



## Annual Progress Report 2015



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*Front page photo: Quispe Pacco and Pacco Chipa from Parque de la Papa in Peru performing traditional Quechua blessing to the seed collections in the Svalbard Global Seed vault in August 2015.*

## 2015 at a glance

- Altogether 36,130 new safety duplicates from 14 depositors were stored in the SGSV 2015. At the end of the year total holding of seed accessions in the Seed Vault was 837,858 samples, which is a slightly lower figure than at the previous turn of the year.
- ICARDA, one of the CGIAR-centres, previously located with its headquarters and gene bank in Aleppo, Syria, became the first depositor to claim deposited seeds to be returned. In September 38,073 accessions of wheat, barley, forage crops and other species were returned to ICARDA units in Morocco and Lebanon.
- Five new institutions signed the Deposit Agreement and made their first deposits in 2015. Two of these were institutes within forest tree breeding in the Nordic countries, and they deposited the first seeds from forest trees in the Seed Vault. The three other institutes are coming from Czech Republic, Costa Rica and Peru.
- By the end of the year chamber two is filled to 80,2% of its current capacity.
- The 'Verdens viktigste rom' (The World's most important room) exhibition was produced, and it was opened in Kristiansand in September. The exhibition is directed towards a Norwegian audience, and it will circulate between Norwegian museums etc. for the next 3-5 years.
- Media and public interest has increased during 2015, and in line with the communication mandate, NordGen hosted several media visits, gave interviews and presented the Seed Vault at meetings and conferences.

## Foreword

NordGen is responsible for the operation and management of the Svalbard Global Seed Vault (SGSV) according to our three-party agreement with the Norwegian Ministry of Agriculture and Food (LMD) and the Global Crop Diversity Trust (the Crop Trust).

The objective of the seed vault is to provide a safety net for the international conservation system of plant genetic resources, and to contribute to securing of the maximum amount of plant genetic diversity of importance to humanity for the long term. The success of the SGSV has continued this year both measured in terms of participation from the global gene bank community and in terms of public interest and awareness about the purpose of SGSV. By the end of 2015, the SGSV held close to 850 thousand safety duplicates representing wide inter- and intra-specific crop diversity deposited by 66 genebanks from around the world.

The SGSV is a flagship project for NordGen and 2015 was the eighth year of operation. We take great pride in the role we play in this project and I take this opportunity to thank our partners LMD and the Crop Trust for the good collaboration. I would also like to thank Statsbygg for the excellent working relationship we have at Svalbard.

Arni Bragason

Director NordGen

## Introduction

This annual progress report for SGSV is prepared by NordGen to give an overview of the operation of the Vault in 2015.

The SGSV was established with the *“objective to provide a safety net for the international conservation system of plant genetic resources, and to contribute to the securing of the maximum amount of plant genetic diversity of importance to humanity for the long term in accordance with the latest scientific knowledge and most appropriate techniques”*<sup>1</sup>. After eight years of operation the SGSV has become the major safety back-up site for PGRFA worldwide, and by the end of 2015 the collection at Svalbard stood at 837,858 safety duplicates from 66 institutes.

The operation of the SGSV is a collaborative endeavour at several levels. At the management level NordGen collaborates closely with LMD and the Crop Trust. At the facility operation level NordGen cooperates with Statsbygg in Longyearbyen who is responsible for the maintenance and the daily surveillance and monitoring of the facility at Svalbard. At the seed logistics level we cooperate with the institutions sending safety duplicates as well as with a chain of logistics and security partners during shipment and transport to the SGSV. The partnerships at all levels have worked very well also in 2015.

In 2015, 36,130 new safety duplicates were deposited from 14 depositors. Five gene banks/institutes deposited for the first time in 2015, and the nine others were existing depositors sending additional material. Two of the new depositors were Natural Resources Institute Finland (Luke) from Finland and The Norwegian Forest Seed Center from Norway, depositing for the first time seeds of forest trees. The seeds were brought into the vault by three Nordic agriculture and food ministers; Sylvi Listhaug from Norway and her Swedish and Danish colleagues Sven-Erik Bucht and Dan Jørgensen.

The international publicity about the SGSV project increased significantly in 2015, especially due to the news about the ICARDA seed withdrawal.

Operation of the Seed Vault consists of two aspects: (1) Physical maintenance of the facility, overseen by Statsbygg and (2) Seed management and operation, overseen by NordGen. NordGen’s responsibilities for the management of seed deposits are stated in the three party agreement providing for the long term funding, management and operation of the Svalbard Global Seed Vault.

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<sup>1</sup> The agreement of 2007 between the Royal Norwegian Ministry of Agriculture and Food, The Global Crop Diversity Trust and the NordGen providing for the funding, management and operation of the Svalbard Global Seed Vault.

## **Facility management**

LMD is the national responsible authority for the SGSV. The property management and daily monitoring of the SGSV is the responsibility of Statsbygg (the Norwegian directorate for public constructions). The property management duties of Statsbygg are stated in the lease-agreement between LMD and Statsbygg. Statsbygg reports on the daily operation and the outcomes of work on the physical facility to LMD in user-meetings. All electro-technical installations are managed through a central operation system (SD-system) accessible inside the Seed Vault as well as from the Statsbygg office in Longyearbyen.

No major challenges or incidences occurred in 2015, and the temperature has been stable within the set limits. The technical challenge related to water intrusion during spring melting has been controlled by Statsbygg through the established drainage system, water pumps, back-up generator and monitoring by Statsbygg staff.

