TERMS OF REFERENCE FOR THE PROCUREMENT OF EQUIPMENT TO SUPPORT THE OBPE SEED CENTER

1. IFDC Overview

The International Fertilizer Development Center (IFDC) was established in 1974 in the U.S. state of Alabama as an independent, non-profit public organization. Since its creation, the organization has played an essential role in global food security, hunger and poverty reduction, environmental protection, and the promotion of economic development and self-sufficiency.

IFDC began its activities in Burundi in 2007, focusing on soil fertility, land management, seed sector development, market access, and value chain development. Through its actions in Burundi from 2007 to 2024, IFDC contributed to increased agricultural productivity and production as a result of improved farm management and improved availability and accessibility of good-quality agricultural inputs.

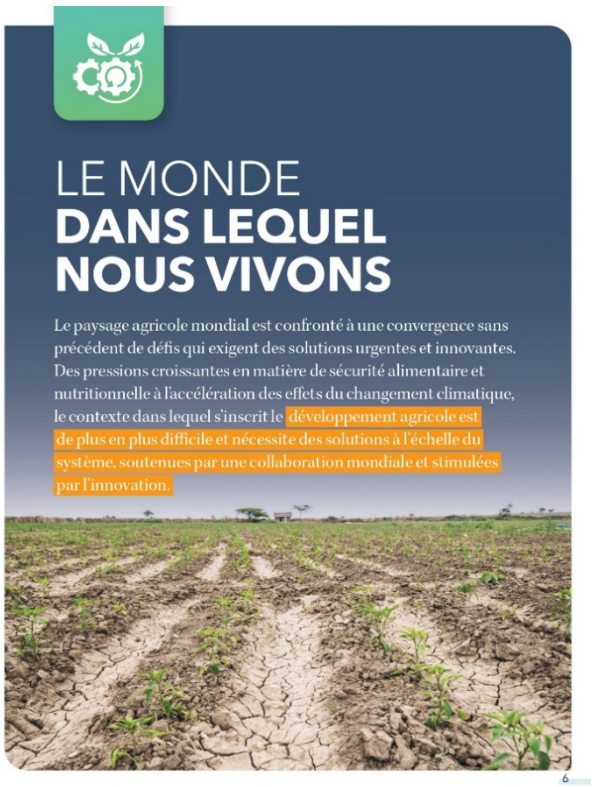
Vision

"Healthier soils and plants for a sustainable and environmentally responsible world."

Mission

"To jointly invest in innovative research, market expertise, and strategic public- and private-sector partners in order to identify and implement sustainable soil and plant nutrition solutions that benefit farmers, entrepreneurs, and the environment."

IFDC Global Strategy (2020–2030), currently being updated



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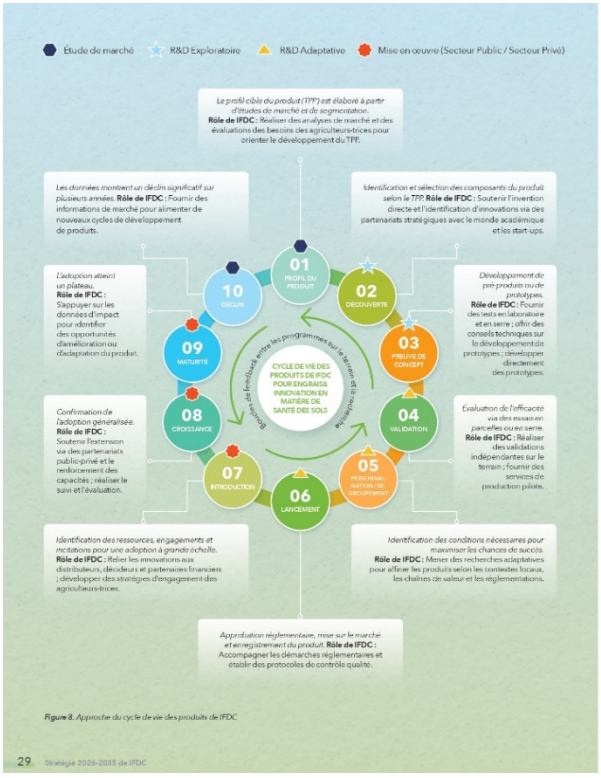

The sustainable implementation of this strategy requires synergy and a shared overall vision among all development actors operating in the field. It also requires sustained support to the Burundian education system in general, and technical education in particular, in order to bring competent technicians and professionals to the labor market. This will also help strengthen learners' practical skills.

