

CIMMYT Germplasm Policy



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General Objective:

This Policy outlines the approach of CIMMYT for acquiring, maintaining, and providing access to its germplasm, whether landraces, wild relatives, or those developed in CIMMYT breeding programs. It is intended to remove uncertainty over CIMMYT's principles, practices and processes – its freedom to operate - in relation to germplasm management.

Separate CIMMYT policies apply to

- The acquisition, maintenance, and dissemination of gene edited germplasm: [CIMMYT Position Statement on Novel Genome Editing Technologies in Crops](#).
- The acquisition, maintenance and dissemination of genetically modified germplasm: [CIMMYT Position Statement on Genetically Modified Crop Varieties](#).

In this document, **Germplasm** denotes plant genetic resources that comprise landraces, breeders' materials, wild relatives, hybrids, synthetics, open pollinated varieties, early generation material (generations F1-F6), elite breeders lines (distinct, uniform and stable F7 or higher generation lines; doubled haploid lines), testcrosses, genetic stocks, other crosses and lines developed for distinct research studies or breeding purposes.

Germplasm ownership: Germplasm is owned by farmers, other individuals, an organization, a country's government, or may be an international public good. The owner has some legal control over how the germplasm can be used by others. Ownership and control are regulated by national legislation, international treaties, conventions and associated protocols. Individual countries define their own regulations and may or may not be signatories to relevant international treaties and conventions.

[The Convention on Biological Diversity \(CBD\)](#) and the [Nagoya Protocol](#) require that genetic resources be accessed under the rules of prior informed consent and mutually agreed terms, which must be negotiated and obtained in bilateral discussions between the provider country and the user of the genetic resource, if so decided by the provider country. The scope of the CBD/Nagoya Protocol-type Access

and Benefit Sharing regime extends to all genetic resources, although its rules apply only to plant genetic resources that are not covered by another specific access and benefit-sharing instrument. In practical terms, this means that all plant genetic resources that do not fall under the specific access and benefit-sharing instrument of the International Treaty are accessible under the rules of CBD/Nagoya Protocol.

[The International Treaty on Plant Genetic Resources for Food and Agriculture \(ITPGRFA\)](#) supports the conservation and sustainable use of Plant Genetic Resources for Food and Agriculture and the fair and equitable sharing of the benefits arising out of their use, in harmony with the Convention on Biological Diversity. In 1994 and 2006, CIMMYT signed agreements with FAO and the Governing Body of ITPGRFA, respectively, with the following implications:

1. As an international germplasm bank in the public domain, CIMMYT designated distinct lists of germplasm in 1994 and 2006 as the *ex-situ* in-trust collection, first to FAO and then to the Multilateral System of the ITPGRFA, including:
 - a. Maize and wheat landraces and wild relatives that CIMMYT collected or received from partner organizations across a wide range of countries; and
 - b. Released varieties, breeders' germplasm, and genetic stocks that CIMMYT developed or acquired from partner organizations across a wide range of countries.
2. As a trustee and custodian of these collections, CIMMYT holds these plant genetic resources for food and agriculture in its Germplasm Bank on behalf of the international community. As a result, CIMMYT will not claim legal ownership over the designated germplasm, nor will it seek any intellectual property rights over that germplasm or related information *that would restrict access for research, breeding and training for food and agriculture*. CIMMYT recognizes the Governing Body of the ITPGRFA to provide policy guidance regarding the Center's *ex-situ* collection and also gives FAO the right to inspect all activities related to the conservation and exchange of the designated germplasm.
3. Except for some wild relatives of maize (*Tripsacum* species, *Zea perennis*, *Z. diploperennis*, *Z. nicaraguensis* and *Z. luxurians*) where the Convention on Biological Diversity and the Nagoya Protocol apply, CIMMYT uses the [ITPGRFA Standard Material Transfer Agreement \(SMTA\)](#) to transfer Germplasm Bank holdings, Breeders' Germplasm, and its components (e.g. DNA) to third parties when the purpose of the transfer is for research, breeding and training for food and agriculture. The SMTA requires (i) facilitated access for research, breeding and training for food and agriculture, and (ii) benefit sharing from commercial use of subsequently-developed Products, if access for research, breeding and training for food and agriculture is restricted.
4. Transfer or exchange of non-plant taxa (e.g. fungi, bacteria, nematodes, viruses, animals) require bilaterally negotiated material transfer agreements, as governed by the Convention on Biological Diversity and the Nagoya Protocol.

Scope:

This Policy applies to all CIMMYT staff, students, visiting scientists, consultants, and contractors who act on behalf of CIMMYT.