A comprehensive monitoring water intrusion programme has been carried out during the warm months, and the results will be used for the planning of technical improvements towards a water proof construction. Some proposals for a permanent solution have been presented and are under consideration.

## **Seed management and operation**

NordGen is responsible for managing and operating all aspects of the safety deposit process. This responsibility spans from liaising with collection holders interested in depositing seed samples to operation of the databases and organization of the storage process at Svalbard. The SGSV is a high profile project with a special status within NordGen's organization (Figure 1).

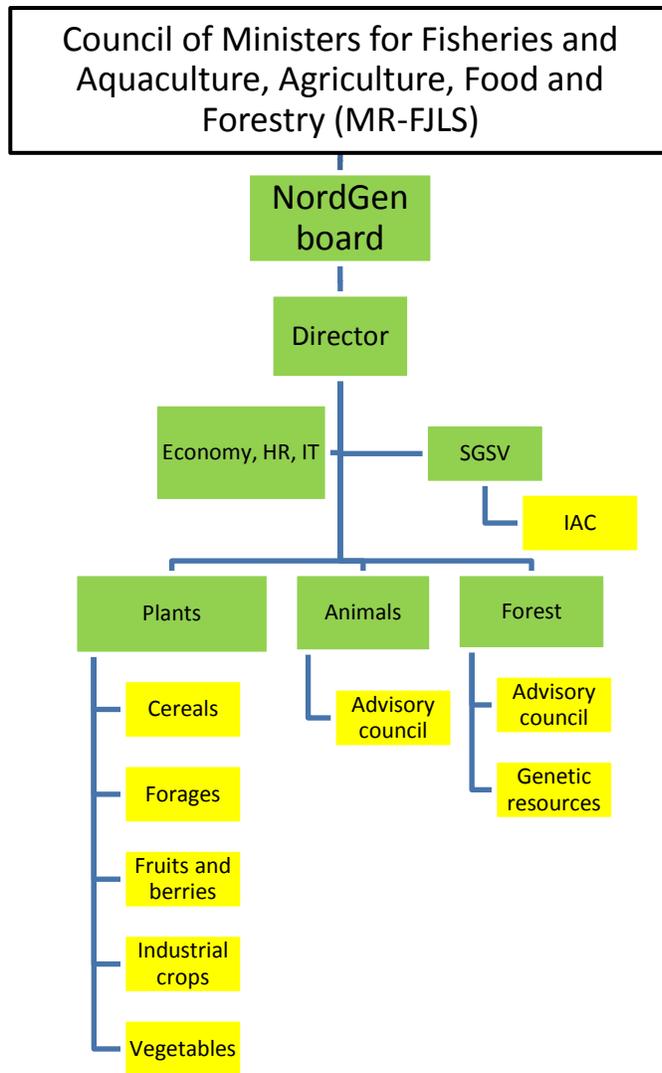


Figure 1. Organogram for NordGen with SGSV.

The overall framework for the tasks carried out by NordGen is organized into four platforms: 1) Overall administration; 2) Information management; 3) Practical Seed administration and 4) Public relations. A senior advisor provides overall leadership and internal coordination of entering into deposit agreements, planning and preparing for seed shipments, and handling of the deposit openings on the site. The senior advisor also works with public requests for information and visits to the site. All NordGen activities in the Seed Vault are conducted in cooperation with the partners LMD and the Crop Trust.

## **Platform 1: Overall Administration & IAC Secretary Administration**

The overall administration includes coordination and liaising with all relevant stakeholders to SGSV including, but not restricted to, LMD, the Crop Trust, Statsbygg, the governor of Svalbard, and depositors. This platform also includes the provision of secretariat services for the International Advisory Council (IAC) in accordance with the Three Party Agreement.

The financial administration covers annual financial statements to be presented to the Crop Trust and LMD, bookkeeping's of records and original vouchers in accordance with Nordic Council of Ministries practice. Open book inspection service is available for the Crop Trust and the LMD. NordGen reports on its work throughout the year in meetings between the partners and more formally in its annual progress report for SGSV. NordGen prepares an annual budget for each financial year (to be approved by the Crop Trust and LMD), submitted by April 1 of the year prior to the onset of the budget period.

The secretary administration tasks for IAC lies within (1) budgetary administration (2) planning arrangements and follow up of IAC meetings and (3) general secretary services for IAC members.

A Seed Vault inspection and meeting for The International Advisory Council was organised in Longyearbyen on the 27<sup>th</sup> and the 28<sup>th</sup> of February. Two new members have joined the Council; Normita Ignacio, Executive Director at SEARICE (South East Asia Regional Initiatives of Community Empowerment), and Matthew Worrell, Chair of the Bureau of the International Treaty on Plant Genetic Resources for Food and Agriculture. The Council discussed and gave advice to the operations of the SGSV, future deposit strategy and public relation activities.

## **Deposit Agreement signing and deposit coordination**

By the end of 2015 NordGen had signed the Deposit Agreements (DA) with 68 institutions (Annex 1). Two of these have not yet made deposits. Five new depositors signed the DA and made deposits for the first time in 2015.

Twelve of the existing 66 depositors are International Agricultural Research Institutes (IARCs), 44 are national genebanks, 2 are regional genebanks, 6 are university genebanks and 2 are NGO genebank collections. Figure 2 shows the proportion and numbers of safety duplicates deposited by different types of genebanks by the end of 2015.