It is in this context that IFDC Burundi's PSSD2 and PAGRIS PO projects are taking the initiative to support the Burundian education system by assisting the University of Burundi, through the ISFA faculty, in updating its curricula to align them with scientific developments and current requirements.

This will begin with training for lecturers on the ISFM approach and the seed production module combined with seed entrepreneurship, approaches for promoting quality seed, and the PIP approach.

Understanding these tools will help guide the experts on the content to be incorporated into the training curricula.

2. Overview of the PAGRIS Phase-Out Project

In view of the decision by the Dutch Ministry of Foreign Affairs to close its Embassy in Burundi in 2027, IFDC was requested to propose a gradual and responsible strategy for sustaining the achievements of the PAGRIS project. It should also be noted that this sustainability strategy is based on mechanisms for transferring project achievements to authorized public institutions, field stakeholders and target communities, as well as through other potential donors and funding opportunities.

As a reminder, the PAGRIS project (Project to Support Responsible and Integrated Soil Management) has been implemented by IFDC since March 2020 until 31 August 2025, in partnership with TWITEZIMBERE ASBL and Wageningen University & Research (WUR). The project aims to promote "*more sustainable and environmentally friendly management of*

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Burundian agricultural land in order to improve food security and increase the incomes of farming households."

To this end, the project identified and implemented activities addressing the challenges of sustainable soil management in Burundi at four distinct levels: (i) at farm level through a "household" approach based on Participatory Integrated Planning (PIP), Integrated Plot Plan (IPP), and Integrated Soil Fertility Management (ISFM); (ii) at sub-watershed level through a community approach based on the PIP watershed, site plan, and hill plan approach; (iii) at national level through support to research, policy development, technical education, and the private sector; and (iv) at the level of highly acidic farms through the promotion of dolomite use to correct soil acidity and sustainably restore soil fertility.

Funded for the period from 1 September 2025 to 31 December 2026, this PAGRIS phase-out project aims to ensure the gradual and responsible sustainability of the project's technical, organizational, and institutional achievements through local capacity strengthening and the establishment of sustainable mechanisms.

Specifically, this PAGRIS phase-out period will make it possible to:

- Transfer skills and tools to local structures and direct beneficiaries;
- Strengthen ownership of responsible planning practices and sustainable soil fertility management by communities, technical services, and local administration;
- Institutionalize the practices and innovations introduced or initiated by the project in the plans of the relevant ministries, provinces, and communes;
- Establish an autonomous local monitoring and evaluation mechanism.

To achieve these objectives, four main results, together with their activities and sub-activities, have been identified and are described in the following paragraphs:

Result 1: By December 2026, the sustainable structures identified in the PAGRIS area (public services, local NGOs, cooperatives, and religious organizations) are aware of soil degradation and soil fertility issues, take ownership of the PAGRIS strategy/approach, and implement it through their community strategic plans;

Result 2: By December 2026, farming households supported by the PAGRIS project are more autonomous and make informed decisions in the management of their farms and sites;

Result 3: By December 2026, new technologies and good practices from research services, knowledge centers, and extension services are disseminated to users who take ownership of the results;

Result 4: Monitoring, evaluation, and capitalization of the PAGRIS project achievements, and dissemination of results.
IFDC intends to achieve these results by relying on its public and private partnerships. Achieving these results will only be possible if all stakeholders take ownership of and share a common understanding of the activities planned for this phase-out period.

