensure appropriate levels of MTS stock are maintained.

¹¹

https://library.cgiar.org/bitstream/handle/10947/2567/Support_Center_Genebanks_proposal_2012.pdf?sequence=1

Objective 3: Use of Conserved crop and tree diversity is informed and facilitated

Activities:

- Managing information for accessions management and use: Maintaining, improving and expanding datasets for management of accession and for promoting their use.
- Genesys: uploading and updating of data in the global portal for accession-level data.

Objective 4: Crop and tree diversity is conserved within a rationalized, cost effective and globalized system

Activities:

- Developing partnerships and exchange of services: Partnerships built and strengthened to create a strong global system of support and role-sharing.
- Rationalization and optimization of collections: strategies to be prioritized and implemented relating to issues raised within all operations (e.g. improving conservation procedures, structuring collections, sharing of clear roles between same-crop collections).
- Establishing and updating [Quality and Risk Management Systems \(QMS\)](#), genebanks operation manuals and staff retention plan.

The objectives are closely aligned with objectives of the CRPs working on agri-food systems. In general the routine operations of the genebanks are not included in the budgets of these CRPs, although there are some exceptions regarding newly-acquired accessions, distribution and training.

Genetic resources policy issues related to international agreements and other policy matters of relevance to the CGIAR and the genebanks' operations has not been within the Genebanks CRP mandate. This has been because the Crop Trust has its own role and position in Treaty meetings and negotiations, which are thus not mixed with the CGIAR's relations with the Treaty members and initiatives.

Data sharing and communication

Genesys, launched in 2008, is the online gateway to an accession-level information system managed by the Crop Trust. It eventually replaced SINGER, the information system that applied solely to CGIAR collections. It currently contains information on >2.6 million genebank accessions, around a third of the world's genebank samples. It serves breeders and other genebank users to search for and request accessions located in 446 institutes around the globe. Genesys is intended to be a single entry-point to global PGR information.

Other data sharing and communications platforms that the Genebanks CRP links with through the Crop Trust include the **GRIN-Global** genebank data management software and **DivSeek**, an initiative in partnership with a wide consortium of institutes, that aims at linking genebanks data with genomic data by promoting common data standards and best practices.

2.3 Program management and governance

The Crop Trust is responsible for management of the Genebanks CRP. The CRP Management Team, placed in Bonn, is led by the Deputy Executive Director of the Crop Trust. The management Team includes a technical expert and other Crop Trust staff. It is responsible for overall leadership, management and administration of CRP as well as management of finances. The Management Team liaises with the Center genebank managers as needed through the A15G; the Executive Committee of the A15G participates in monthly tele-conferences with the Management Team. The Crop Trust Board and the Executive Director play an oversight role on the management to ensure full execution of the program.

2.4 Funding and budget

The Genebanks CRP manages funding for the CGIAR genebanks that comes from the CGIAR complementing the long-term grants (LTG) provided by the Crop Trust from the endowment. The endowment fund's current target size is USD 850 million, of which USD 500 million will be for long-term funding of the international collections. The target in the Proposal was to reach USD 500 million by the end of the CRP's first phase. Currently the endowment has reached USD 170 million. Thus far, approximately 95% of the endowment's value has been provided by 14 national governments and the remainder by the private sector. The Genebanks CRP funding sources are shown in Table 2.

Table 2. Funding to Genebanks CRP 2012-2014¹²

Sources	2012		2013		2014	
Windows 1 & 2	18,200,000	82.5%	18,400,000	71%	19,553,000	76%
Window 3		0%	109,800	0%	24,001	0%
LTG¹³	2,522,928	11.5%	2,246,535	8.6%	2,291,465	8.9%
Other Bilateral funding	928,461	4%	5,166,975	20%	2,818,198	11%
Center funds	434,091	2%	147,388	1%	1,093,085	4%
Total Funding	22,085,480	100%	26,070,698	100%	25,779,749	100%

Source: from the Financial Reports to the Consortium Office

The Crop Trust uses the endowment interest for LTGs to the center genebanks. The interest on the endowment has been about 4% annually. Bilateral funds, the majority coming from Germany, go directly to centers. Among the Centers, CIMMYT has the highest share of bilateral funds (30% of the total Bilateral Funds in 2012, 18% in 2013 and 21% in 2014) while AfricaRice the lowest (approx. 2%) W3 funds are paid directly to the Centers.