Figure 3 shows the relative size of deposits from the different depositor groups. The largest share of the current holdings in the SGSV is deposited by IARCs represented by several institutes belonging to the Consultative Group of International Agricultural Research Centres (CGIAR), the Asian Vegetable Research Centre (AVRDC) and the Tropical Agricultural Research and Higher Education Centre (CATIE), all holding collections of PGRFA in trust for the UN Food and Agriculture Organisation (FAO). Considering the national and subnational collections, the majority of the depositors are located in developing regions;

however the number of safety duplicates sent from institutes in developing regions is smaller than the number sent from institutes in developed regions.

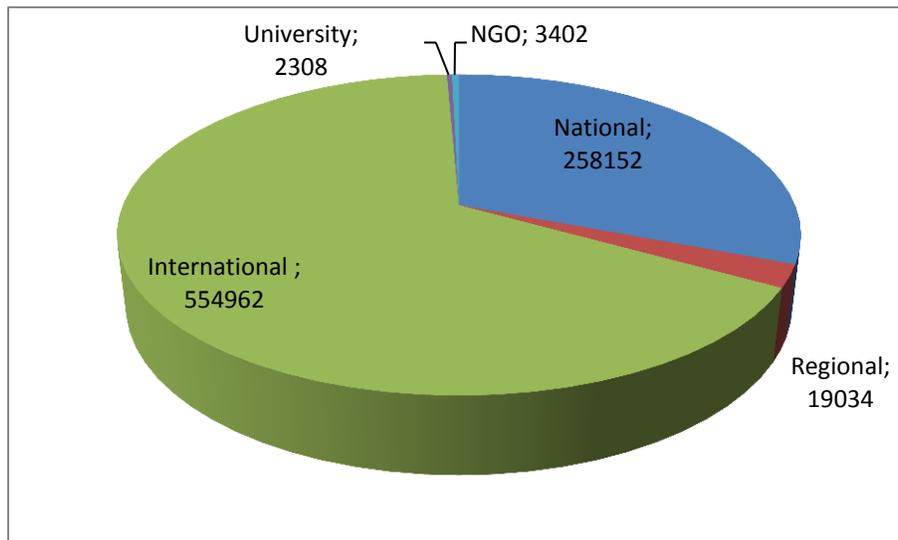


Figure 2. The proportion and numbers of safety duplicates currently deposited in The Vault at the end of 2015 by different types of genebanks.

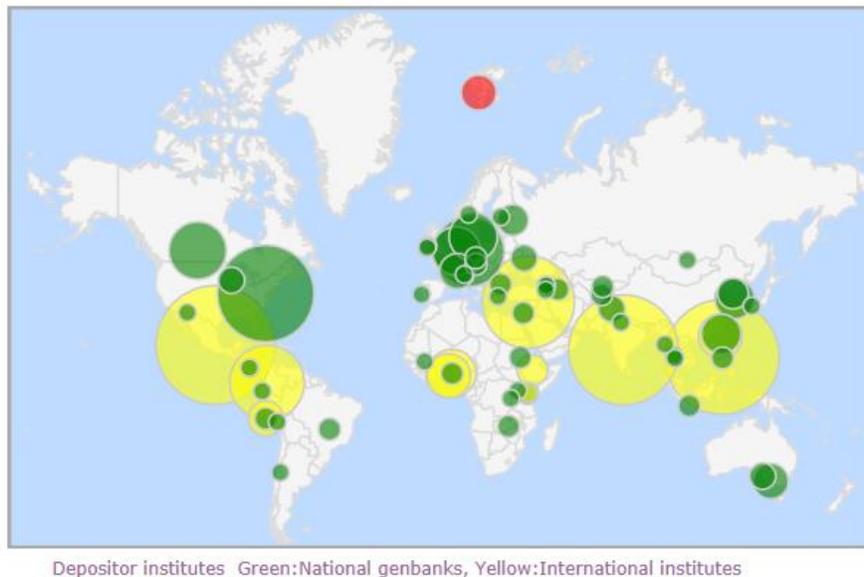


Figure 3. Genebanks with safety deposits in the Svalbard Global Seed Vault. The radius of the circles is relative to the number of samples deposited, and the circle size reflects the size of the deposits according to 25 size classes. Yellow circles are International Agricultural Research Centres and green circles are regional, national or subnational genebanks. The radius of the red SGSV circle is not relative to the holdings.

## Platform 2: Information management

This platform serves the development, technical service to depositors, and maintenance of the databases. NordGen maintains two databases for the SGSV; one box level storage system database and one safety duplicate level database with descriptors of all the material stored.

Depositors are required to provide electronic inventories of the material they wish to deposit prior to shipment to Svalbard. The purpose of receiving the data prior to shipment is to allow NordGen to check if the data is of satisfactory quality, as well as to check for obvious duplications of material already stored in the vault. Depositors report a minimum set of descriptors necessary for unique identification of the samples. Information for depositors is provided on the “guidelines for depositors page” of [www.nordgen.org/sgsv](http://www.nordgen.org/sgsv). The database is updated directly following every seed deposit event. The data is publicly available and searchable on the Information Sharing page of [www.nordgen.org/sgsv](http://www.nordgen.org/sgsv).

The data portal is an important tool in NordGen’s interaction with partners, especially the Crop Trust and the depositors. The data portal is also a standard reference for journalists searching for the latest statistics and biological and geographic information of the material stored in SGSV. There are links to this portal both from NordGen’s homepage and the official webpage of the Seed Vault maintained by LMD ([www.seedvault.no](http://www.seedvault.no)) as well as the website of the Crop Trust ([www.croptrust.org](http://www.croptrust.org)).