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3. Context and Justification

As part of the implementation of its soil management program through the PIP approach and the ISFM approach (Integrated Soil Fertility Management), the PAGRIS project supports actions aimed at promoting sustainable and resilient agricultural systems in response to land degradation and the effects of climate change. This program is based in particular on protecting soils against erosion, improving their fertility, and promoting sustainable agricultural practices that foster better agricultural productivity.

Among the practices promoted, agroforestry occupies an important place. Integrating trees into agricultural systems contributes to improving soil fertility through the supply of organic matter, nitrogen fixation by certain species, and nutrient recycling by deep roots. Agroforestry also contributes to protecting soils against erosion, diversifying income sources, supplying fuelwood, and restoring degraded landscapes.

Since October 2020, the PAGRIS project has implemented several agroforestry activities in collaboration with rural communities, the Burundian Office for Environmental Protection (OBPE), the Institute of Agricultural Sciences of Burundi (ISABU), the Faculty of Agronomy and Bioengineering of the University of Burundi (FABI-UB), as well as other technical and scientific partners. These activities have focused in particular on the production and planting of agroforestry trees, an inventory study of agroforestry systems, technical exchanges on priority agroforestry species, and the development of a national agroforestry roadmap.

The various consultations and exchanges held with actors in the sector highlighted several major constraints related to the availability and quality of agroforestry seeds. OBPE, the main producer of forest and agroforestry seeds in Burundi, faces growing demand that it struggles to meet, particularly for certain priority species such as *Grevillea robusta*, *Calliandra calothyrsus*, and other agroforestry species that are in high demand in the project intervention areas.

The analyses carried out also revealed technical shortcomings at the seed center, particularly in terms of:

- germination control;
- moisture measurement and management;
- seed cleaning, sorting, and grading;
- seed conservation and storage under controlled conditions;
- traceability and management of seed lots.

The absence or obsolescence of certain equipment currently limits the center's capacity to ensure sufficient production of quality seed, maintain germination capacity, and respond effectively to the growing needs of agroforestry and landscape restoration programs.

Furthermore, seed conservation remains a major challenge due to constraints related to climatic conditions and energy instability. The establishment of a hybrid cold room powered by both solar energy and the electricity grid therefore represents an appropriate solution for sustainably improving storage conditions and reducing losses in seed viability.

To address these challenges, the national agroforestry roadmap recommends in particular:

- strengthening the technical capacities of the seed center;
- acquiring quality control and seed processing equipment;
- improving conservation and storage systems;

- developing seed management and traceability tools.

Given its national mandate, experience in forest seed production, and territorial coverage, OBPE is the institution best placed to sustainably carry these strategic investments forward.

It is in this context that the International Fertilizer Development Center (IFDC), through the PAGRIS project, plans to support OBPE through the acquisition, transport, installation, and commissioning of technical equipment intended for quality control, processing, conservation, hybrid cold storage, and traceability of agroforestry seeds, in order to sustainably improve seed availability and quality in Burundi.

4. Objectives of the Activity

To strengthen the technical and operational capacities of the seed center of the Burundian Office for Environmental Protection (OBPE) through the acquisition, installation, and commissioning of equipment suitable for quality control, processing, conservation, and traceability of agroforestry seeds, in order to sustainably improve the availability and quality of seeds intended for agroforestry and landscape restoration programs.

5. Expected Results

Result 1: The capacities for germination control of agroforestry seeds are strengthened

The seed center of the Burundian Office for Environmental Protection (OBPE) has adequate equipment to carry out germination tests and monitor the temperature and humidity conditions required to assess the quality of agroforestry seeds.

To achieve this result, two pieces of equipment will be acquired:

- the controlled germination chamber (Lot No. 1); and
- digital thermo-hygrometers (Lot No. 2).