¹²2012 was the first year of operations for the Genebanks CRP. Figures for 2015 are currently being confirmed.

¹³ Bilateral funds consist of LTG contributions and other bilateral funding. LTGs are funds that the Crop Trust provides to the Centers: 4% of the endowment fund is withdrawn to pay LTG operations and Crop Trust operations.

Table 3. Costs of Genebanks CRP 2012-2016¹⁴

Program Budget	2012	2013	2014	2015	2016
Core requirement for Centers	15.9	16.3	16.6	17	17.3
Management and Program costs	0.8	0.8	0.9	0.9	0.9
Additional Requirements	4.1	4.2	4.3	4.3	4.4
Total	20	20.5	20.9	21.3	21.7
<i>Details of Additional Requirements</i>					
World Agroforestry	1.0	1.0	1.0	1.1	1.1
Cryobanking	0.6	0.6	0.6	0.6	0.7
Additional acquisitions and collecting	0.2	0.2	0.2	0.2	0.2
Optimizing collections	0.8	0.8	0.8	0.9	0.9
Global outreach, capacity building	0.8	0.8	0.8	0.9	0.9
Genesys and GRIN Global	0.7	0.7	0.7	0.7	0.7

Genebanks CRP costs are shown in Table 3. As well as core requirements for the maintenance of the genebanks, the CRP funds cover CRP management costs (~USD 0.5 million p.a), mainly for salaries of the Crop Trust staff, and Programme costs (~USD 0.3 million p.a.) to cover annual CRP meetings, reviews and consultancies.

The CRP costs include a series of activities under the subtitle of “additional requirements” which are developed and financed in different ways; funds for collecting were allocated competitively to prioritized proposals, while optimizing funds were allocated for the implementation of action plans to address review recommendations. Decisions on funding allocation are made either by the Centers at the annual meeting AGM or by the Management Team.

The Crop Trust also supports the Svalbard Global Seed Vault, which provides the back-up for the global system, including the CGIAR crop collections and thus serves the CGIAR while not a Genebank CRP activity, nor a cost.

3 The Evaluation

3.1 Evaluation purpose

The primary purpose of this evaluation is to support the improvement of the efficiency, effectiveness and sustainability of the management of the CGIAR’s genebanks for secure conservation and enhanced use of the collections. The evaluation will provide essential evaluative information for decision-making by the CGIAR System Council, Genebanks CRP Management, the Crop Trust and CGIAR Centers with genebanks. At a time when the first phase of the Genebanks CRP is ending, the evaluation will provide an assessment of the CRP’s performance since its beginning and provide lessons and recommendations to strengthen the operations and management of the Program in its next phase. It will also provide lessons on system level genebank issues under the CRP structure.

The evaluation will assess the extent to which the CRP has made progress in achieving the desired results according to its objectives and has brought about positive changes in key areas of activity.

¹⁴Includes projections for 2016.

3.2 Stakeholders

The key stakeholders of this evaluation include Genebanks CRP management and the Crop Trust, CGIAR Centers that manage genebanks, and researchers and partners who use genebanks, the CGIAR Fund/System Council and other donors funding genetic resources related activities, and the Consortium/System office. FAO is singled out as an important stakeholder of this evaluation.

Table 4. Evaluation stakeholders

Type of stakeholder	Role	Interest in evaluation
CGIAR System/Fund Council	Oversight on use of funds for CRP	Accountability, CRP performance, decision making for resource allocation
CGIAR System office/Consortium	Annual reporting, funds disbursement	Lessons learnt to increase reporting efficiency
Genebanks CRP management	Management of the CRP	Lessons learnt to increase CRP performance
Crop Trust	Hosting and oversight of Genebanks CRP	Lessons learnt about CRP effectiveness and Crop Trust performance as manager
11 CGIAR Center management and Boards	Accountability and oversight of Center genebanks	Accountability and learning regarding genebank management and performance
CGIAR genebank management and curators	Management of Center genebanks	Lessons on genebank performance, synergy and effectiveness
Researchers dealing with genetic resources	Research on genetic resources	Lessons on genetic resources management and use through research
FAO	Authority over the Global Plan of Action. Convenor and host of the Treaty, which relies on FAO's legal personality including signing the agreements with the CGIAR collections.	Lessons on accountability and efficiency regarding international commitments; lessons to the Governing Body of the Treaty
NARS breeders and crop researchers, national genebanks	Collaborators and recipients of germplasm	Lessons on CRP and genebanks' performance regarding conservation, access and distribution

These stakeholders will be consulted and engaged throughout the evaluation through structured interviews, surveys and genebanks visits. A reference group of experts will be convened (see below).

