

For three decades now, community seed banks have helped preserve heirloom seed varieties. Anitha Pailoor explores the evolution of these efforts and how they support sustainable farming



For Syed Ghani Khan in Mandya's Kirugavalu, organic farming is intertwined with multicropping and seed conservation. "Biodiversity is key to sustaining farming and this can happen only when we have varied crops and healthy seeds," he says. When he first started at the turn of the century, very few heirloom varieties were available for farmers.

It took six years for him to get his hands on West Bengal's iconic paddy variety 'jugal', which produces two grains from a single seed. "In the process, I realised how we struggle to get seeds of even varieties that were locally available a few decades ago," Ghani says. This prompted him to collect more varieties and open the doors of his personal seed collection to fellow farmers.

Now, Ghani's seed bank has 1,350 paddy varieties, 100 finger millet varieties and over 100 types of vegetable and medicinal plant seeds. He is one among the growing breed of seed savers in Karnataka who have set up seed banks independently and are catering to the needs of farmers across the country.

The concept of seed banks with women farmers at the centre was sown in Karnataka in the 1990s by Green Foundation, a civil society organisation. Karnataka farmers had started exploring alternatives to chemical-intensive, single-crop-focused agriculture at the time. The NGO facilitated the collection of seeds from different regions and farmers preserved them by growing them.

Farmers managed the seed bank and followed a barter system. A farmer who collected seed from the bank had to return double the amount of seeds after harvest the next year. This instilled a sense of ownership in everyone who traded with the community seed bank.

Community seed banks helped restore and revive many nearly extinct varieties. This particularly proved useful in the age of climate change, as farmers needed varieties that withstand extreme weather events such as drought and floods. The deep-water variety Nereguli, for example, is popular among farmers as it can survive submerged in water for a month.

Seed conservation efforts like that of B K Deva Rao in Belthangady taluk got wider attention in the early years of 2000. That decade also saw seed savers like Bore Gowda of Mandya and A N Anjaneya of Davanagere developing paddy varieties and distributing seeds. Seed festivals held in different parts of the state helped link such efforts and provided them a bigger platform.

Pioneering efforts

Set up in 2001, the community seed bank in Chinnikatte village in Haveri district is one of the early efforts in the state. The response was lukewarm initially as farmers here did not see the need for such an effort in a district known for hybrid seed production. "Some of us were open to the idea as we had experienced the ill-effects of heavy synthetic chemicals used in hybrid seed production," says Shrenikaraju, who used to produce tomato seeds. After 20 years, he is a pioneering seed saver in the state and a board member of Desi Seed Producers Company that trades heirloom seeds grown

Custodians of SEED DIVERSITY



In pic, women farmers display varieties of ragi.

PHOTOS/G KRISHNA PRASAD

Seed banks in Laos

OUNKHAM PHIMMATA

Lao People's Democratic Republic has one of the widest varieties of indigenous rice varieties in the world. The diversity of varieties enables farmers to choose based on their taste and their soil type, steepness of slope and micro-climate. It also enhances their resilience to changing conditions.

Farmers have faced relatively little competition from imports — or opportunity to export — as the staple food is glutinous rice. There is, however, a potential threat of foreign seed companies claiming patents on Lao rice varieties. The country is currently developing new laws and policies on the seed sector.

The National Agriculture and Forestry Research Institute (NAFRI) and the Ministry of Agriculture and Forestry of Laos have established at least five farmer seed banks.

NAFRI has also developed awareness-raising tools and materials to improve un-

derstanding of how to grow underutilised local crops in gardens and incorporate them optimally in a nutritionally balanced diet.

An estimated 30% of rice grown in paddy fields in the valleys now consists of improved varieties developed



Syed Ghani Khan at his seed bank in Karnataka.

by NAFRI. Environmental experts predict that climate change is expected to cause severe droughts and floods, with crop yields possibly falling 10% by 2020 and 30% by the year 2050.

(Ounkham Phimmata works with the Vientiane Times in Laos)

without synthetic chemicals.

The community seed bank in Chinnikatte does not exist anymore. But the concept is thriving as farmers have become keepers of seeds. Around 70% of farmers in the village have shifted from hybrid seed production to traditional seed production.

"Twenty years ago, the focus was on collecting seeds but now we are working on distributing to as many farmers as possible," says Shanth Kumar, convenor at Sahaja Samrudha, a farmer-led organisation facilitating community seed banks in the state.

The women-led community seed bank in Teertha village in Dharwad district has shown how this effort can improve nutrition in rural areas. "During the Covid lockdown, we distributed vegetable seeds to every house in 22 villages in Kundgol taluk and encouraged people to grow vegetables in their backyard," says farmer-entrepreneur Bibi Jan. The kitchen garden effort provided enough vegetables to every household and brought more families into the fold of the community seed bank.

Here, around 10 farmers produce seeds of heirloom varieties through scientific methods while many others grow these varieties in their farms. Bibi Jan's team buys and distributes the seeds. The grains harvested are processed and sold through the self-help group that she leads. Her team focuses on millets.

In fact, millets (40%) and vegetables (40%) top the sale of heirloom seeds followed by paddy, says Shanth Kumar.

"Community seed banks played a crucial role in strengthening the organic farming movement in the state," says agriculture scientist N Devakumar, who was instrumental in setting up a crop diversity block in Navile Organic Farming Research Centre, Shivamogga. "What began with the support of NGOs, seed conservation efforts are now led by farmers themselves," he says.

Even though Karnataka incorporated seed banks to a certain extent in its programmes after the introduction of the organic farming policy in 2004, it is yet to introduce traditional varieties in the seed supply chain. "Without a proper support system, it is difficult to sustain community seed banks. The government support so far has been limited to documenting native varieties and organising some workshops and fairs," says G Krishnaprasad, founder, Sahaja Samrudha.

K Madhusudan, special officer, National Seed Project, University of Agricultural Sciences, Bangalore says that though the government and universities acknowledge and appreciate farmers' efforts, it is difficult to introduce traditional or farmer-bred varieties in the seed supply chain as they are not certified. "Four universities in Karnataka have set up a gene bank where we store seeds of every crop variety found in the region. This genetic stock is used for the research and development of new varieties with desirable features and also for conservation," he adds.

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