Seed Bank in the Svalbard Islands

1. ☐ Deep in the bowels of an icy mountain on an island above the Arctic Circle between Norway and the North Pole lies a resource of vital importance for the future of humankind. Millions of seeds, from more than 930,000 varieties of food crops, are stored in the Global Seed Vault on Spitsbergen, part of Norway's Svalbard archipelago. It is essentially a huge safety deposit box, holding the world's largest collection of agricultural biodiversity.
2. ☐ The seeds lying in the deep freeze of the vault include wild and old varieties, many of which are not in general use anymore. And many do not exist outside of the seed collections they came from. But the genetic diversity contained in the vault could provide the DNA traits needed to develop new strains for whatever challenges the world, or a particular region will face in the future. One of the 200,000 varieties of rice within the vault could have the trait needed to adapt rice to higher temperatures, for example, or to find resistance to a new pest or disease. This is particularly important with the challenges of climate change. The seeds have very little monetary value, but they potentially hold the keys to the future of global food security.
3. ☐ Over the past 50 years, agricultural practices have changed dramatically, with technological advances allowing large-scale crop production. But while crop yields have increased, biodiversity has decreased to the point that now only about 30 crops provide 95% of human food-energy needs. Only 10% of the rice varieties that China used in the 1950s are still used today, for example. The US has lost over 90% of its fruit and vegetable varieties since the 1900s. This monoculture nature of agriculture leaves food supplies more susceptible to threats such as diseases and drought.



4. ☐ The Svalbard Vault was opened in 2008 as a backup storage unit for all those hundreds of thousands of varieties. The idea was conceived in the 1980s but only started to become reality after an International Seed Treaty was signed in 2001.
5. ☐ The goal is to find and house a copy of every unique seed that exists in about 1700 global gene banks all over the world. This global network collects, preserves and shares seeds to further agricultural research and develop new varieties.

In an age of geopolitical tensions and uncertainty, the Svalbard vault is an unusual and hopeful exercise in international cooperation for the good of humankind. Any organisation or country can send seeds to it, and there are no restrictions because of politics or the requirements of diplomacy.

Adapted from: *https://time.com/doomsday-vault/*

bowels: *viscere*
strain: *specie*

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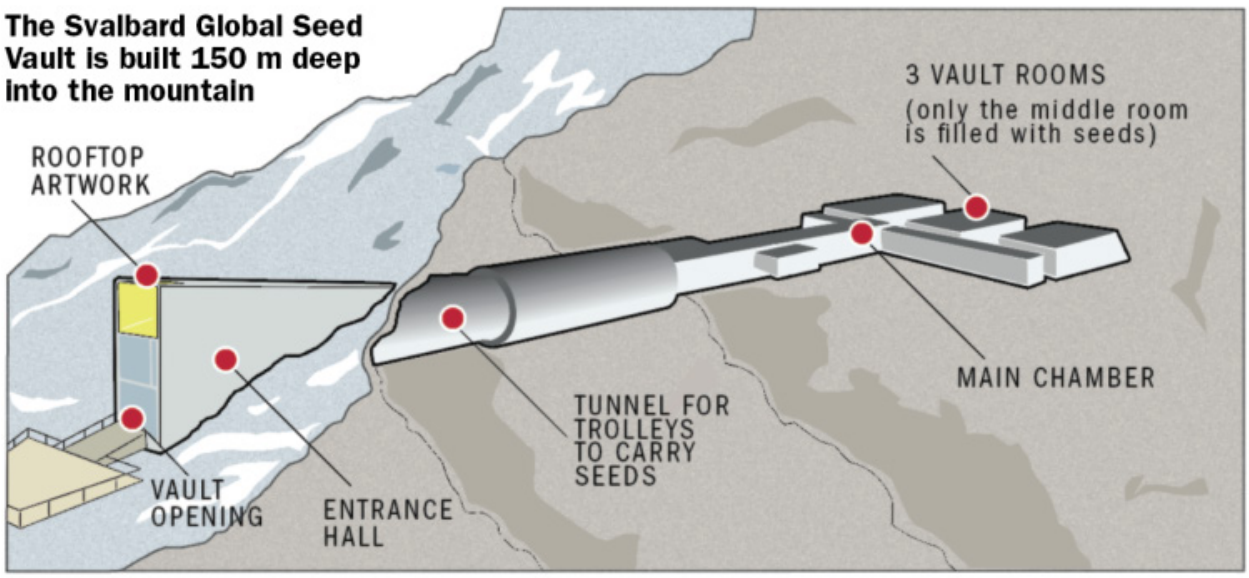

Source: Crop Trust

1 **Read the text and choose the correct heading (a-e) for each paragraph (1-5). There is one extra heading you should not use.**

a. The Vault history
b. Scandinavian target
c. Worldwide cooperation
d. The site
e. The treasure in the ice
f. Biodiversity at risk

2 **Decide if the statements are true or false and correct the false ones.**

	T	F
1. The Global Seed Vault stores 930,000 seeds.	☐	☐
2. The vault is a repository of wild and old varieties.	☐	☐
3. None of the stored varieties will be able to adapt to future climate conditions.	☐	☐
4. The stored seeds are worth a lot of money.	☐	☐
5. China has lost 90% of its crop varieties since 1950s.	☐	☐
6. Monoculture crops are more likely to be affected by climate conditions and are more vulnerable to diseases.	☐	☐
7. The project became operational seven years after the International Seed Treaty.	☐	☐
8. The Svalbard Vault cooperates with worldwide global gene banks.	☐	☐

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