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Seed-bank information systems: An international perspective

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It is conceivable that humans can live without animals but it is inconceivable that animals and humans can live without plants. Unfortunately, seeds are getting extinct caused by varied reasons such as climate change, radio activation, endangering in the wrong environment, droughts, volcanic eruptions, poor agricultural practices etc. As a panacea, seed banks have been established for prosperity and posterity. A seed bank preserves seeds as a repository for future planting in case seed reserves elsewhere are destroyed. It is similar to gene bank to guard biodiversity. Storing seeds also guards against catastrophic events like natural disasters, outbreaks of disease or war. Over the years several seed banks have been established. The best example is Svalbard Global Seed Vault, a secure seed bank located on the Norwegian island of Spitsbergen about 810 miles from the North Pole. The Global Crop Diversity Trust, the Consultative Group on International Agricultural Research (CGIAR) and the Food and Agriculture Organization of the United Nations played vital role in establishing this underground vault. This Doomsday vault is a global backup system for the planet's plant resources. There are currently about 1,400 seed banks worldwide in various countries for specific crops such as cassava, forages, beans, cowpea, soybean, yam, rice, potatoes, peanuts etc. It is worth noting that of the more than one million seed samples distributed, seed contributions from CGIAR gene banks have helped agricultural recovery after conflict and natural disasters in many countries. This paper presents an overview of major seed banks worldwide, differentiates these banks from commercial seed banks, discusses typology of these banks, and outlines strengths and weaknesses of community seed banks in developing countries.

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