Faults in the vault
Not everyone is celebrating Svalbard

After months of extraordinary publicity, and with the apparently unanimous support of the international scientific community, the "Global Seed Vault" was officially opened today on an island in Svalbard, Norway. Nestled inside a mountain, the Vault is basically a giant icebox able to hold 4.5 million seed samples in cold storage for humanity's future needs. The idea is that if some major disaster hits world agriculture, such as fallout from a nuclear war, countries could turn to the Vault to pull out seeds to restart food production. However, this "ultimate safety net" for the biodiversity that world farming depends on is sadly just the latest move in a wider strategy to make ex situ (off site) storage in seed banks the dominant – indeed, only – approach to crop diversity conservation. It gives a false sense of security in a world where the crop diversity present in the farmers' fields continues to be eroded and destroyed at an ever-increasing rate and contributes to the access problems that plague the international ex situ system.

Faulty assumptions

Cary Fowler, Director of the Global Crop Diversity Trust and one of the main proponents of the Vault, says that the initiative "will rescue the most globally important developing-country collections of the world's 21 most important food crops." While it's true that crop diversity needs to be rescued and protected, as irreplaceable diversity is being lost at an alarming scale, relying solely on burying seeds in freezers is no answer. The world currently has 1,500 ex situ genebanks that are failing to save and preserve crop diversity. Thousands of accessions have died in storage, as many have been rendered useless for lack of basic information about the seeds, and countless others have lost their unique characteristics or have been genetically contaminated during periodic grow-outs. This has happened throughout the ex situ system, not just in genebanks of developing countries. So the issue is not about being for or against genebanks, it is about the sole reliance on one conservation strategy that, in itself, has a lot of inherent problems.

The deeper problem with the single focus on ex situ seed storage, that the Svalbard Vault reinforces, is that it is fundamentally unjust. It takes seeds of unique plant varieties away from the farmers and communities who originally created, selected, protected and shared those seeds and makes them inaccessible to them. The logic is that as people's traditional varieties get replaced by newer ones from research labs – seeds that are supposed to provide higher yields to feed a growing population – the old ones have to be put away as "raw material" for future plant breeding. This system forgets that farmers
are the world's original, and ongoing, plant breeders. To access the seeds, you have to be integrated into a whole institutional framework that most farmers on the planet simply don't even know about. Put simply, the whole ex situ strategy caters to the needs of scientists, not farmers.

In addition, the system operates under the assumption that once the farmers' seeds enter a storage facility, they belong to someone else and negotiating intellectual property and other rights over them is the business of governments and the seed industry itself. In the case of most so-called public genebanks, the seeds are said to become part of "the public domain" if not "national sovereignty" (which increasingly translates to state ownership). The Consultative Group on International Agricultural Research (CGIAR), which runs about 15 global genebanks for the world's most widely used staple food crops, has even set up a legal arrangement of "trusteeship" that it exercises over the treasure chest of farmers' seeds that it holds "on behalf of" the international community, under the auspices of the FAO. Yet they never asked the farmers whom they took the seeds from in the first place if this was okay and they left farmers totally out of the trusteeship equation.

The new Svalbard Vault lies squarely at the pinnacle of this faulty architecture and false assumptions, inevitably exacerbating these problems. Because it is a "doomsday" backup collection, it raises the stakes to new extremes. Nobody really knows for sure if the Vault will be effective in keeping the seeds alive and its security is untested. Just days before the opening of the Vault, Svalbard was at the centre of the biggest earthquake in Norway's history, even though the facility's feasibility study assured that "there is no volcanic or significant seismic activity" in the area. But more troubling than any technical matter is the issue of access, the keys to which are held by few hands.

