A bank for seeds: In Telangana, a safehouse secures the future of agriculture

The genebank hosts 126,830 accessions (samples of a particular plant/crop population stored as seeds) collected from 144 countries.

Stashed away in earthquake proof and environment-controlled vaults in South India are thousands of stockpiles of seeds of crops important to semi-arid tropics covering Asia, much of southern and eastern Africa, and a few locations in Latin America.

This fortified archive at the International Crops Research Institute for the Semi-Arid Tropics headquarters at Patancheru near Hyderabad in Telangana, is home to one of the largest plant genebanks in the world – a safehouse with rows of neatly labelled cans and vacuum sealed aluminium foil packs containing seeds. And for over four decades, the RS Paroda genebank at ICRISAT has been working quietly to preserve bounties of crop diversity watched over by expert genebank managers. The collection of raw genetic material is needed to breed diverse crops to ensure food security, as environmental degradation, climate change and desertification in dryland areas threaten food production and security.

The genebank hosts 126,830 accessions (samples of a particular plant population stored as seeds) collected and assembled from 144 countries, including the world’s largest genetic holdings of sorghum, pearl millet chickpea, pigeonpea, groundnut and small millets. Now, new projects are being rolled out to secure and bolster the collection of the genebank, identify gap areas and enhance its usability.

“If we don’t have germplasm we don’t have the basis to develop anything. So all the breeding programmes and research on these crops are based on germplasm and the genebank represents the biggest diversity possible of all those crops so we can have variability. Our job is to generate data so we can improve the utility of the bank,” Vania Azevedo, head of the ICRISAT Genebank, told Mongabay-India. Read more..