NordGen faced some computer server problems during the last part of 2015. In addition, the withdrawal of seeds from ICARDA, which was the first withdrawal of seeds from SGSV, made it necessary to consider and develop some new routines for the seed database. Due to these events, the Seed portal was not completely updated through shorter periods at the end of 2015.

The SGSV is part of the global system for *ex-situ* conservation of PGRFA. An important element in that system is the global accession level database Genesys – Gateway to genetic resources database (<http://www.genesys-pgr.org/>). The provider institute code, accession number and genus in the SGSV data base is matched with data in Genesys and the database now reports whether the accession is backed-up at Svalbard or not (Figure 4).

The databases of SGSV are maintained on separate servers at NordGen headquarters in Sweden. All data are backed-up daily to two different locations: A dedicated backup server and a remote server located in another town.

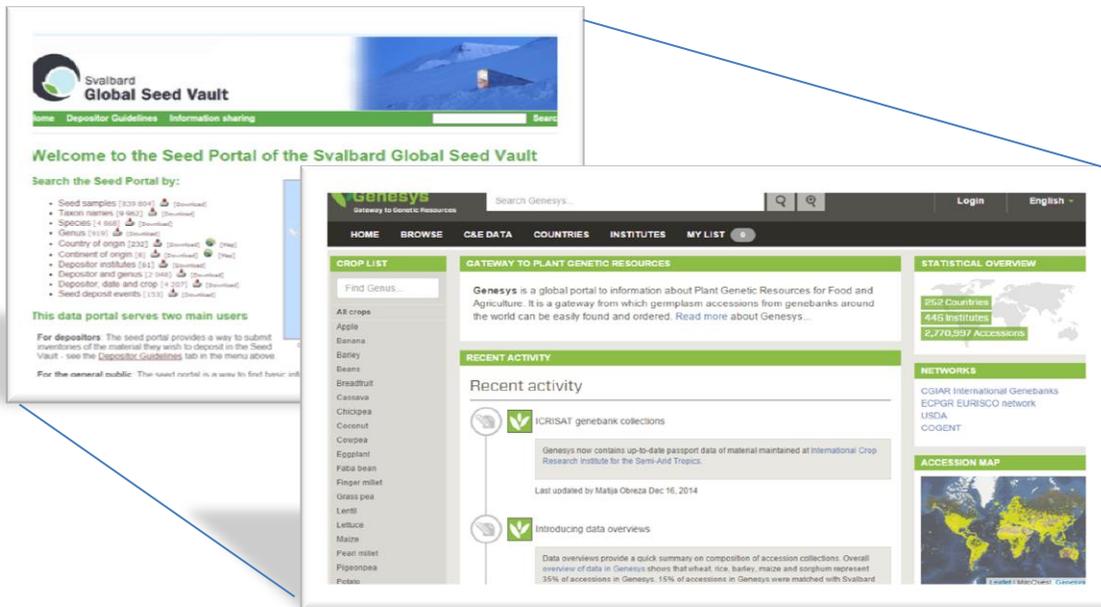


Figure 4. The “Seed Portal” is the public interface of the SGSV and the information from this database is also available through the global level accession database - Genesys.

### Platform 3: Practical Seed Administration

Overall management of transport logistics for seeds deposited is managed by NordGen. The practical seed administration further covers assistance regarding security, customs, phytosanitary certificates and other relevant clearances. NordGen communicates closely with depositors on all practical aspects of making shipments. The depositors are instructed to make the shipment with a regular courier such as DHL, TNT etc. from their genebank to Oslo. In the cases where the shipment cost is covered by the Crop Trust, NordGen and Trust staff works in close collaboration to ensure proper packaging, etc. To avoid problems with the bottleneck between the mainland and Svalbard, NordGen organizes transport from Oslo to Longyearbyen together with a private logistics company. NordGen renegotiates and enters into contracts for the Oslo-Longyearbyen logistics on an annual basis and in 2015 we worked with the company Jetpak.

Logistics at Svalbard is coordinated by NordGen and handled in close collaboration with the local logistics company, Pole Position. Screening and security at arrival in Svalbard is handled in collaboration with the airport authorities at Longyearbyen airport and the security company, Securitas. Statsbygg provides support with logistics and technical backstopping during deposit openings at Svalbard. Overall security during transport between the airport and the Seed Vault is provided by the police department at the Governor's office. NordGen receives, registers and stores seed boxes inside the Seed Vault. The routines for the management of Depositor Agreements, organization of deposit logistics, data handling and practical on site logistics and security is streamlined and formalized in Working Instructions under NordGen's Quality Management System.



*Figure 5. Seeds of forest tree species were for the first time deposited in the SGSV in 2015. Seeds from The Norwegian Forest Seed Centre (Skogfrøverket) was carried into the Seed Vault by the Norwegian Minister for Agriculture and Food, Sylvi Listhaug. On her right side, State secretary Hanne Maren Blaafjeldal.*

NordGen has organized between three and six openings of the SGSV for storage of new safety duplicates per year since the opening in 2008. Depositors are asked to organize shipments for arrival in Oslo during seven days windows.

NordGen organized five deposit openings during 2015, comprising 36,130 seed samples from 15 different depositors. (Table 1).

