

Country: India

Focus of case study: Seed Banks

Summary: With the advent of the green revolution, the emphasis on agriculture in India shifted away from biodiversity to increased yield. As a result, the genetic base of rice varieties is being reduced considerably and several traditional seed varieties are now facing extinction. Yet, there are many benefits of traditional varieties: resistance to pests and diseases; resistance to droughts and floods; compatibility with local farming conditions; economic practicality and environmental sustainability. Tribal communities in Orissa have started to revitalize on-farm conservation by promoting traditional varieties of rice through seed banks.

Desired seed varieties are collected from interested households, catalogued systematically, and stored. The central village committee identifies families that urgently require seeds. The secretary of the seed bank then records the variety and quantity of seed required by each family. Farmers receive seeds on loan from the community seed bank, providing they agree to obey all the terms and conditions of the loan. On returning the loaned seed, each household has to give approximately 1.5 times the quantity taken. Seed banks are a form of storage and diversification, and they enhance farmers' ability to buffer environmental and economic stress. Community seed banks enable farmers to cope with environmental stress by planting several rice varieties adapted to a range of environmental conditions. At the same time, seed banks facilitate farmers' access to markets and give farmers more choice over what they grow. Seed banks enable rural tribal villages to become less dependent on engineered high-yield varieties and on expensive inputs such as fertilizers and pesticides.

Class of adaptation practice: storage, diversification

External support: informational, leadership, technical

Local rural institutions: collective/
social

External institutions: none

Capacity Building: coordination, ability to plan and strategize, ability to improve production

Source: UNFCCC Local Coping Strategies Database: “Seed Banks In Orissa, India.”