3.3 Scope

The evaluation will cover all activities of the Genebanks CRP since its initiation in 2012 and as identified in the CRP proposal and Performance Agreement. The summative component of the evaluation will address both the efficiency and effectiveness of Genebanks CRP's service functions and the extent to which the genebank operations have improved as a result of the CRP. These include meeting standards, supporting the fulfillment of obligations under the Treaty, achieving harmonization and cost-efficiency in genebanks management and securing essential coverage of collections.

Furthermore, the CRP performance will be assessed against the objectives of improving long-term sustainable funding of the crop collections and enhancing knowledge management through information services (including Genesys and individual genebank data management), communication and collaboration. To the extent relevant, the evaluation will use the CGIAR arrangements at the System and Center levels preceding the establishment of the Genebanks CRP as benchmark.

The evaluation will also assess the roles, responsibilities and relationships of the Center genebanks, Genebanks CRP management, the Crop Trust, the Consortium and Consortium office and the Fund Council. The evaluation will cover the appropriateness of the governance (role of the Crop Trust as lead organization of the Genebanks CRP vis-à-vis its broader mandate) and management mechanisms (structure, leadership and CRP management interaction with Center genebanks), and monitoring and reporting.

The formative aspects of the evaluation will address the extent to which the long-term objectives of Genebanks CRP are likely to be reached considering future financial sustainability and realization of the endowment, integration and synergy across Centers and CRPs, the changes in CGIAR governance and funding. This evaluation will explore the interlinkages and interdependencies of the Genebanks CRP and the research CRPs as they are likely to evolve in the future and comment on plans for the next phase of the Genebanks CRP.

While the Genebanks CRP has not had responsibility over genetic resource policy matters, the evaluation will be framed in the context international and national genetic resources policies and agreements where the CGIAR has commitments and reputational stake. The evaluation will thus explore the importance of the policy context to achieving the objectives of the Genebanks CRP. It will also consider the adequacy of system level dialogue and decision making on important genetic resources issues.

The evaluation will also address other issues, such as representation of CGIAR genebanks externally, and research aspects that are essential for the achievement of the overall objectives such as accession health and genetic resources policy where the Genebanks CRP currently does not have a role.

3.4 Criteria and issues

The evaluation will address the Genebanks CRP for the efficiency and effectiveness of its management function and the genebank operations as a result of the CRP; sustainability of long-term conservation of crop collections as an objective of the CRP, and the appropriateness of the CRP management and governance arrangements. A set of broad (but not exhaustive) issues and tentative evaluation questions is presented below. The specific evaluation questions will be refined and elaborated during the inception phase by the Evaluation team in consultation with relevant stakeholders.

Issues on efficiency and cost-effectiveness of genebank operations:

- The extent to which the Genebanks CRP has enhanced synergy and harmonization of operations across CGIAR genebanks;

- The extent to which Genebanks CRP has led to increased optimization and cost-efficiency of CGIAR crop collections conservation and management, including decisions on the coverage of diversity conserved and extent to which collections are available for use;
- The extent to which the Genebanks CRP has improved the reporting and accountability of the CGIAR genebanks to the Fund Council;
- The extent to which the Genebanks CRP has enhanced genebanks data management in terms of completeness, sharing and service to genebank use;
- Enhanced communication among involved parties; Centers management and genebanks, Consortium Board and Office, The Crop Trust, Fund Council through the Genebanks CRP;
- Efficiency of the representation of the CGIAR genebanks and reporting to the Treaty Governing Body under the current CRP arrangement.

Issues around enhancing effectiveness of genebank operations:

- Targets related to objectives and timelines of the Genebanks CRP and whether they are clear and realistic;
- Progress towards achieving the targets;
- Effectiveness of Genebanks CRP in enhancing genebank operating standards across the CGIAR;
- Effectiveness of System-level dialogue and decision-making on issues related to genetic resources under the current CRP arrangement;
- Other issues currently not covered by the Genebanks CRP that influence the effectiveness of the conservation and use of the crop collections.