Access and benefit ills

The Vault is not immune from the terrible controversies over access to and benefits from the world's precious agricultural biodiversity. The Norwegian government is ultimately responsible for the Vault and is currently regarded as fair and trustworthy, but there is no guarantee that the country's policies won't change. This is acknowledged by the Norwegian government itself, which has provided agreements to be signed with depositors that last only ten years and that include clauses allowing them to be terminated if policies change. Probably more important, the Norwegian government will not be making decisions autonomously. Decisions will be shared with the Global Crop Diversity Trust, a private entity with strong private and corporate funding.

There are already some access issues with the Vault. For all practical purposes, seeds cannot be stored in the Vault unless they come from genebanks that have successfully duplicated their samples in another bank. More than this, depositors are not allowed to put in seeds that are already stored in the Vault. The Standard Depositor Agreement states that the "Depositor shall deposit only samples of plant genetic resources that are, to the best of the Depositor's knowledge... samples of plant genetic resources that have not yet been deposited in the Svalbard Global Seed Vault" and that "the Depositor recognizes the right of the Royal Norwegian Ministry of Agriculture and Food to refuse to accept samples for deposit or to terminate the deposit of samples already deposited if the samples constitute duplicates of materials already held in deposit in the Svalbard Global Seed Vault".

As a rule, only depositors can access their own collections at Svalbard, or give permission for someone else to. With parcels of CGIAR seeds already arriving in Norway, this means that the CGIAR Centres will be the depositors for most of the seeds held in the Vault, giving them almost exclusive control over access. Indeed, as the Seed Vault feasibility study indicates, it was "assumed that the [Vault] would begin operations with a nucleus consisting of the CGIAR materials and those of certain key national genebanks and that this (sic) 'founding collections' would discourage subsequent unnecessary duplication of materials within the Svalbard facility." Out of the 19 depositor institutes that have registered with the Vault so far, only three are national seed banks from developing countries. The Vault, then, is not a safe deposit box for just anyone. It is mostly the
CGIAR's private stash.

In practical terms this means that many developing countries that want to duplicate their collections in Svalbard would not be able to do so directly. It would be seen as a duplicate of what the CGIAR has already deposited. They will not, therefore, have direct access to seeds in the Vault that may have been collected from their country. This might not seem to pose many concerns right now because governments have different backup sources for seeds but the context would be vastly different under any doomsday scenario where decisions would have to be taken over a critical, unique resource which suddenly only remains in Svalbard. For farmers there is pretty much no possibility for direct access to seeds in the Vault.

But doomsday aside, it is important to ask who really benefits from the *ex situ* system that the Vault contributes to. As the few transnational seed corporations that control over half the world's US$30 billion annual commercial seed market are increasingly buying up public plant breeding programmes and governments are pulling out of plant breeding, the ultimate beneficiaries will be the very same corporations that are at the roots of crop diversity destruction.

**Stop destroying diversity instead!**

If governments were truly interested in conserving biodiversity for food and agriculture, they would do two things. First, they would, as a central priority, focus their efforts on supporting diversity in their countries' farms and markets rather than only betting on big centralised genebanks. This means leaving seeds in the hand of local farmers, with their active and innovative farming practices, respecting and promoting the rights of communities to conserve, produce, breed, exchange and sell seeds. But this won't happen until governments turn agricultural policy and regulations upside down and stop pushing for industrialisation and feeding corporate-controlled global markets at the expense of letting farmers freely feed their own communities and countries. This means making food sovereignty the foundation of farm policy instead of continuously pushing agriculture further down the destructive path of corporate-led global market integration.

Svalbard is about putting diversity away, in case of some hypothetic emergency. The real urgency, however, is to let diversity live – in farms, in the hand of farmers, and across people-controlled and community-oriented markets – today.

**Going further:**

- Norwegian government and the Svalbard vault: http://www.nordgen.org/sgsv/
- International Treaty on Plant Genetic Resources for Food and Agriculture: http://www.planttreaty.org/
- GRAIN, "The FAO seed treaty: from farmers' rights to breeders' privileges," Seedling, October 2005, http://www.grain.org/seedling/?id=411