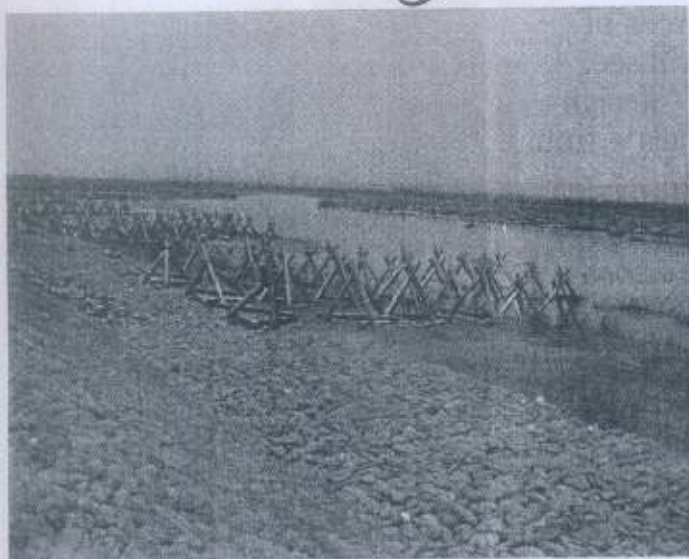


Taming Swan river



SINCE time immemorial, the Swan river, also known as the 'river of sorrow', has given nothing but pain and grief to the people living in 95 gram panchayats of Himachal Pradesh's Una district.

Seven years ago, people in the area had never imagined that the river would ever give them joy, prosperity, and a means to earn their livelihood. And they had reasons to think so. Sudden floods taking a huge toll of lives and property was nothing new.

A decade back those who had agricultural land near the 'river of sorrow' used to curse their bad luck, but today they are proud owners of the land and consider their once barren land as golden-egg-laying goose, thanks to the state government's initiative. The 'river of sorrow' has turned into a 'river of joy', courtesy an integrated watershed management project.

The region has seen a complete change after the launch of the Swan river integrated watershed management project seven years ago. Prior to the execution of this project there were few or no crops, it all depended upon the flow of Swan river.

In the Himachal government's records, too, the villages along the river were marked as a permanent flood zone. Elders of the region hardly remember a year without death and destruction. The flooding of several houses and the deaths of at least half a dozen people due to change in the course of the Swan were common every year.

"So far, we had seen only two faces of Swan. Either there was no water for a large part of the year, or otherwise there were devastating floods. We were victims of flood as well as drought every year," said Kartar Chand of Jakrala village, whose nine-canal land has made him a millionaire after the commissioning of the project.

"All the 94 gram panchayats benefited by the projects are not in the hills. Whenever it rained in the catchment areas, all water used to flow into the seasonal river through its 73 tributaries and flood the entire region. The river used to suddenly change its path. All this would happen so fast that people in the area had no time to rush to higher places.

River of sorrow turns into river of joy

Sometimes it took away their houses and all belongings," said Gurmeet Bedi, district public officer of Una.

"The peculiarity of the Swan river is in its sudden changes. Like if there is no water right now, within two minutes we may see it overflowing with 6-foot high water. And after four hours the river would go dry again," Bedi said.

But today it is a different story altogether. In the late nineties, there were no takers for fertile land even for Rs 500 a canal. Today one would not get even barren land for Rs 1,00,000 a canal. "The annual yields of the flood-prone area is more than 14,450 metric tonnes. Besides there is around 7,700 metric tonnes of fruit production," claimed the Himachal Pradesh government.

The exact yield of vegetable crop is not yet estimated, but certainly it is as high as fruit production. Other than agriculture and horticulture production, the water harvesting structure developed by the government is likely to produce 1500 metric tonnes of good quality fresh water fish, rarely available in drought-hit Una, one of the not so affluent districts

of Himachal Pradesh.

"The land which was giving one crop a year, is producing four crops a year and the yield of each crop has tripled. Drinking water, one of the major problems of the area in the late nineties, is now available 24x7 in almost all villages along the river bed," said executive engineer Chadda, who was instrumental in executing the first part of the Swan river project. It was in the nineties that the government envisaged a project for flood management of Swan river. The initial cost of the project was Rs 259 crore, which included planting of trees in its catchment area, building embankments on its tributaries to slow down the flow of water and to harvest water on the upper hills to maintain continuous flow of water. It also envisaged providing embankments on both banks of the river in three phases to prevent flooding and the river changing its course which caused annual destruction.