**Table 1. Deposit openings in 2015**

<b>Depositor/Opening</b>	<b>Code</b>	<b>Acronym</b>	<b>No Accessions</b>
<b>February 2015</b>			
National Plant Germplasm System	USA996	NPGS	19340
Seed Savers Exchange	USA974	SSE	244
Nordic Genetic Resource Center	SWE054	NORDGEN	1969
Africa Rice Center	BEN089	AfricaRice	2400
The Norwegian Forest Seed Centre	NOR056	NFSC	208
Natural Resources Institute Finland	FIN027	Luke	7
<b>April 15</b>			
Nordic Genetic Resource Center	SWE054	NORDGEN	340
<b>August 15</b>			
Universidad de Costa Rica	CRI092	UCR-CIA	6
Parque de la Papa	PER862	PdeP	750
<b>September 15</b>			
Crop Research Institute	CZE122	CRI	806
<b>October 2015</b>			
International Institute of Tropical Agriculture	NGA057	IITA	1376
Centro Internacional de la Papa	PER001	CIP	559
International Crop Research Institute for the Semi-Arid Tropics	IND002	ICRISAT	1662
Centre for Genetic Resources	NLD037	CGN	1071
International Rice Research Institute	PHL001	IRRI	5392

## Platform 4: Public Relations

NordGen contributes significantly to public relations activities related to The Seed Vault. In addition, LMD and the Trust both do active PR-work in connection with the Seed Vault.

NordGen's work with public outreach and information about the SGSV is carried out through several arenas: we respond to questions about the operation from the public and the media; we present the SGSV to different scientific and general audiences through public presentations; we give interviews to the press and write about the SGSV in various publications and conduct visits to the SGSV for prioritized groups and media.

Article 4 in the three-party agreement between the Ministry, the Crop Trust and NordGen provides that the Parties to the Agreement are to *“contribute to and, as appropriate, take part in information activities related to the objectives and the role of the Svalbard Global Seed Vault. Such information activities should be aimed at public awareness and at potential depositors to the Svalbard Global Seed Vault. Each Party shall inform each other on a regular basis on such activities and, as appropriate, ensure good coordination of such activities.”*

NordGen receives a large number of requests for visits, information, interviews and lectures about the Seed Vault. NordGen takes care to answer all serious requests, and in 2015 we responded to 131 independent requests for vault visits or for information.

A quite strict visitor policy is pursued. The general guiding principle is that we «bring the seed vault to the people rather than people to the vault». However, in connection with deposit openings and in special cases NordGen hosts selected media and VIP for information and a tour in the vault. This is done in close collaboration and coordination with the other partners.

The majority of requests are coming from different kinds of media. In total 73 requests for information and/or visiting the vault came from TV or radio stations, web based media/video documentaries, newspapers or magazines. Out of these 22 media group visits were conducted by NordGen staff. Nine visits were conducted for artists, policy makers or scientists, mainly social scientists with projects involving the SGSV. In addition NordGen has assisted in visits conducted by LMD and Crop Trust.

Other requests for visits have been rejected in accordance with the visitor policy or because it was not possible to find suitable dates. Other kinds of inquiries are related to offers for voluntary work for SGSV or offers for seeds that NGO or individuals from all parts of the world would like to donate to the Seed Vault and its mission. Communication related to requests, offers and other kinds of enquiries gives opportunities to convey general information and to clarify misunderstandings about SGSV and its mission.

Some of the more notable visits in 2015 were those of the General secretary of FAO Jose Graziano da Silva, Secretary of ITPGRFA, Shakeel Bhatti and Minister of agriculture in Costa Rica, Arauz Cavallini, all hosted by State secretary Hanne Maren Blaafjelldal from the Norwegian ministry for Agriculture and Food.

A visit from the EU commissioner for Health and Food safety, Vytenis Andriukaitis was hosted by Norwegian ministers of Agriculture and Food Sylvi Listhaug and of Health and Care Services Bent Høie.

From 2015, NordGen participates as a partner in the project *“From the Vault to the Archive: Architectures, Technologies and Techniques of ex situ Conservation”*, managed by Institute of Archeology, University College London, UK.

NordGen was the project employer and took part in the production of the exhibition *“Verdens viktigste rom”* (Earth’s most important room) that was inaugurated in Agder Natural History Museum and Botanical Garden in Kristiansand in September 2015. The movable exhibition is produced in Norwegian, aiming at a Norwegian audience, and it will be displayed at museums and other scenes throughout Norway during the next three to five years.

The exhibition is produced by Agder Natural History Museum and Botanical Garden and the company NaturExpo in Kristiansand, which also has produced the current Seed Vault exhibition in Svalbard Museum. The project has been funded from the Norwegian Ministry for Agriculture and Food with Svalbard Museum as the project manager.



*Figure 6. From inside the exhibition miniature Seed Vault at the opening event on the 13<sup>th</sup> of September 2015; from the left Jarle Torkildsen, Naturexpo, Roland von Bothmer, Svalbard Global Seed Vault/ NordGen, Ann-Kristin Olsen, County Governor in Vest-Agder and former Governor of Svalbard and Árni Bragason, NordGen.*

## **Financial result and other activities**

### **Financial result**

Financial result for 2015 amounts to SEK 201.029 as stated in the Budget and spending report in annex 2. Due to vacancy/less overlap related to change of staff, coordinator costs have been significantly lower than budgeted. However, this account line should be considered in relation to Overall administration costs (Platform 1), which shows a higher spending than budgeted in 2015, due to increased inputs from other NordGen staff.

Costs related to Practical Seed Administration (Platform 3) turned out to be lower than budgeted. Other activities show quite good accordance between budget and spending. The positive result has been transferred to working capital fund, which amount as per 31 December 2015 to SEK 1.782.820.

