

# Climate Resilient Farming: Conserving Indigenous Rice Varieties



## *Krishna Suchitra Memorial Study Centre (Experimental School), Sagar Island, India*

Sagar Island, located in Sunderbans in West Bengal, is highly vulnerable to cyclones and salinity issues severely affecting the local agriculture. A group of thirteen students at the study centre, under the leadership of XII grade student, Sakila, and with guidance from PUPA, a local NGO, undertook an innovative initiative to cultivate and revive indigenous rice varieties. A community member volunteered his small vineyard for the project that remained fallow after the devastating 2020 cyclone, Amphan, destroyed the vineyard. This land was used for seed production of traditional rice, suited to adapt to local climatic hazards. The students grew 62 different varieties of rice in holes/pits in the field to identify which varieties grew best in upland conditions surrounded by low saline water. The seeds were conserved for future use. The students also made organic compost and conducted rainwater harvesting on the field. The entire initiative was supported through community knowledge and technical expertise. Students were linked with a farmers' club to receive advice and two teachers of the study centre guided them throughout the process.

Conservation of indigenous rice varieties, some of which are salt-tolerant but not currently grown locally, is critical to sustain local agriculture as these salt-tolerant varieties can be grown successfully even if the field is flooded with low saline water. However, due to current intensive use of high-yielding-varieties, indigenous rice seeds are not readily available.

As a result of this initiative, there is a revived interest among the community members in traditional varieties and several of them have adopted the practice.





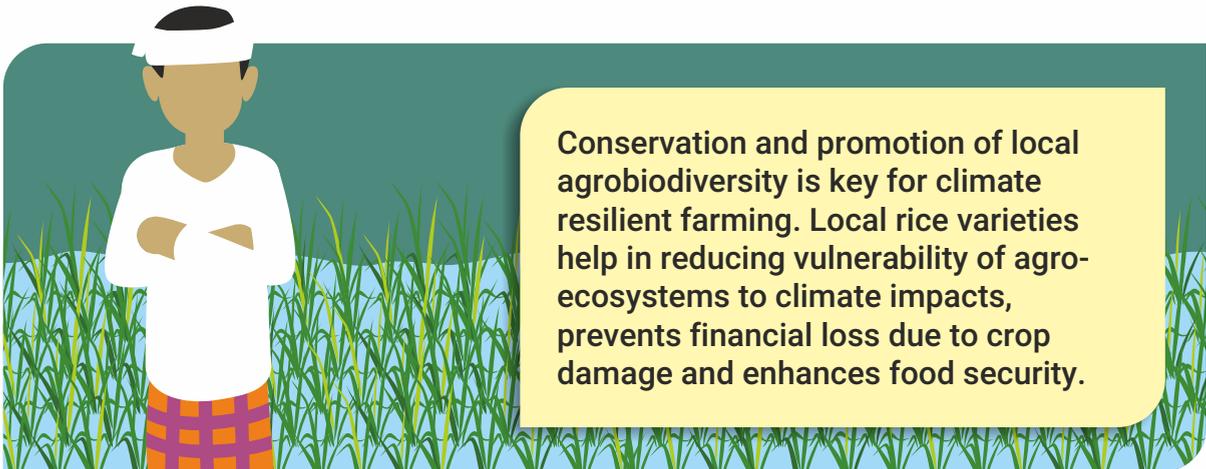
On field experiment by students to identify salt-resistant varieties



Seed bank for salt-resistant varieties created



Distributing seeds among farmers



Salt-resistant varieties being grown by farmers

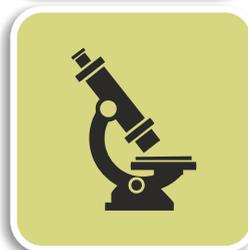
**13** Students involved in the innovative process



**63** Rice varieties grown and tested



**15** Salt-resistant varieties identified



**30** Farmers adopted growing salt-resistant varieties

