The Cowshed Corporation

Soil Protection and Rehabilitation for Food Security in India

Commissioned by: Federal Ministry for Economic Cooperation and Development (BMZ)

Co-financed by: Gates Foundation

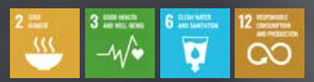
Project partners: Madhya Pradesh State Rural Livelihoods Mission (MPSRLM), Professional Assistance for Development Action (PRADAN)

Project timeline: May 2015 - December 2024

Budget: EUR 22.35 million

Locations: Madhya Pradesh and Maharashtra

SDGs addressed:



A fly sits on her face in the still afternoon heat, but Lalti Marawi does not swat it away. Her hands are dirty from mixing jaggery, gram flour, and another curious ingredient: cow dung.

Lalti and her seventeen colleagues are sitting on the floor of a cowshed in the sleepy village of Jhanda Tola, Madhya Pradesh. These women gather every week, their hands calloused yet gentle, mixing jaggery, gram flour, soil and water together. Under the cowshed run pathways and pipes, leading to a sump designed to collect urine from the community cowshed. This will be the magic ingredient in the mixture these women are preparing. They work in unison, patiently kneading the mixture to remove any lumps, preparing it for the next stage.

Once the mixture is ready, it is fed into an automated, solar-powered production unit with a capacity of 2,000 litres. As the mixture calmly ferments here for the next seven days, the unit will spring to life twice a day, aerating the mixture to promote the growth of beneficial microbes that will soon enrich the soil of the neighbouring farms. Once ready, it is called ***Jeevamrit.***

“Jeevamrit is a bio-fertiliser that has been proven to be beneficial not only to the crops, but also in maintaining the fertility of the soil,” says Akhila Ajay of PRADAN, an Indian NGO.

However, making it in large quantities is a labour-intensive task, involving a fair amount of drudgery. To encourage farmers in Mandla to either produce or at least use Jeevamrit, GIZ and its partner PRADAN created a new solution under the Indo-German cooperation project ‘Soil Protection and Rehabilitation for Food Security in India’. With technical support from GIZ, multiple solar-powered automated Jeevamrit production units were developed to produce and sell this potent panacea. This unit was to be made available for those who would be ready to take on this task.

Lalti Marawi was one of eighteen women selected to form a women's collective that would work together to produce and sell the Jeevamrit. In addition to helping small and medium farmers adopt agroecological practices, this collective of tribal women would soon go on to become successful agro-entrepeneurs, growing in confidence and enterprise.

"It's an amazing feeling to know that our work is helping both farmers and the environment," says Lalti. "The farmers that use our Jeevamrit are very happy with the increase in fertility and yield that they have seen. Chemical fertilisers had wiped out the earthworms, frogs and other welcome visitors that keep insects away and help farmers with the Jeevamrit, these indicators of healthy soil have returned to the field. Like the farmers, we too can see the impact the Jeevamrit has had on our livelihoods. We have sold about 5,000 litres of Jeevamrit so far, earning almost ₹40,000, with the next batch already in the pipeline."

How does the little collective do so well?

At a cost of only ₹600 per acre, the Jeevamrit organic fertiliser is a fraction of the cost of chemical alternatives, which run as high as ₹2,200 per acre. Having their operations at the cowshed gives the women easy access to cow dung and urine, and the solar-powered Jeevamrit production unit means less overhead cost. This Jeevamrit produced in large quantities also goes through multiple filtration processes so that the end product is easy to dispense through spray bottles, unlike home-made Jeevamrit that may contain lumps. The collective also only produces as per demand, communicated to them by farmer Community Resource Persons (CRPs in neighbouring villages. They now supply precious Jeevamrit to over 2,000 farmers.

The women of Jhanda Tola are businesswomen, agro-entrepreneurs, and stewards of the land, proving that ecology and economy grow together.