The controlled germination chamber makes it possible to reproduce optimal germination conditions (temperature, humidity, and light) for different agroforestry species. This makes it possible to obtain more reliable results on the actual germination rate of seeds before they are distributed to nurseries.
The digital thermo-hygrometer will make it possible to monitor and control temperature and humidity variations in storage and testing areas, thereby reducing the risk of seed deterioration caused by poor environmental conditions.
This will make it possible to:

- improve the reliability of germination tests;
- reduce losses related to the use of non-viable seeds;
- strengthen quality control of seed lots produced and distributed.

Result 2: Capacities for moisture control, conservation, and seed storage are improved

Seed moisture measurement, drying, conservation, and storage operations are strengthened in order to preserve the germination capacity and quality of agroforestry seed lots.

The equipment that will contribute to this result includes:

- the drying oven/laboratory drying oven (Lot No. 3);
- the seed moisture meter (Lot No. 4);

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- the analytical balance (Lot No. 5);
- the digital thermo-hygrometer (Lot No. 2);
- the hybrid cold room (Lot No. 6).

The drying oven/laboratory drying oven will make it possible to reduce seed moisture after harvest to the recommended levels for conservation, thereby limiting the risks of mold development and seed deterioration.

The seed moisture meter will make it possible to accurately measure the moisture content of the different lots before storage. This will facilitate decision-making on the level of drying required before conservation.

The analytical balance will make it possible to carry out precise measurements during laboratory analyses, particularly for moisture tests and seed quality trials.

The hybrid cold room powered by solar energy and the electricity grid will make it possible to maintain stable temperature conditions despite constraints related to power outages. This thermal stability will help slow the physiological deterioration of seeds and extend their shelf life.
The acquisition of the drying oven/laboratory drying oven, seed moisture meter, analytical balance, digital thermo-hygrometer, and hybrid cold room will make it possible to:

- better control seed moisture content;
- reduce quality losses caused by poor storage conditions;
- extend seed conservation duration ;
- ensure more stable conservation through a hybrid solar and grid-powered system adapted to local energy constraints.

Result 3: Capacities for seed sorting, cleaning, and purity analysis are improved

The seed center is equipped to ensure the cleaning, grading, size sorting, and physical analysis of agroforestry seeds in order to improve the quality and homogeneity of the lots produced and distributed.

The seed cleaner and grader will make it possible to separate seeds from debris, dust, plant fragments, and damaged seeds. This will result in cleaner lots of better commercial and technical quality.

The sieve sets will make it possible to classify seeds according to their size and grade in order to improve lot homogeneity and facilitate sowing operations in nurseries.

The required equipment includes:

- the seed cleaner and grader (Lot No. 7);
- the sieve sets (Lot No. 8).

The acquisition of the seed cleaner and grader, sieve sets, and laboratory accessories will make it possible to:

- remove impurities and debris;
- improve the physical quality of seeds;
- standardize the lots distributed;
- increase the efficiency of seed processing operations.

Result 4: Nursery production and characterization capacities are strengthened

Germination trials, characterization, and agroforestry seedling production are facilitated through the acquisition of materials adapted to nursery activities.

- Planting trays (Lot No. 9),

will improve germination trials and seedling production by ensuring better management of substrate, drainage, and seedling spacing.

The acquisition of planting trays and nursery equipment will make it possible to:

- improve germination and growth trials;
- strengthen agroforestry seedling production capacities;
- facilitate demonstration and applied research activities.

Result 5: The seed lot traceability and identification system is improved

The seed center has tools that enable better identification, management, and traceability of agroforestry seed lots produced and conserved.

- The label printer (Lot No. 10),

will make it possible to produce standardized labels containing essential information on seed lots, including species, origin, harvest date, germination rate, and storage conditions.

The acquisition of the label printer and marking materials will make it possible to:

- improve lot identification;
- facilitate stock monitoring;
- strengthen the traceability of agroforestry seeds;
- reduce the risk of errors in seed management.

