




Nurturing climate resilience in agriculture by women farmers

Climate Resilient Agriculture is a comprehensive approach designed to ensure the sustainable use of a given ecosystem's natural resources, incorporating both crop and livestock production systems. The ultimate goal is to maintain and enhance productivity and farm incomes in the face of climate variability. Watershed Organisation Trust (WOTR) in India encourages women to adopt of Climate Resilient Agriculture (CRA) practices to address the issues arising in agriculture due to climate change.

This multifaceted concept encompasses a number of strategies and technologies, to make farmers, especially women, more resilient to climate variability. These include

1. Promoting crop varieties suitable for the region.
2. Efficient water management [Share This](#) 
3. Adopting of various in-situ moisture conservation techniques
4. Adopting Integrated Nutrient Management and Integrated Pest Management (IPM)
5. Promoting Farm Precise app for making informed decisions about crop management practices.

Women participation was ensured through capacity building and awareness programmes for improving household food security and enhance the climate resilience of their farms. Women were made aware of several concepts like Integrated Nutrient Management, Integrated Pest management, Livestock management, multilayer farming, crop planning and kitchen gardens. Awareness sessions on how to start all these activities were organised. Exposure visits also gave them an opportunity to see live model farms and interact with farmers .

Following is a series of activities taken up by women which has enhanced their confidence to deal with the effects of climate change on agriculture.

1. Women promoter conducts Farmer Field School on Climate Resilient Agriculture, with a group of women farmers. Farmer Field Schools (FFS) is a platform to help farmers promote a healthy crop. This is achieved by understanding the crop ecosystem, appropriate use of farming techniques and exchange of knowledge and ideas about good agricultural practices amongst farmers.





2) Women farmers are taught about the use of bio inputs under the Nutrient Management. Vasundhara Sevika during a FFS session demonstrates the preparation of organic formulation to be used as nutrient application to crops. Women learn to identify the local biomass that can be used for preparing the organic formulation. Its use and application rate is also discussed with the group members.

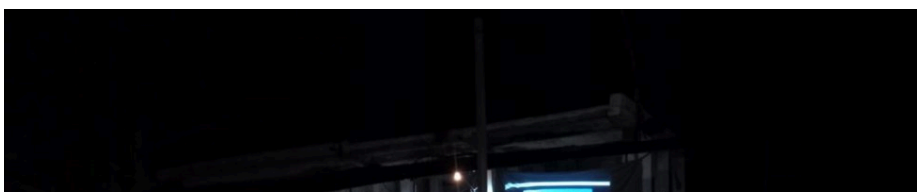




3) Preparation of organic formulations to help improve the crop yield with the reduction in input cost- Women farmers together prepared Jeevamrit, Amritpani and Dashaparni ark etc. to improve microbial count in the soil, promote growth of the crop and avoid the pest infestation to some extent. Some women from SHGs prepared Amritpani and Dashaparni ark and sold at the village level.



4) Manjubai Gurjar, Bisali, Chhipa Baroud (Rajasthan) creating awareness in villagers regarding Climate Resilient Agriculture at night meeting. The image shows her standing confidently in front of a group of mostly male farmers, delivering her message with assurance. Photo credit: Sanwermal Seemavat, ChhipaBaroud (Rajasthan)





5) Some of the women farmers have become good entrepreneurs and are inspiring others to take up entrepreneurship. In Karjat, Ahmednagar area, women farmers share their experience on Onion processing unit with women farmers from neighbouring area.



6) Women have not only learnt the climate resilient practices, but also are actively engaged in influencing others through rallies and campaigns. Women farmers seen organising a rally to advocate for the adoption and promotion of Climate Resilient Agriculture practices





7) The principles of agroecology – focus on creating sustainable and resilient farming systems, align closely with the practices and benefits of multilayer farming. Multilayer farming enhances biodiversity, adapting to climate variability, optimising resource use, and building resilience in farming systems. It also contributes to food security by providing a variety of crops and a continuous supply of fresh produce throughout the year, improving dietary diversity and nutritional intake. It helps farmers to become more self-reliant, better-equipped and resilient by raising the adaptive capacity of farmers by ensuring food and nutrition security especially during crises – such as drought and pandemic.



8) WOTR has carefully chosen 45 women as Pashusakhis in Madhya Pradesh to address the issue of scarcity of veterinary doctors in the project area. The government veterinary doctors have provided foundational training, encompassing vaccine administration and pharmaceutical knowledge to Pashusakhis. Pashusakhis are equipped to navigate the village effectively, possessing excellent communication skills and serving as proficient trainers. Pashusakhis conduct livestock surveys, administer essential vaccinations, maintain comprehensive livestock and medicine records, and extend their services to the community at a nominal fee. From July 2023 to August, these Pashusakhis have successfully vaccinated around 13,000 livestock animals.





9) Women farmers installing Yellow sticky traps in Cotton crop. In one of the project areas in Gangapur, Aurangabad, women farmers are made aware of Integrated pest management. They have learnt to use yellow sticky traps to control sucking pests.



10. System of Rice intensification: In another project area, women farmers have come forward to practice System of Rice Intensification (SRI). This requires lesser inputs and yields better than the conventional system of rice growing. Also the precious water resource use is drastically reduced, thus resulting in better resource management.





11) In Jharkhand, women farmers are transitioning towards the cultivation of millet crops due to the inadequate rainfall conditions. Traditionally, they have been engaged in cultivating rice crops. Shifting to millets is a climate resilient practice, as millets requires very less amount of water to grow as compared to paddy. This is a commendable initiative towards celebrating The International Millet Year 2023.



12) Awareness on ecological alternatives is being imparted at a young age by involving school students. Girl students installed bird perches as an 'integrated pest management' activity in

soybean crop to control leaf eating caterpillar. It is an eco-friendly way to control agriculture crops from invading pests. It prevents economic losses to farmers.



Prithviraj Gaikwad

Sr. Agri. Officer, (Climate Resilient Agriculture)

Watershed Organisation Trust (WOTR), Pune

Email: prithviraj.gaikwad@wotr.org.in

Harshal Khade

E-mail: harshal.khade@wotr.org.in

Arun Bhagat

ecology | [Articles](#) | [Mixed farming](#)

[Ecological inputs](#), [Ecological practices](#), [Women Empowerment](#)