

Colombia Ships Seeds of Staple Food Crops to the Svalbard Global Seed Vault for Safeguarding

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Colombia is participating in one of the world's most ambitious projects. Known as the Svalbard Global Seed Vault, the project aims to preserve, safe from any catastrophe, humanity's agricultural heritage.

As a service to the global community, the Norwegian Government constructed a huge vault to preserve the world's plant germplasm from any potential disaster—hence the media's nicknames "Doomsday Vault" and "Noah's Ark". This polar fortress, built near the town of Longyearbyen, is buried deep in the bowels of a sandstone mountain on Spitsbergen Island, in the remote archipelago of Svalbard, Norway, near the North Pole (giving the vault yet another name: "Arctic Seed Vault"). The vault is at the end of a 120-meter tunnel that sits at 130 m above sea level, safe from rising sea levels. The site was chosen for its tectonic stability, permafrost (which will keep samples frozen, should electricity fail), and remoteness from areas suffering socio-political instability. Operations will be funded by the Global Crop Diversity Trust, an international NGO based in Rome.

Although probably 1.5 million distinct seed samples of agricultural crops currently exist, the vault can hold as many as 4.5 million samples. Eventually, it will house every variety of almost all the world's important food crops. The idea is to guarantee food production for humanity for centuries and against the possibilities of regional or global catastrophes. The protected crops will include ancestral crops such as barley, beans, lentils, maize, rice, sorghum, and wheat; forages; and agroforestry plants. Scientists regard these collections as treasures because, from them, they can develop new varieties with improved characteristics such as higher yields, increased nutritional value, resistance to pests and diseases, and the ability to survive changing climatic conditions.

In late January 2008, seeds were shipped from different parts of the planet to Longyearbyen in time for the vault's official inauguration on 26 February 2008. Colombia is sending more than 200,000 accessions. Of these, more than 65,000 will be duplicates of those currently conserved in the gene bank at the International Center for Tropical Agriculture (CIAT), one of 15 centers that form part of the Consultative Group on International Agricultural Research (CGIAR). The Center is considered as holding the world's largest and most diverse collections of beans, cassava, and tropical forages, including varieties that are already extinct in their places of origin. The collections originate not only from Latin America, but also from Asia, Africa, and the Middle East.

Through its Genetic Resources Unit, CIAT has supported scientists and farmers across five continents for more than 4 decades, distributing more than 500,000 germplasm materials. The Unit has also participated in humanitarian campaigns to help alleviate famines caused by disasters such as the Rwandan Civil War and Hurricane Mitch in Honduras and Nicaragua, where bean fields were wiped out in their entirety.

CIAT will first send 30,912 accessions to Svalbard, consisting of beans (21,699) and tropical forages (9,213). "This shipment, representing about half of our current holdings, will be the first of four", said Daniel Debouck, director of the Genetic Resources Unit. "Except for some Caribbean islands and the Guianas, every Latin American country will have duplicates of their germplasm in the Arctic Seed Vault", added Debouck.

Geoff Hawtin, Interim Director General of CIAT and former executive director of the Global Crop Diversity Trust, rates the Svalbard Global Seed Vault as vital to the better protection of food crop collections. "With coming climate changes, higher food prices, and expanding markets for biofuels, our best available options for progress, if not survival, lie in what we have conserved and studied, often against all conceivable predictions", said Hawtin.

The shipment from Colombia was packed in 93 boxes, built especially for this purpose. They weighed a total of 1310 kg. Their journey began on 1 February 2008, leaving Cali for Bogotá and Madrid to arrive in Oslo. After a 2-day wait, and a special 5-hour flight, these agricultural jewels from Latin America will arrive at their final destination: a vault in Svalbard that may well help guarantee humanity's future survival.

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