6 Technical Specifications

The technical characteristics of the equipment to be supplied are as follows:

Lot No.	Equipment	Minimum Required Specifications	Associated Services
1	Germination Chamber	Temperature and humidity-controlled chamber; adjustable lighting system; suitable for medium-scale seed germination testing; digital monitoring and programmable settings.	Installation, user manual, training, warranty.

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2	Digital Thermo-Hygrometer	Digital device for measuring and monitoring air temperature and relative humidity; simultaneous display of temperature and humidity; suitable for seed storage facilities, germination chambers and laboratory environments; robust and easy to use.	User manual and warranty.
3	Laboratory Drying Oven	Laboratory drying oven with adjustable temperature control; forced air circulation preferred; suitable for seed drying and media sterilization.	Installation and user training.
4	Moisture Meter	Digital portable moisture meter suitable for agroforestry and vegetable seeds; rapid and accurate moisture measurement; data recording capability preferred.	Calibration, user manual, warranty.
5	Analytical Balance	Laboratory analytical balance with minimum precision of 0.001 g; digital display and internal calibration preferred.	Calibration certificate and warranty.
6	Hybrid Solar Cold Room	Modular cold room suitable for agroforestry seed conservation; adjustable temperature range between +5°C and +15°C; hybrid solar and grid-powered system; capacity suitable for medium-scale seed storage (15 m² max) ; tropicalized structure adapted to East African conditions; temperature and humidity monitoring system included.	Delivery, installation, commissioning, staff training, warranty minimum 12 months.
7	Seed Cleaner and Grader	Suitable for small and medium-scale seed cleaning operations; ability to clean and sort different seed sizes; easy maintenance and operation.	Installation, operational training, warranty.
8	Seed Grading Sieves	Stainless steel grading sieves with different mesh sizes suitable for seed cleaning and grading.	Supply of compatible sieve sets.
9	Planting Trays	Durable and reusable nursery trays suitable for forest seedling production.	Supply of compatible trays.

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10	Laboratory Label Printer	Label printer suitable for durable and moisture-resistant labels; compatible with standard computers and laboratory traceability needs.	Software setup and starter consumables included.

6. Illustrative Photos

The photos shared in these Terms of Reference are illustrative and are intended to provide a reference. Suppliers may propose equivalent equipment that meets the minimum specifications set out above.

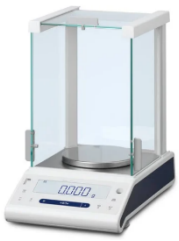
a) **Germination Chamber**

b) Digital thermo-hygrometer

c) **Drying Oven (Laboratory Drying Oven)**

d) **Moisture Meter (Grains)**

e) **Analytical Balance**



f) **Hybrid Solar Cold Room for a Forest Seed Center**

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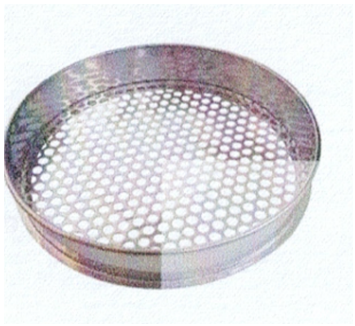
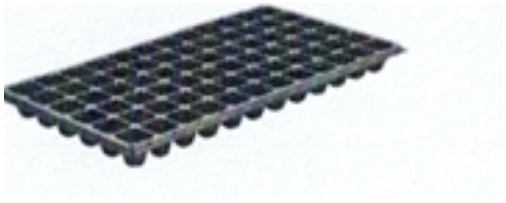
g) **Seed Cleaner and Grader**

h) **Seed Grading Sieve**



i) **Planting trays (Nursery/Growing trays)**



j) **Laboratory Label Printer**

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7. Les Quantités requises

N° Lot	Product Name § Required Technical Parameters	Quantity
1	Germination Chamber	1
2	Digital thermo-hygrometer	2
3	Drying Oven (Laboratory Drying Oven)	1
4	Moisture Meter (Grains)	3
5	Analytical Balance at least 0,001 g	2
6	Hybrid Solar Cold Room for a Forest Seed Center	1
7	Seed cleaner § grader	1
8	Grading sieve 40 cm	7
9	Planting trays (Nursery/Growing trays)	20
10	Laboratory Label printer	1