Policies:

- 1. International public goods:** CIMMYT holds and manages its germplasm as an international public good and is committed to its widespread and facilitated diffusion and use to achieve the maximum possible access, scale, scope of impact, and sharing of benefits for the poor, especially maize and wheat farmers and consumers in developing countries. To safeguard its international public goods character, and by legal obligation with FAO and the Governing Body of ITPGRFA, CIMMYT germplasm for use in food and agriculture is transferred using the SMTA of the ITPGRFA or equivalent Material Transfer Agreements (MTAs) in the case of species that are not listed in the Annex 1 of the ITPGRFA.
- 2. Research focus:** The CIMMYT germplasm research for development focus is on (i) conservation and the effective use of genetic diversity and (ii) the further development and deployment of CIMMYT germplasm for the benefit of improved and more sustainable food and nutrition security, poverty reduction, and environmental sustainability.
- 3. Facilitated access for research, breeding and training:** CIMMYT strives to make CIMMYT held germplasm, as well as the data and other outputs resulting from its germplasm research and development activities, openly available and accessible for research, breeding and training for food and agriculture, in accordance with the ITPGRFA, the [CGIAR Intellectual Assets Principles](#), the [CGIAR Open Access and Data Management Policy](#) and [CIMMYT's Intellectual Assets Policy](#). Germplasm availability is made public through the web, field days etc. and access is free of charge or at minimal cost. CIMMYT may apply additional conditions to the transfer of germplasm under development from its breeding and research programs in support of accelerated use, data sharing, and impact assessment. CIMMYT informs the Governing Body biennially about SMTAs it has issued.
- 4. Licensing for commercialization:** CIMMYT issues both non-exclusive and semi-exclusive licenses for commercialization. Non-exclusive licensing is CIMMYT's default position. Semi-exclusive licensing is used in cases where it accelerates CIMMYT germplasm dissemination and use by target beneficiaries. Semi-exclusivity is limited to a particular geography. Licenses are aligned with the CGIAR Intellectual Assets Principles to keep germplasm accessible for research, breeding and training for food and agriculture, the CGIAR Open Access Policy, and CIMMYT's Intellectual Assets Policy. Availability and allocation of rights and commercialization licenses are based on transparent selection procedures, using fair and equitable criteria that are published on [CIMMYT's website](#). In cases where an entity derives substantive commercial benefits from the use of CIMMYT germplasm, it is required to co-support CIMMYT germplasm improvement efforts to the benefit of CIMMYT's mission.
- 5. Germplasm acquisition:** CIMMYT acquires germplasm, associated know-how and innovation to achieve substantial benefits for CIMMYT target beneficiaries. To this end, CIMMYT seeks to acquire germplasm from external sources with the same rights for its use and dissemination as for CIMMYT's own germplasm. Germplasm is acquired under restricted dissemination and/or use conditions only if this will result in substantial benefits for CIMMYT target beneficiaries. CIMMYT abides by all obligations, conditions, and restrictions in MTAs and other agreements it enters into with partners regarding germplasm use and transfer. This includes addressing relevant concerns relating to confidentiality, access and use by third parties and intellectual property issues.

- 6. Collections from farmers' and *in situ* fields and collaboration with national germplasm banks:** All collection of maize or wheat germplasm from farmers' and *in situ* fields is accomplished (i) in partnership with pertinent national germplasm banks or research institutes, (ii) with full consent by national authorities and farmers, and (iii) in accordance with national regulations that typically require the issuance of collecting permits, evidence for Prior Informed Consent, and documentation of the acquisition with an SMTA or an MTA on mutually agreeable terms. CIMMYT encourages national maize and wheat germplasm banks to deposit and make available duplicate samples of their collections as PGRFA in the Svalbard Global Seed Vault. Upon request, CIMMYT will return a sample of the germplasm accessions to the country of origin to assist with the restoration of national collections.
- 7. Documentation:** All CIMMYT germplasm is uniquely identified and documented with its name, pedigree, origin, passport data, Multilateral System status and other descriptive information. CIMMYT may assign a coded name or designation to partner germplasm whose contributions to CIMMYT germplasm are to be held confidential under an MTA.
- 8. Germplasm conservation and maintenance:** Following the policy guidance of the ITPGRFA and the [FAO Genebank Standards](#) for the conservation and maintenance of its PGRFA, CIMMYT develops ISO certified quality management systems, practical guidelines and back-up systems for the conservation and maintenance of landraces, wild relatives, and those materials developed in CIMMYT breeding and research programs.
- 9. Compliance:** CIMMYT acquires and distributes all seed samples in accordance with relevant international and national regulations, such as phytosanitary/quarantine laws, ITPGRFA or CBD, and national laws for genetic resources access, transgenic status, and other considerations. Germplasm imported, exported, or acquired from quarantined regions within the same country must pass through the applicable quarantine processes implemented by an accredited CIMMYT Seed Health Unit or the importing or exporting countries' dedicated authorities, as well as meeting all necessary regulatory requirements, before acceptance and use by CIMMYT for conservation, breeding, research, and/or dissemination to third parties.
- 10. Stewardship:** CIMMYT follows national regulations and internationally audited stewardship procedures to keep maize and wheat landraces, their wild relatives, and conventionally-bred maize and wheat germplasm and associated research physically separate from gene edited germplasm and transgenic germplasm. CIMMYT implements stewardship procedures to prevent, monitor, and destroy potential occurrences of adventitious presence and applies special biosafety policies and procedures to gene edited and transgenic germplasm. Adherence to those policies and procedures is supervised by the CIMMYT Biotechnology Research Oversight Committee.
- 11. Warranties to partners:** CIMMYT makes no warranties, express or implied, regarding the quality, viability or purity (genetic or mechanical), safety of and/or use of CIMMYT-held germplasm including any warranty of merchantability, or fitness for a particular purpose, including without limitation, production, breeding, crossing, testing, commercialization, or non-infringement of third party intellectual property.