



**Food and Agriculture  
Organization of the  
United Nations**



**The International Treaty**  
**ON PLANT GENETIC RESOURCES  
FOR FOOD AND AGRICULTURE**

**Item 15.4 of the Provisional Agenda**

**EIGHTH SESSION OF THE GOVERNING BODY**

**Rome, 11 – 16 November 2019**

**Report of Norway on the Management and Operations of the Svalbard  
Global Seed Vault**

**Executive Summary**

Through Resolution 12/2017, the Seventh Session of the Governing Body invited the Government of Norway to continue updating the Governing Body on the management and operations of the Svalbard Global Seed Vault. This report is submitted in response to that invitation.

The Governing Body is invited to take note of the information provided in this document, and respond as it deems appropriate, taking into account the elements for a possible Resolution provided in the *Appendix* to this document for its consideration.

*This document can be accessed using the Quick Response Code on this page;  
an FAO initiative to minimize its environmental impact and promote greener  
communications. Other documents can be consulted at <http://www.fao.org/plant-treaty/meetings/meetings-detail/en/c/1111365/>*



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## I. Background

1. The Svalbard Global Seed Vault offers genebanks long-term safety storage for duplicates of orthodox seeds; it is operated in line with the FAO Genebank Standards for Plant Genetic Resources for Food and Agriculture (2014). These standards recommend that a "*safety duplicate sample for every original accession should be stored in a geographically distant area, under the same or better conditions than those in the original genebank*".
2. The Svalbard Global Seed Vault was established by the Norwegian Government in 2008, as a contribution to the global community. It is operated in partnership between the Norwegian Ministry of Agriculture and Food, the Nordic Genetic Resource Center (NordGen) and the Global Crop Diversity Trust.
3. Norway reported to the Seventh Session of the Governing Body on the first decade of management and operations of the Svalbard Global Seed Vault. This report provides updates on progress made between then and December 2018.

## II. Progress and results

4. In total, 92 638 seed accessions from 30 depositors were safety duplicated in the Svalbard Global Seed Vault in 2018. Three of these institutes, located in Estonia, Thailand and the United Kingdom, deposited seeds for the first time in 2018. By the end of 2018, 76 genebanks had deposited a total of 1 075 594 seed accessions for long-term storage in the Svalbard Global Seed Vault. In 2015, the International Center for Agricultural Research in Dry Areas (ICARDA), previously located in Aleppo, Syria, and now temporarily headquartered in Beirut , Lebanon, became the first depositor to request withdrawal of its seeds. Altogether, 92 427 seed accessions were returned to ICARDA for regeneration. In February 2018, during the 10<sup>th</sup> anniversary of the seed vault, a large portion of these seeds were redeposited at Svalbard.

Table 1. Seed Vault deposits and dates in 2018

<i>Depositor/date of seed deposit</i>	<i>Acronym</i>	<i>Code</i>	<i>Accessions</i>
<b>26 February</b>			
Australian Grains Genebank	AGG	AUS165	9 283
Australian Pastures Genebank	APG	AUS167	25 567
Africa Rice Center	AfricaRice	BEN089	861
Plant Gene Resources of Canada	PGRC	CAN004	3 858
Station Fédérale de Recherches en Production Végétale de Changins	AGROSCOPE	CHE001	719
Instituto de Investigaciones Agropecuarias	INIA	CHL044	102
Centro Internacional de Agricultura Tropical	CIAT	COL003	323
Centro Agronomico Tropical de Investigacion y Enseñanza	CATIE	CRI001	591
Leibniz Institute of Plant Genetics and Crop Plant Research	IPK	DEU1 46	5 556

