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Adapting to Climate Change

A Community Radio Initiative

This article by **Sarita Brara** highlights how community radio is helping farmers adapt to climate change through timely, expert-driven guidance. Programmes like *Tohfa-e-Kudrat – Jal, Jangal, Jameen* broadcast practical advice on climate-resilient crops, water conservation, and sustainable farming. Farmers such as Abdul Razak in Haryana and Rekha in Rajasthan have significantly improved yields and incomes by adopting recommended practices, including new wheat varieties and better irrigation methods. The initiative also promotes rainwater harvesting, drip irrigation, and use of solar systems and AI-based groundwater monitoring. With real-time weather updates and interactive platforms, the radio serves as a vital link between scientific knowledge and rural communities, enabling farmers to reduce risks, conserve resources, and build climate resilience.

Farmers are the most affected by climate change. The shifting pattern of weather impacts the production of their crops and ultimately their incomes. Abdul Razak a farmer in Regarh village of Nuh in Haryana is no exception. His wheat crop production was greatly affected because of untimely rains and storms. But while listening to agricultural scientists in a programme *Tohfa-e-Kudrat – Jal, Jangal, Jameen* aired over a community connect radio, he

learnt about the climate change resistant variety of wheat. Razak who owns 10 acres of land, sowed the variety of wheat PBW 147 suggested by experts in the next season and the yield was much more than he had expected. He also changed over to the varieties of mustard and tomatoes suggested by the experts. Now, he no longer suffers losses due to climate change. In fact, production of his crops has increased.

Rekha, a farmer from the small village

of Poothi in Ramgarh tehsil of Alwar district, Rajasthan, has also benefited from shifting to a climate-resilient variety of wheat. This Rabi season, she was able to harvest nearly double the yield compared to the previous season. She attributes this improvement to the knowledge she gained from listening to the *Jal Jangal Jameen* programme. Earlier, she says, wheat production from one bigha of land never exceeded 10–12 maunds. This season, however, the yield rose to over 25 maunds. For the first time, Rekha was able to sell a portion of her wheat after setting aside enough for her family's needs, earning nearly ₹7,000.

"I keep transistor by my side to listen to the programme while doing my household chores as the tips given by experts relating to sowing of seeds to taking care of plants and harvesting the crop. Rekha has nearly two bighas of land and grows cotton, wheat, millets, mustard, and other vegetables.

The Community Radio Connect FM 107.8 covers around 300 villages across four districts—Alwar, Deeg, Khairthal-Tijara in Rajasthan, and Nuh



(Mewat) in Haryana. The signature programme *Tohfa-e-Kudrat – Jal, Jangal, Jameen* (Water, Forests, Soil), a daily programme focusses on natural resource management and climate change awareness. Experts from Krishi Vigyan Kendra give their advice and suggestions over this community radio on shifting to climate change resistant crops, timing of sowing and harvesting of different crops as per the changing weather patterns.

One of the patterns observed due to climate change is a shift in rainfall distribution. Earlier, rains were spread over longer periods, allowing for gradual absorption. Now, rainfall tends to come in short, intense bursts—it does not rain, it pours. This makes it essential to ensure that water is not lost through overflow and flooding, but is effectively captured and stored.

Pooja Oberoi Murada who is the Principal lead of the outreach programme of S M Sehgal Foundation running the Community Radio says that farmers are advised to dig in farm ponds to store rainwater which can be used for



irrigation and the ponds can be used for fishery purposes as well. The farmers are also educated on the use of solar system for irrigation and other purposes and the government subsidies for the same. The Foundation has also constructed 70 check dams in the region. The farmers are also advised to use AI technology sensors

for measuring the levels of ground water. This technology enables real time data collection, analysis and prediction by use of sensors and this enhances monitoring of groundwater levels. The farmers are also advised to go in for drip irrigation and sprinkling so that not a drop of water is wasted.





Pooran Chand Saini from Thakarbass village in Alwar in Rajasthan is among the regular listeners of the programme aired over the radio. Saini who has shifted to drip irrigation says he is now able to save water and follows whatever suggestions are given to check the depleting levels of ground water. Other farmers also say that the consumption of water has greatly reduced.

"We have been able to save on electricity and time spent in the fields. Earlier irrigation would take four to five days, but now, the same work was completed in just 1–2 hours," says Saini.

"I have come to understand the importance of conserving water and not wasting a single drop. I've also learned how cutting down trees in forests affects the climate," says Rekha. She feels that the large forest area near her small village must be protected, and that it

is important for the local community to ensure that no trees are cut. She also notes that rising temperatures, even during what used to be the peak winter season, are adversely affecting agricultural crops.

The programme broadcast over this community radio station also provides real-time weather information received from the Meteorological Department. Saini is of the opinion that in the present scenario of climate change forecast of weather as well as others kinds of suggestions are indeed crucial for farmers like him. "Right forecast can help minimize the losses to a great extent," he feels.

The farmers are also advised how to deal with setting frost in the fields that affects the crops as well as harmful impact of stubble burning like pollution and how to avoid this practice. Fakat

Hussain, Station In-Charge of Community Radio Connect says such information is also aired during farmers' meetings and *Kisan Goshtis* (farmers' meetings) and farmers can also interact through phone calls and WhatsApp listener groups.

The number of community radios which play a vital role in climate change adaptation across India has increased over the last decade and today more than 500 community radio stations are running in different parts of the country. Serving as a bridge between scientific knowledge and grassroots realities, initiatives like Radio Connect provide authentic and real-time information to educate farmers on climate-resilient farming techniques, weather forecasts, government schemes, and market trends. ■

Sarita Brara is a senior writer and a regular contributor to this publication.