### **Storage Capacity Assessment**

So far we are only making use of one of the Seed Vault's three chambers. NordGen, in consultation with partners and depositors annually analyze the storage capacity in chamber 2, which contains the seeds, and consider eventual needs for cooling of an additional chamber.

Due to the retrieval of seed boxes to ICARDA there was a decrease in the number of boxes in the SGSV during 2015. 95 new boxes were taken into the vault, while 128 boxes were taken out, which means that there are 33 fewer boxes in chamber 2 now than at the previous turn of the year, see figure 6.

The total storage capacity with the current shelving is 2880 boxes. The current holding in the Seed vault is 2312 boxes, including test boxes and two boxes with seeds from the local Svalbard flora. The storage capacity with current shelving is then filled up to 80.2 %.

It is possible to mount 288 more slots by re-installing shelf sections that were temporarily removed in 2009 (8x36 slots). (This will require that the fence inside hall 2 is removed) See figure 7 & 8 for an illustration of the increase in number of boxes over the years.

We have at the moment no formal requests from ICARDA about further withdrawal from their total deposit of 325 seed boxes. However, it is not unlikely that ICARDA would need more of their deposited seed samples to be returned. According to this and to indications from our contact with depositing institutes, we believe that the need for a new hall would be necessary later than 2020.

Uncertainties with these estimates are:

- a) We do not know how much current and future depositors want to deposit in the coming few years. NordGen asks this information from all depositors every year, but the information that is received is not complete.
- b) We do not know how many new depositors will join the project in the coming years and we do not know how compact they will be able to package.
- c) We do not know if new withdrawals of seeds will take place, most likely from ICARDA, but withdrawals from other depositors cannot be precluded.

Another calculation that could be useful is the total capacity of the Seed Vault with three chambers given that the average number of accessions in each box continues as it is now. The average number of accessions in each box is now 362 seed portions. This number has varied over the years, with 505 accessions pr box as the highest figure in 2010 and 241 as the lowest the year after, in 2011. The last three years the average number of accessions in each box has been quite on the average, between 350 and 390.

If this degree of box filling prevails there is room for approximately 3.5 mill. accessions in the Vault.

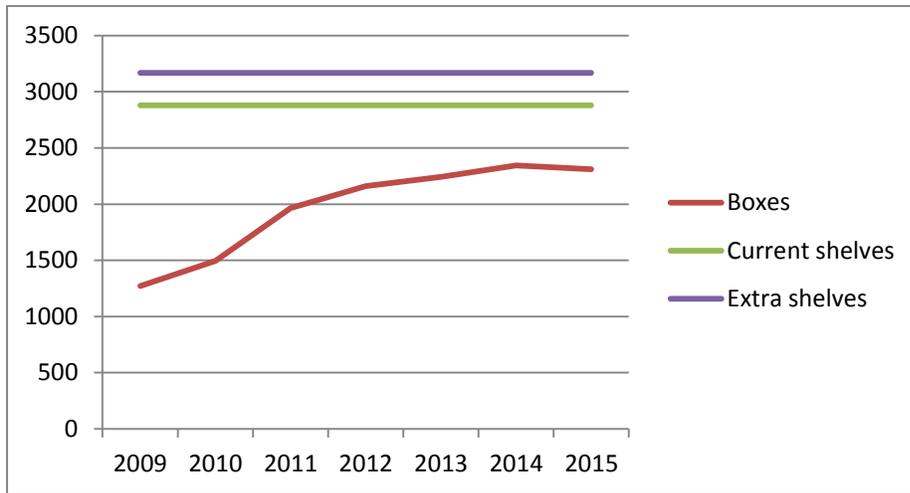


Figure 7. Total number of boxes vs. storage capacity in Vault chamber 2

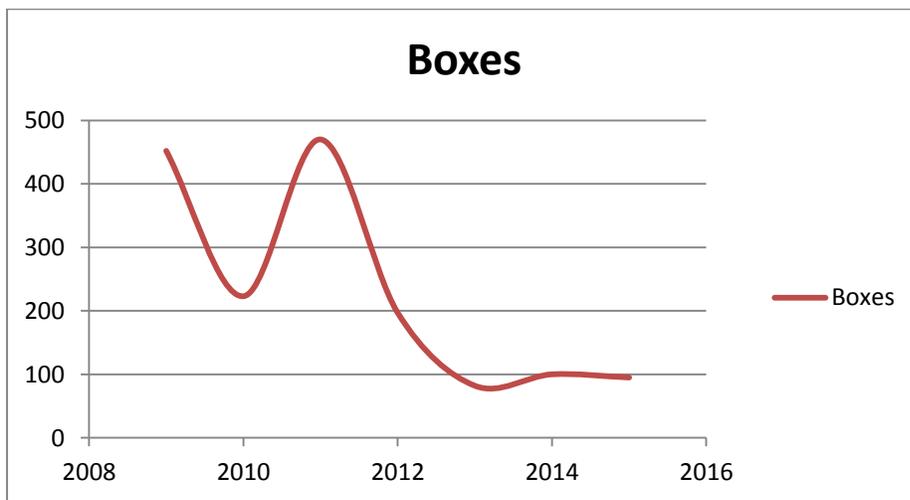


Figure 8. Number of boxes arriving per year 2008-2015 (Withdrawals are not showed).