Estonian Crop Research Institute	ETKI	EST019	133
International Crop Research Institute for the Semi-Arid Tropics	ICRISAT	IND002	355
Department of Agriculture, Food and Rural Development	DAFF	IRL029	296
World Agroforestry Centre	ICRAF	KEN023	318
International Institute of Tropical Agriculture	IITA	NGA057	1 530
Margot Forde Forage Germplasm Centre, AgResearch Ltd	AGRESEARC H	NZL001	512
Centro Internacional de la Papa	CIP	PER001	94
International Rice Research Institute	IRRI	PHL001	3 433
Portuguese Bank of Plant Germplasm	INIAV	PRT001	217
Nordic Genetic Resource Center	NORDGEN	SWE054	1 307
International Centre for Agricultural Research in Dry Areas	ICARDA	SYR002	8 647
The World Vegetable Center	AVRDC	TWN001	1 004
Seed Savers Exchange	SSE	USA974	242
National Plant Germplasm System	NPGS	USA996	12 723
<b>21 August</b>			
N.I. Vavilov All-Russian Scientific Research Institute of Plant Industry	VIR	RUS001	804
National Rice Seed Storage Laboratory for Genetic Resources	NRSSL	THA012	86
Department of Agriculture, Ministry of Agriculture and Cooperation	DOAGB	THA032	32
<b>31 October</b>			
Crop Research Institute	CRI	CZE122	362
International Livestock Research Institute	ILRI	ETH013	389
Warwick Genetic Resources Unit	HRIGRU	GBR006	101
Centro Internacional de la Papa	CIP	PER001	182
International Centre for Agricultural Research in Dry Areas	ICARDA	SYR002	11 411

### III. 10-year anniversary

5. On 26 February 2018, the 10<sup>th</sup> anniversary of the Svalbard Global Seed Vault was celebrated with a 10-years deposit event and a Seed Vault Summit. Participants included the Seed Vault International Advisory Panel, depositors and partners, as well as media from all over the world. The Seed Vault Summit 2018 on Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture recommended a number of urgent tasks that governments should prioritize.<sup>1</sup> Among these were facilitating improvement of community seed banks, so as to address the need to protect and safeguard the viability of stored seeds and other plant genetic resources, and to strengthen the global system for conservation and sustainable use of crop diversity.

### IV. The International Advisory Panel

6. The meeting of the International Advisory Panel (IAP) of the Svalbard Global Seed Vault was convened back-to-back with the 10-year anniversary deposit in February 2018. The IAP's mandate is to provide advice on policy and other technical, legal and management issues related to the seed vault. The panel is composed of representatives of depositor institutes, suggested for each meeting of the IAP by Crop Trust and NordGen and approved by the Norwegian Ministry of Agriculture and Food. The Chair of the Governing Body of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) is invited to act as Chairperson of IAP. The Director of NordGen is appointed as secretary of the IAP.

7. In addition to receiving general updates on routines etc., IAP members inspected the seed vault and were informed about ongoing technical improvements to the facility. The IAP also discussed how the seed vault could attract new eligible genebanks as depositors, as well as future strategies for increasing the number of deposited samples and activities to raise public awareness activities, including using IAP members as seed vault ambassadors.

#### Members of the IAP for the 2018 meeting:

- Christine Dawson, USDA, USA (Chair)
- Ahmed Amri, ICARDA, Morocco
- Ann Tutweiler, Bioversity, Italy
- Arthur da Silva Mariante, Embrapa, Brazil
- Gordana Djuric, University of Banja Luka, Bosnia & Herzegovina
- Kristin Børresen, Graminor, Norway
- Teresita Borromeo, NPGRL, the Philippines

### V. Technical and administrative upgrades

8. After 10 years of operations, the Government of Norway has made a number of technical and administrative improvements required by the facility. The seed vault is located deep inside a mountain, and is kept frozen by both the permafrost and artificial freezing. A new waterproof access tunnel has been constructed to protect against water intrusion resulting from potential climate change. This will provide additional security to the seed vault, based on a 'better safe than sorry' approach. The seeds in the seed vault have never been placed at risk, remaining safe during the technical upgrades. As a consequence of these improvements, the seed vault's management and operations have also been upgraded. In 2020, a new security and operations management system will be set in place, as well as a joint communication strategy for the seed vault.

