

Raising the reservoirs

A charitable trust is helping villagers in India's driest regions to recharge ground water and maximise agricultural earnings using an age-old rainwater harvesting technique, writes Geetanjali Krishna

In today's world, it would be safe to say that everyone has been exposed to images of human suffering across the world, and closer home. Few, however, dare to dream of transforming this suffering into long-term prosperity. This is exactly what septuagenarian Amla Rula did when, in early 2000, she saw photographs of people affected by drought in Rajasthan. "I felt, even though I had no expertise in the field, that simply sending water tankers to these drought-stricken areas would provide only temporary relief," says she. "The solution had to be a permanent one." This resolve led her to form Aakar Charitable Trust (ACT), the organisation that has helped villagers in India's driest regions to recharge ground water and maximise agricultural earnings using an age-old rainwater harvesting technique — check dams.

Traditionally, villagers in Rajasthan used obstructions to block the run off from rainwater. Known as *Khadin*, this system trapped rainwater

in pools. Over the years, however, villagers stopped relying on such traditional structures. Their wells dried up. "Check dams seemed like a cost-effective



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solution with all the advantages of the large dams and none of the disadvantages, such as displacement and rehabilitation of people, huge unutilised dead storage of water, water logging, risk of breach causing extensive damage to life and property," says Rula.

ACT built its first two check dams in Mandawar village in 2006 and its bleak desert landscape became transformed into agricultural land. With the water brimming in their wells, Mandawar locals earned ₹12 crore from agriculture in the first year itself. "We found that when the reservoir dried up eight months later, the soil underneath was so moist and fertile that villagers were able to grow a *rubis* crop on it, that needed neither irrigation nor fertiliser," Rula adds. She noted that check dams worked even in areas that received as little as 16 inches of rain annually, recharging water in as

many as 150 wells nearby. "Check dams work best in mountainous terrains where valleys form natural reservoirs," says Rula. "We started looking for sites where water naturally tended to pool."

In many ways, these early years were a learning experience for Rula and her cohorts. They discovered that check dams did not cost a lot to construct (₹4-25 lakh depending on size) but had the potential to transform the economic climate of desert villages in some of Rajasthan's most marginalised districts like Sikar, Jhunjhunu, Bikaner and Dausa.

Take the case of the check dam in Kalakota, a village in Sikar district. Before it was constructed, the villagers registered no income at all from agriculture. ACT asked them to jointly contribute ₹80,000 while RJ Foundation, its sponsor, contributed ₹1.74 lakh. Post construction in 2011, the villagers began cultivating tracts of land, and registered a net income of ₹2,19,81,023 in 2015. Similarly before a check dam was constructed in Kalakhet, its winter crop yield in 2007-08 was ₹2.98 lakh. Once the dam had recharged the ground water in the area, the total income grew in 2015 to ₹6,44,04,838. "Now, thanks to the abundant water available, many villagers have taken up animal husbandry, which has sharpened the rise in their incomes," says Rula. The highest income generated annually by a single ACT beneficiary village is a whopping ₹2 crore. What makes the check dams built by the trust more effective than others is that villagers own them fully. After a dam is constructed, villagers create a joint bank



Amla Rula (left) at a village in Rajasthan

account, into which everyone deposits one percent of their harvest every year. This corpus is used to maintain the dam.

Thus far, Rula and ACT have transformed 115 villages directly, and a further 193 villages indirectly. Rula insists upon all their village stakeholders swearing off drinking, using tobacco and holding ostentatious death feasts. "Consequently, these villages have become so prosperous that everyone wants their daughters to marry boys from here," she laughs.

Aakar Charitable Trust has its work cut out, given that India's watershed management has

been so short-sighted that states like Maharashtra, Rajasthan and Bundelkhand face drought almost every year. "Our work has strengthened my belief that we, as citizens, shouldn't wait for the government to help us," says Rula. "With support from local stakeholders and corporate sponsorships, we can effect transformations ourselves."

To learn more, visit aakarcharitabletrust.weebly.com. Next up, the story of how three young girls who used to play in a river of sewage blossomed into productive members of society thanks to an innovative educational programme