

port from other agencies, two check dams were constructed to catch the run off from the tank. To avoid the prohibitive cost of pumping water with motor pumps, a local lift irrigation practice was resurrected and a network of *fuds*, shallow canals, was dug along the contours of the land to bring water to fields.

A flexible system

The *fud* system, say the villagers, has many advantages. The slight infrastructure involved can be constructed and repaired by the villagers without any assistance. The channels being small and flowing along the contours of the land slow down the speed of water and hence reduce erosion and facilitate percolation of water into the ground.

The results were instantaneous. In the first crop season that ended in 2007 summer, grain production shot up by

have also enabled farmers to resurrect long-lost traditional soil enrichment practices. "Earlier we had to keep all our wheat straw and tur greens for fodder, but this year many have enough left for mulching land," he says.

This year only one representative from each family went out with the sheep. Women and children have stayed back and as a result school enrolment is expected to rise.

Same old story

While Dhargarwadi prospers, things remain much the same in most parts of the district. No minor irrigation or irrigation tank revival work has been sanctioned under employment guarantee scheme (EGS). Some micro-irrigation work such as digging up of small farm ponds, locally known as *shetatalis*, have been undertaken under the various

Effective management of 46,000 minor watersheds could drought proof Maharashtra

45 tonnes and onion production by 25 tonnes. Villagers were able to diversify into tur, the popular local pulse crop, wheat, onions, bajra and black gram. Yields shot up too. "Earlier we would get about 100-200 kg wheat from an acre, but this year we got about 1,000 kg," says Krishna Rama Adhire, a resident of Dhargarwadi.

This year, soil conservation and water percolation have further enhanced production. Jaggu Kengar proudly shows off his bumper wheat crop. "I got 17 tonnes of onions and my bajra crop is yet to come," he declares. The good yield and abundant biomass, he says,

farmers' packages declared by the government in the wake of a spurt in farmers' suicides, but the results range from frustrating to ridiculous. For instance, in Bothbodan village, where there have been 16 suicides, diesel pumps and PVC pipes were distributed to 25 families last year, but no water harvesting or groundwater recharge structures were created. "The equipment is rusting in our homes because there is no water to pump," says sarpanch Anup Ramchandra Chavan.

Even in places where work has been sanctioned (not under EGS), it is hamstrung by corruption. In January



The wheat output of our lands has gone up five to ten times after the tank was revived.

—Krishna Rama Adhire
Dhargarwadi resident

this year, tribal commissioner of Amravati division Sunil Limaye sanctioned Rs 6 lakh for two projects similar to Dhargarwadi in neighbouring Chaparda and Bhurgad, but the funds have not yet come through. Says Dhas, "Officials are demanding a bribe, which we are not ready to pay. But we are in a fix because the villagers have already carried out the work by taking loans from other agencies, and they have to be paid back," he rues.

A fund problem also caused the second phase of the Dhargarwadi project to be delayed by an year. "The project should have been completed in 2007 June. The delay has created much misunderstanding among villager," says Dhas. Executive engineer of the irrigation department S K Dhoble has his reasons. "Reviving the tank is not a labour-intensive activity that fits the EGS bill," he says. Water management expert H M Desarda disagrees. "Watershed management involves afforestation, soil conservation, desilting and other labour intensive works. Only construction of harvesting structures involves some machinery. Saying that the work is not labour intensive, shows a partial understanding of the process," he argues.

Desarda says effective management of 46,000 minor watersheds in Maharashtra could drought-proof the state and also eliminate the need for environmentally and socially disruptive big dams. "Even the most drought-prone districts here get a minimum of 250-500 mm of rainfall per year. This is sufficient to meet their basic agricultural requirements," he adds. ■

Channels of prosperity: Fuds take the water from the tank to fields