Issues related to the sustainability of genebank operations:

- The extent to which the Crop Trust has fulfilled its obligation to provide endowment funding for the longer-term sustainability and security of the crop collections in the CGIAR;
- The level of attention under the Genebanks CRP arrangements to research and implement state-of-the-art conservation techniques for sustaining the long-term viability of the crop collections;
- Financial security and sustainability of the genebanks;
- Evolution of partnerships between the CGIAR center genebanks and external partners in the course of the CRP.

Issues related to management and oversight:

- Transparency of fund allocation across genebanks;
- Effectiveness of the management instruments and processes;
- Crop Trust role and influence on technical and financial management of the CRP;
- Appropriateness of the Genebanks CRP Governance arrangements;
- Efficiency and transparency related to Genebanks CRP leadership and staffing arrangements.

3.5 Approach and methodology

The evaluation will be primarily desk-based. Document review will be a major component of the methodology, including review of documents related to the approval of the Genebanks CRP, Annual Reports to the Consortium Office and Fund Council, Selected CGIAR documents regarding System-level

strategies and genebank activities, policies and plans prior 2012, and other evaluative studies and reviews available, such as the genebanks costing study commissioned by CGIAR and the Crop Trust in 2010.¹⁵

The evaluation will make use of genebank reviews carried out by the Genebanks CRP management (reviews of seven genebanks completed to date); the online reporting tool, the 2015 self-evaluation on management and communication; and the audit carried out by the Internal Audit Unit of the Consortium in 2015. The Evaluation team will also be informed by the Genebanks Platform proposal and documents related to its appraisal.

Interviews will be another main component of the evaluation. Stakeholder groups to be interviewed will include Center genebank curators and researchers, CGIAR and the Crop Trust governance, donors, major agencies involved in genetic resources conservation and policies such as FAO, and peers in genebank management and genetic resources research and data systems, including national systems and breeders in developing countries.

The evaluation will be conducted in close collaboration with the Crop Trust and the Genebanks CRP management, and the Center genebanks. A limited amount of travel will be included, for holding team meetings and for gathering and verifying evidence.

3.6 Main limitations to the evaluation

The evaluation will focus on the Genebanks CRP, which has a management and service function, rather than the 11 CGIAR center genebanks, the operations of which largely reflect the extent to which the CRP has been successful. Both the evaluation's remit and its resources limit the extent to which it can collect primary information about the genebank operations. Therefore, the evaluation will use review reports and other documents, representative sample of interviews and limited ground-truthing to gather evidence on the evaluation questions and validate its findings.

There are a number of boundary issues that influence the core objectives of the Genebanks CRP to make CGIAR crop diversity available to breeders and researchers. Such issues relate to policy and research that have not been part of the CRP's mandate, and the complementarity of conservation and research that the evaluation can explore only to a limited extent.

The evaluation is occurring as the proposal for the second phase of the Genebanks CRP (under name Genebanks Platform) is being assessed. The final evaluation results will therefore not be available in time for feeding into the proposal development and assessment process but are aimed at informing program implementation.

¹⁵ Shands H, G Hawtin, and G MacNeil. 2010. The Cost to the CGIAR Centres of Maintaining and Distributing Germplasm.

4 Evaluation management

4.1 Evaluation phases and timing

The evaluation is scheduled to take place between March and December 2016. The evaluation schedule is shown in Table 5.

Table 5. Evaluation schedule and main deliverables

Phase	Period	Main outputs	Responsibility
Preparatory Phase	Jan-April 2016	Final ToR Evaluation team recruited	IEA
Inception Phase	April-June	Inception Report	Evaluation team
Inquiry phase	June-September	Analysis products as defined in inception report	Evaluation team
	August 2016	Preliminary findings	Evaluation team
Reporting phase	Sep–Nov	Draft Evaluation Report	Evaluation team
	Dec 2016	Final Evaluation Report	Evaluation team
Dissemination phase	Jan 2017		IEA, Team leader

Preparatory phase

During the preparatory phase the IEA, in consultation with relevant stakeholders, will review key documents and define the scope and issues surrounding the evaluation.