Work on the project actually started only seven years ago and it was planned to complete it in two phases.

"Grass and bushes were planted on both sides of the river bank and also in the catchment area," said Gurmeet Bedi. "Then the government made hundreds of small and big check dams along the river and tributaries. The result was really very impressive, the sudden flooding reduced drastically, and water started flowing quiet regularly," he added.

The first phase of the project was completed in 2007, covering 34 kilometres of river and 52 tributaries that fell in the way. It has reclaimed over 2,500 hectares of land. Then began the second phase of the project to cover the remaining area of the river.

"During the second phase of the channelisation, work is being done on both banks, the total length of which is 56 kilometres. About 5,000 hectares would be reclaimed after the channelisation," said the Himachal irrigation and public health minister, Ravinder Singh Ravi.

■ ANAMIKA THAKUR

(Tanyarsh Feature Service)



land to be used by the entire community to build check dams, sunken pits, percolation tanks, etc. "Initially, we were not convinced and people too were not ready to give up their land. We thought that when the land was hardly yielding anything, then why not try it out," said Laxmi (40) of Kothapally.

It took over two years for results to show, and it was only when the villagers saw water in their wells during the dry season that they began believing in the watershed scheme. "We had to walk a long way to fetch drinking water. We were surprised to see that there was water in our wells even during summers," said Bhagamma of Kothapally.

International Crop Research Institute for Semi-Arid Tropics pitched in with technical support. Advice about the nutrients to be fed to the soil and improved variety of seeds resulted in a significant jump in agricultural output.

"Earlier, we just grew local varieties of pulses and cotton. Now, we are getting improved varieties of seeds and apart from paddy, cotton

and pulses, vegetables are being planted in a big way," said Kahiru Nisa of Gottigaripally.

According to farmers, the yield per acre before the integrated watershed development programme was just 4-5 quintals. It has now increased to 10-11 quintals.

Survanna (35), of Kothapally, owns just one acre of land and her husband drives an auto. Earlier, the entire family used to migrate in search of work and now they get enough to remain in the village and send their three children to high schools in Hyderabad, 65 km away.

However, the fate of the programme remains to be seen when the government withdraws from it. So far, the village community has the support of the government.

"We are hopeful that things will be smooth even after we withdraw as everything is managed by the community and the government has minimal intervention," said K Vidyasagar, Special Commissioner, Rural Development, Andhra Pradesh.

In dry Medak and Rangareddy districts of Andhra, farmers used to struggle for one crop.

J P YADAV

GOTTIGARIPALLY &
KOTHAPALLY (ANDHRA
PRADESH), NOVEMBER 19

AT FIRST glance, the lush green fields barely convince that this is one of the dry regions of Andhra Pradesh. Then, a closer look, and you wonder how the gravel-ridden red soil supports the thick growth of pulses.

Farmers, who used to struggle to grow even one measly crop in Gottigaripally village in Medak district, are now reaping two to three crops a year. The sweeping change came about due to the centrally sponsored watershed programme being implemented by the state. "Farming was so unproductive an option that people desperately wanted to sell their land. Now, those who had sold it at throwaway prices are repenting doing so," said A Narayan Reddy, a farmer from Kothapally village in Rangareddy district—yet another region where the watershed programme has been successfully implemented.



Now, they are reaping two to three crops a year

Watershed moment

According to the figures provided by the state government, the programme has been successfully implemented in 4,741 villages and it is underway in another 4,560 out of the 22 semi-arid districts identified in the state.

Watershed development refers to conservation, regeneration and judicious use of all available natural re-

sources. It involves treatment of water from the highest point (ridge) to the valley. Rain water is allowed to flow down the ridge through soil bunds and collected at different stages by building low-cost check dams, sunken pits, percolation tanks and farm ponds. This causes increased groundwater recharge, increased soil water availability, in-

creased water levels in the bore wells — all these leading to increased yield.

But the whole process requires community mobilisation — something that is easier said than done. "Convincing the villagers is the most difficult part. In many villages, we had to abandon the programme with villagers rejecting the pro-

gramme outrightly," said Kishan Das, Joint Commissioner, state rural development department.

As part of the preparatory phase, the villagers need to enter into a Memorandum of Understanding and show willingness for community action towards conservation of natural resources. They need to agree to give up portions of their