**Annex 1. List of depositors to the Svalbard Global Seed Vault listed in order of Deposit Agreement signature.**

Acronym	Country	Institute name	SDA	Accessions_End2015
WARDA	International, Benin	Africa Rice Center	2007/2008	14839
CIAT	International, Columbia	Centro Internacional de Agricultura Tropical	2007/2008	50272
CATIE	International, Costa Rica	CATIE	2007/2008	723
ILRI	International, Ethiopia	International Livestock Research Institute	2007/2008	5335
ICRISAT	International, India	International Crop Research Institute for the Semi-Arid Tropics	2007/2008	110014
ICRAF	International, Kenya	World Agroforestry Centre	2007/2008	777
CIMMYT	International, Mexico	Centro Internacional de Mejoramiento de Maiz y Trigo	2007/2008	130291
IITA	International, Nigeria	International Institute of Tropical Agriculture	2007/2008	20189
CIP	International, Peru	Centro Internacional de la Papa	2007/2008	7640
IRRI	International, Philippines	International Rice Research Institute	2007/2008	122060
ICARDA	International, Syria	International Centre for Agricultural Research in Dry Areas	2007/2008	78411
AVRDC	International, Taiwan	The World Vegetable Center	2007/2008	14411
NORDGEN	Regional, Sweden	Nordic Genetic Resource Center	30.01.2008	17574
IPK	Germany	Leibniz Institute of Plant Genetics and Crop Plant Research	30.01.2008	42412
CGN	Netherlands	Centre for Genetic Resources	30.01.2008	19713

PGRI-NARC	Pakistan	Plant Genetic Resources Institute, National Agricultural Research Centre	30.01.2008	2874
SSE	USA	Seed Savers Exchange	30.01.2008	2652
NGBK	Kenya	Kenya Agricultural & Livestock Research Organisation (KALRO): Genetic Resources Research Centre	26.02.2008	1314
NAC	South Korea	National Agrobiodiversity Center	06.05.2008	13185
IAS	Macedonia	Institute of Agriculture Skopje	11.06.2008	0
NCPGR	India	National Bureau of Plant Genetic Resources	04.07.2008	25
VIR	Russia	N.I. Vavilov All-Russian Scientific Research Institute of Plant Industry	04.07.2008	5278
RAC	Switzerland	Station Federale de Recherches en Production Vegetale de Changins	27.10.2008	9665
EMBRAPA	Brazil	EMBRAPA	06.11.2008	1319
AFT	Ireland	Oak Park Research Centre	16.01.2009	577
DAFF	Ireland	Department of Agriculture, Food and Rural Development	22.01.2009	100
TARI	Taiwan	Taiwan Agricultural Research Institute	26.02.2009	10503
UAAS	Ukraine	Institute of Plant Production n.a. V.Y. Yurjev of UAAS	03.03.2009	2782
PGRC	Canada	Plant Gene Resources of Canada, Canadian Genetic Resources Program, Saskatoon Research Centre	05.11.2009	25868
ILRF	Georgia	I. Lomouri Research Institute of Farming.	23.02.2010	305

AAS	North Korea	Pyongyang AAS	18.03.2010	5700
La Molina	Peru	Programma de Mais	25.05.2010	1296
ICCI	Israel	Institute of Cereal Crop Improvement, Tel Aviv University	23.06.2010	900
DELEP	USA	Desert Legume Program. University of Arizona	24.08.2010	134
ARC	Sudan	Agricultural Research Corporation	18.10.2010	1195
SPGRC	Regional, Zambia	SADC Plant Genetic Resources Centre	09.11.2010	1463
NAGREF	Greece	National Agricultural Research Organization	02.02.2011	25
ICABIOGRAD	Indonesia	Indonesian Center for Agricultural Biotechnology and Genetic Resources	02.02.2011	1050
DAR (MOAI)	Myanmar	Department of Agricultural Research	23.02.2011	718
INIAP	Ecuador	Instituto Nacional Autónomo de Investigaciones Agropecuarias	12.04.2011	168
NARO	Uganda	National Agricultural Research Organization	26.05.2011	777
BARI	Bangladesh	Plant Genetic Resource Centre, Bangladesh Agricultural Research Institute	10.06.2011	0
LS	Italy	University of Pavia, Department of Earth and Environmental Sciences, Lombardy seed bank	23.06.2011	2

NACGRAB	Nigeria	National Centre for Genetic Resources and Biotechnology (NACGRAB)	06.09.2011	800
IRAG	Guinea	Institut de Recherche Agronomique de Guinée	07.10.2011	0
RNGRC	Tajikistan	Republican National Genetic Resource Center	14.11.2011	1646
AGRI	Azerbaijan	Genetic Resources Institute (AGRI) of the Azerbaijan National Academy of Sciences	17.02.2012	1522
INRB	Portugal	Instituto Nacional de Recursos Biológicos	05.03.2012	12
ISABU	Burundi	Agricultural Research Institute of Burundi	19.06.2012	365
IER	Mali	Institute of rural economy	19.09.2012	158
PSARTI	Mongolia	Plant Science Agricultural Research Institute	02.10.2012	160
INIA La Platina	Chile	Unidad de Recursos Genéticos -INIA La Platina	03.10.2012	43
AUG	Georgia	Georgia State Agrarian University	15.10.2012	120
NPGRL	Philippines	National Plant Genetic Resources Laboratory	18.10.2012	2254
ASAU	Armenia	Armenian State Agrarian University, Laboratory of Plant Gene Pool and Breeding	16.12.2012	175
CN FCRC	Thailand	Chainat Field Crops Research Center	01.03.2013	150
UzRIPI	Uzbekistan	Uzbek Research Institute of Plant Industry	01.03.2013	2038