### VI. Future activities

9. In February 2020, a large seed deposit event will mark the finalization of the technical and administrative upgrades, and the beginning of a new operational phase for the Seed Vault. On this occasion, a further meeting of the International Advisory Panel will be convened. Another session of

<sup>1</sup> Report of the Seed Summit is available at: [www.seedvault.no/news/the-seed-vault-summit-calls-for-action-to-save-crop-diversity/](http://www.seedvault.no/news/the-seed-vault-summit-calls-for-action-to-save-crop-diversity/)

the Svalbard Seed Summit will be also organized back-to-back with the February 2020 seed deposit event.

10. The Svalbard Global Seed Vault is open for the long-term safety deposit of seed duplicates. Seed deposits events will be organized about 2–3 times a year. Priority is given to seeds of Plant Genetic Resources for Food and Agriculture that are maintained in accordance with the FAO Genebank Standards, and are made available through the International Treaty’s Multilateral System. Seed deposits are free of charge under black box conditions, as ownership remains with the depositor, and only these can withdraw their seeds.

11. Information on seed deposits and future activities are available on the Svalbard Global Seed Vault’s website: [www.seedvault.no](http://www.seedvault.no).

## VII. Interfaces with the Governing Body

12. The Svalbard Global Seed Vault is a small part, or ‘tip of the iceberg’ of a global system that includes different methods for conserving crop diversity of importance to food and agriculture, and as such it is a symbol for how different conservation methods are interlinked, complementary to each other, and in many ways interdependent. The conclusions of the Seed Vault Summit highlighted the need to encourage multiple methods for conservation and sustainable use, all the way from farmers’ fields to the Global Seed Vault in Svalbard and back again. A prerequisite for a well-functioning seed vault is therefore that governments give urgent priority to conservation methods that are less developed, such as community seed banks, as well as on-farm and *in situ* conservation.

13. The massive media attention that the Svalbard Global Seed Vault attracts from around the world contributes to a greater global understanding and an improved international awareness of the important work done by local, national, regional and international initiatives for conserving crop diversity under the umbrella of the Governing Body of the International Treaty.

14. The Seed Vault International Advisory Panel, chaired by the Chair of the Governing Body of ITPGRFA, is an important channel through which the seed vault can receive political and technical guidance from the Governing Body. The IAP also plays a role in ensuring that the Governing Body has improved insight into Seed Vault operations, and that it reflects on how the Seed Vault can best benefit the global community.

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*Appendix*

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**Draft Resolution \*\*/2019****Cooperation with other International Bodies and Organizations****Part [XX]: Management and Operations of the Svalbard Global Seed Vault****THE GOVERNING BODY,**

*Recalling* Resolution 12/2017;

*Recalling* that the adoption of the International Treaty gave the impetus to the Norwegian Government to proceed with the establishment of the Svalbard Global Seed Vault (Seed Vault);

*Reaffirming* that the Seed Vault is an important element of the global system for ex situ conservation and use of plant genetic resources for food and agriculture;

- 1) *Thanks* the Government of Norway for the submission of the report on the management and operations of the Seed Vault and invites it to continue updating the Bureau and Governing Body on the operations and management of the Seed Vault;
- 2) *Notes* the structural, technical and administrative upgrades of the Seed Vault, meant to further ensure the integrity of the Seed Vault and security of its contents, and commends the Government of Norway for undertaking these upgrades;
- 3) *Renews* the invitation to Contracting Parties, international institutions and other relevant eligible bodies and organizations to consider making use of the Seed Vault as part of their strategy for securing their important seed collections and for long-term storage of plant genetic resources for food and agriculture;
- 4) *Requests* the Secretary to continue collaborating with the Government and its partners in related activities, including supporting relevant communication initiatives and in promoting the use of the Seed Vault;
- 5) *Welcomes* the reconvening of the Seed Vault's International Advisory Panel and requests the Chairperson of the Governing Body to continue chairing the Panel and carrying out such functions as the role may require;
- 6) *Requests* the Secretary to explore further with the Government of Norway other practical means to enhance the linkages between the International Treaty and the Seed Vault, and report to Bureau and the Governing Body.