8. Submission of Offers

8.1.Technical Offer

The technical offer shall include the following elements:

1. The bidder’s physical and email address,
2. Tax identification number,
3. Copy of the Trade Register,
4. Tax clearance certificate,
5. A detailed technical description for each item of equipment by lot. The technical description must provide detailed information on the brand, technical specifications, origin, conditions of use, any equipment warranties, photos, etc.
6. Evidence of experience: The supplier must demonstrate relevant experience in supplying similar equipment. To this end, the supplier must attach to its offer a list of at least three recent references indicating the equipment supplied, beneficiary clients, years of delivery and, where available, certificates of satisfactory completion or illustrative photos of completed installations.

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NB:

- *The first four elements of the technical offer are exclusion criteria for contract award;*
- *Bidders may submit their technical and financial offers as a single offer, with details for each lot.*

8.2.Financial Offer and Payment Terms

The bidder shall provide a price offer in US dollars, inclusive of all taxes, containing:

- A detailed cost proposal for the equipment by lot, including the cost of the equipment, transport costs to Burundi, installation costs, and any applicable taxes excluding customs clearance;
- The payment percentages upon order and upon delivery;
- Delivery period from the date of notification of contract award.

9. Supplier Evaluation

Supplier evaluation will be scored out of 100 points, including 80 points for the technical offer and 20 points for the financial offer.

This evaluation will be conducted in three stages:

- Analysis of the supplier's administrative compliance based on the exclusion criteria mentioned above;
- Analysis of the technical offers:
    - By supplier, based on experience in supplying similar equipment;
    - By lot, based on technical compliance criteria;

- Analysis of the financial offers.

Suppliers will be ranked by lot. The total score will be calculated by adding the score for the supplier's experience, which applies to all lots included in the offer, the technical compliance score by lot, and the financial offer score by lot.

1. Analysis of the Technical Offer

1.1.Supplier Experience (10 points)

Criteria	Points
2 similar contracts completed	4
3 to 5 similar contracts completed	7
More than 5 similar contracts completed	10

This evaluation shall be unique for each supplier and shall apply to all lots included in its offer.

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1.2.Technical Compliance (70 points)

Criteria	Points
Compliance with technical specifications by lot	30
Quality and performance of the proposed equipment by lot	10
Technical documentation provided by lot, including catalogues and technical data sheets	10
Warranty, after-sales service, and user training by lot	10
Proposed delivery time by lot	10
Technical total	70

2. **Financial Evaluation (20 points)**

- The lowest financial offer will receive the maximum score of 20 points;
- The following formula will be applied:

Financial score = (Amount of the lowest offer / Amount of the evaluated offer) × 20
Overall score.

The selection of lots by supplier will be determined by the lowest evaluated offer for each lot. The total score calculation by lot is as follows:

Evaluation criterion by lot	Weighting
Supplier experience per technical offer	10
Technical evaluation by lot	70
Financial evaluation by lot	20
Grand total	**100**

10. Delivery and Acceptance of the Contract

The equipment will be delivered to Bujumbura in the name of IFDC Burundi. The delivery period should not exceed **September 2026**.

Acceptance of this contract by the acceptance committee will be carried out in accordance with IFDC's internal procedures.

11. Presentation and Submission of Offers:

Bidders are invited to submit their technical and financial offers to the following address: ifdcburundi@ifdc.org, with a copy to mbeun@ifdc.org, no later than 10 July 2026 at 5:00 p.m. Files sent after the deadline indicated in the Terms of Reference will not be considered for analysis.

The files will then be analyzed by IFDC's internal procurement committee, which will decide on the bidder to be selected for this contract based on a value-for-money analysis.

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Budget Code: Act 1.3 - 5136 - PAGRIS Phase-Out

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