The IEA will carry out the following tasks:

- finalize the Terms of Reference (TOR);
- select the evaluation Team leader and in consultation with her/him, the Evaluation team
- set up an Resource Group for the evaluation.

Inception phase

The inception phase is the responsibility of the Team leader with the IEA Evaluation Manager. The tasks during the inception phase include:

- review of information pertaining to the Genebanks CRP and center genebanks;
- refine the evaluation questions, the methods and sources of evidence for addressing them and a plan for data collection methods/instruments (to be presented in an evaluation matrix);
- draw up a preliminary list of strategic issues of importance for emphasis during the inquiry phase;
- specify the evaluation timetable which includes plan for field visits;
- prepare indicative evaluation report outline and division of roles and responsibilities among the team.

These elements will be drawn together in an evaluation inception report to be agreed between the team and the IEA, which will subsequently represent the contractual basis for the team's work and deliverables of the evaluation.

Inquiry phase

During the inquiry phase the Evaluation team will collect the evidence according to the plan detailed in the inception report, completes its analysis and prepares a preliminary list of findings.

Reporting phase

The team prepares a draft report for sharing with Genebanks CRP management for comments and factual corrections and with stakeholders for feedback and subsequently finalizes the evaluation report taking into account these comments according to the team's judgement.

4.2 Evaluation team qualifications

The evaluation Team leader will have a suitable background relating to genebank management and genetic resources conservation and use, and the CGIAR's mandate, as well as solid experience in leading evaluations of complex programs. The Team leader will be supported by a team of experts who will among them have extensive and proven experience at international level, working for research or development agencies on issues, programs and policies related to agriculture and natural resources and conservation issues.

The team will consist of two experts in addition to the Team leader. Among its members, the team will have an excellent understanding and knowledge of genetic resources and technical conservation issues, and partnerships, communication and management related to research and the substance of the CRP.

4.3 Evaluation governance/roles and responsibilities

The Evaluation will be conducted by an independent team of experts (the Evaluation team). The 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 listed in section 4.4.

The IEA will be responsible for planning, initially 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. An evaluation manager supported by an evaluation analyst will provide support to the team throughout the evaluation.

The IEA will set up a Resource Panel consisting of a range of stakeholders with expertise and experience in genebank management, genetic resources conservation and use, international agreements and genetic resources policy from national and international perspectives. The Resource Panel will serve as a sounding board that will draw the Evaluation team's attention to important issues, relevant contacts and sources of evidence, and provide feedback during the inception and report preparation phases.

The Genebanks CRP Management, the Crop Trust, the CGIAR governing bodies (according to the new arrangement in 2016) and the Center DGs and focal persons (genebank managers) play a role in catering for the Evaluation team's needs for information throughout the evaluation. They will provide documentation and data, access to staff for engagement with the evaluators, and information on partners and stakeholders. They will facilitate arrangement of site visits and appointments within the Centers and with other stakeholders. These actors will be also responsible for giving factual feedback on the draft evaluation report.

Adequate consultations with evaluation stakeholders will be ensured by the Evaluation team and the IEA throughout the process, with debriefings on key findings held at various stages of the evaluation.

4.4 Deliverables and dissemination of findings

The Inception Report: the Inception Report, which builds on these terms of reference for the evaluation, outlines the Evaluation team's proposed approach to the main phase of the evaluation as follows: (i) elaborating the scope and focus of the evaluation; (ii) developing the methodological tools for gathering evidence; (iii) providing a detailed evaluation matrix; (iv) clarifying the analytical frameworks to be used by the evaluation; and (v) providing a detailed work plan for the evaluation.

The Evaluation Report - the main output of this evaluation - will describe findings and conclusions, based on the evidence collected in the framework of the evaluation questions defined in the Inception Report, and recommendations logically following the conclusions. The recommendations will be evidence-based, relevant, focused, clearly formulated and actionable. They will be prioritized and addressed to the different stakeholders responsible for their implementation. The main findings and recommendations will be summarized in an executive summary.

Presentations: The Team leader will present the Report to key CGIAR stakeholders through different means that may include slide shows and Webinars to targeted audiences. The IEA will interact the main stakeholders (CRP Management, the Crop Trust, the Consortium/System Office and the Centers) for the preparation of the management response. Given that this is a cross-cutting, thematic evaluation and that the CGIAR is undergoing a governance reform, the details about the management response will be decided at a later stage.