SARDI	Australia	South Australian Research and Development Institute	12.06.2013	2926
AGG	Australia	Australian Grains Genebank/Australian Tropical Crops Collection	26.11.2013	7486
BWPRC	Japan	National University Corporation Okayama University	26.11.2013	575
NRSSL	Thailand	National Rice Seed Storage Laboratory for Genetic Resources, NRSSL, Rice Department	14.08.2013	81
AGES	Austria	Austrian Agency for Health and Food Safety, Dept. for Plant Genetic Resources	17.03.2014	1457
BGRIPGR	Bulgaria	Institute for Plant Genetic Resources "K.Malkov"	17.03.2014	933
NCGRP	USA	National Center for Genetic Resources Preservation, USDA	SIGNED 18.01.2015	88647
NFSC	Norway	The Norwegian Forest Seed Centre	08.01.2015	208
Luke	Finland	Natural Resources Institute Finland	21.01.2015	7
CRI	Czech Republic	Crop Research Institute	28.08.2015	806
UCR-CIA	Costa Rica	Universidad de Costa Rica	08.09.2015	6
PdeP	Peru	Parque de la Papa	09.09.2015	750

## Annex 2. Budget and spending 2015

### Budget and spending report 2015

Activity	Cost Category	Items	Cost basis		Budget 2015	Actual spending
			SEK	Qty	SEK	SEK
709512: Coordinator	Personnel <sup>(a)</sup>	Coordinator	110 000	7	770 000	630 628
		Coordinator	110 000	3	330 000	
	Travel <sup>(b1)</sup>	To Svalbard and other destinations	10 000	5	50 000	103 650
		Communication / supplies	Phone, computer,printer, mailing, rent etc.	25 000	1	25 000
<b>Sub-total</b>					<b>1 175 000</b>	<b>768 911</b>
709513: Platform 1 - Overall Administration	Personnel	Director and Administration	170 000	1.1	187 000	439 258
	Communication / supplies	Phone, printer, mailing etc.	15 000	1	15 000	14 722
	Travel <sup>(c)</sup>	To Svalbard and other destinations	10 000	3	30 000	24 946
<b>Sub-total</b>					<b>232 000</b>	<b>478 926</b>
709514: Platform 2 - Information Management	Personnel <sup>(a)</sup>	IT-manager	85 000	1.5	127 500	196 783
		Travel <sup>(b2)</sup>	To Svalbard	10 000	1	10 000
	IT System	Computer				10 900
	IT System	Server, web	54 000	1	54 000	54 000
<b>Sub-total</b>					<b>191 500</b>	<b>270 555</b>
709515: Platform 3 - Practical Seed Administration	Personnel <sup>(a)</sup>	Seed Technician	85 000	2	170 000	38 740
		Travel <sup>(b2)</sup>	To Svalbard	10 000	2	20 000
		Vehicle hire, local supplies	50 000	1	50 000	8 069
<b>Sub-total</b>					<b>240 000</b>	<b>74 054</b>
709516: Platform 4 - PR	Personnel <sup>(a)</sup>	Scientific information expert	110 000	5	550 000	635 693
		Travel <sup>(b1)</sup>	To Svalbard and other destinations	10 000	6	60 000
	Materials for media	External filming, editing and multiplication	30 000	1	30 000	
	Exhibition Material	Production of exhibition	1 744 000	1	1 744 000	1 696 270
	Communication / supplies	Phone, printer, mailing etc.	10 000	1	10 000	3 801
<b>Sub-total</b>					<b>2 394 000</b>	<b>2 420 622</b>
709517: International Advisory Council	Personnel	Director	170 000	0.5	85 000	58 080
	Personnel <sup>(a)</sup>	Other staff	85 000	0	0	130 481
	Travel <sup>(b1)</sup>	Meeting at Svalbard	15 000	12	180 000	122 113
	Expenditure	Meeting costs	75 000	1	75 000	47 729
<b>Sub-total</b>					<b>340 000</b>	<b>358 403</b>
709519: Pilot Project - Longterm storage		Testing, Testing Materials, Procedures	100 000		0	0
<b>Sub-total</b>					<b>0</b>	<b>0</b>
<b>Total costs 2015 SEK</b>					<b>4 572 500</b>	<b>4 371 471</b>
<b>Result 2015 SEK</b>						<b>201 029</b>
<b>TOTAL SEK</b>					<b>4 572 500</b>	<b>4 371 471</b>
<b>TOTAL US\$ <sup>(d)</sup></b>					<b>\$544 994</b>	<b>\$521 033</b>
<b>WORKINGCAPITAL FUND SEK per 2015-12-31 <sup>(d)(e)</sup></b>						<b>1 782 820</b>
<b>WORKINGCAPITAL FUND US\$ per 2015-12-31 <sup>(d)(e)</sup></b>						<b>\$212 493</b>

<sup>(a)</sup> NordGen Personnel budgeted at avg SEK 110,000/month and director SEK 170,000/month.

<sup>(b1)</sup> Travel budgeted at avg SEK 10,000/trip, Svalbard and other destinations

<sup>(b2)</sup> Travel budgeted at avg SEK 10,000/trip, Svalbard

<sup>(c)</sup> Travel budgeted at 2\*SEK 10,000/trip to Svalbard and 2\*SEK 5,000/trip to Oslo

<sup>(d)</sup> Based on exchange rate at Dec 2015: 1 US Dollar = 8,39 SEK

<sup>(e)</sup> Workingcapital Fund - adjusted as per 2015-12-31 with the positive result for 2015.

Income 2015 comes from - \$143.586 Global Crop Diversity Trust, SEK 3.597.525 LMD, SEK 80.000 NordGen.

