

Revival of Yelganga River through Community Initiatives In four villages of Aurangabad District, Maharashtra, India

WACREP Activity No. 1.3.1: Low Cost/No Regret Investments



This was how Yelganga looked one year before



How Yelganga looks now

Background

Communities of Kaudgaon and nearby villages of Paithan Taluka of Aurangabad District were suffering from water scarcity for several years. Moreover, the severe droughts which were hit Marathwada region of Maharashtra in 2012 and 2013 have compelled the public and government to consider short and long term drought mitigation measures. Consequently, Mr Kishore Shitole, a young civil engineer from Dhupkhed village, the founder of Jaldoot Jalsanvardhan Sansthan-a community based Non-Governmental Organisation based in Aurangabad has initiated a series of projects to address the problem of water insecurity, by involving communities of four villages. Revival of Yelganga River is one of the successful projects conducted under the programme.

Rivulet Yelganga flowing through Taherpur, Kaudgaon, Dhupkhed and Nandalgaon villages and reaches Nathsagar dam in Paithan. Decades ago, the river used to have year-round water which now has started disappearing due to abandoned growth of Babool trees (*Prosopis juliflora*), other bushes and heavy sedimentation of silt in the river bed.

Marathwada region of Maharashtra had the severest drought in 50 years in 2013. Most rivers, wells and all water sources remained dry. People of four villages decided to revive the Yelganga rivulet on self-help basis.

Community Based Planning

Problem analysis enabled the community to evolve the action plan and to mobilise resources at community level.

Initial discussions were held with the villages on revitalising the tributary; lack of funding was the major constraint which detained the final decision. However consensus was built to revive the six kilometre long river and project was named as “Shree Sai Jalsamwardhan Yojna”¹. The action plan included repairing of three existing check

dams (locally known as *bandharas*), constructing five new check dams at strategic points along the course of the rivulet, removal of bushes in the river bed, de-silting and deepening of the rivulet.

The intervention

The restoration process started with excavating the sidewall of an abandoned bridge, located near the main Aurangabad-Paithan road. Higher estimations for suggested Reinforced Cement Concrete (RCC) lead the team to find local level solutions. Subsequently, a stone wall was constructed at zero cost using stones collected from farmers' well sites. The second work was repairing and strengthening an eight-year-old Kolhapuri Type Weir, which had

¹ Shree Sai Baba is a revered saint of Maharashtra, the temple at Shirdi, not too far from Aurangabad, attracting millions of devotees from all over India. Jalsamvardhan Yojana means plan for augmentation of water.

become non-functional due to leakage and damaged slab. The restoration of the structure involved repairing 21 weir doors, rectification of base leakage, building of earthen bund and de-silting and deepening of river bed. The third set of restoration work involved constructing a spillway, a stonewall and nearly ten metre long bund with stone pitching. Additionally the work included de-silted and deepening the nearly 100m of the river bed to more than 60 metre width and one metre depth. The District Collector provided the machinery for bed deepening and de-silting.

Costs and current status

The three structures were completed within 21 days of continuous work and remaining five are planned to be completed by the end of 2014. The riverbed was de-silted removing almost 1,000 tractor loads of silt from the bed. The total cost incurred was INR 267,000 which includes the contributions of villagers, Devagiri Urban Cooperative Bank and employees and donation of professionals. In addition the money collected through sale of silt, which was ultimately spread through farmlands to augment fertility of soil was also utilised for constructions.

The Impact

The monsoonal rains of 2013 filled the rehabilitated check dams to the brim. The increased water storage in the rivulet enhanced the recharging of more than 27 wells and increased the water levels of dug-wells by three to four meters, indicating a significant rise in the water table. Water is available at the depth of 13m in three newly bored tube-wells which used to be dry in the past. Villages are satisfied with the availability of drinking water and are confident that in the next summer, even if there is a drought, the water stress will not be as severe as it was in the past. There is also an evidence of improved soil moisture indicated through healthy growth of grass and fodder in the adjacent areas. Until last year farmers could only cultivate Kharif crops (crops cultivate in the rainy season) whereas now they successfully cultivate both Kharif and Rabi crops (crops cultivate in the winter season) ensuring food security of the people. Some have started planting vegetables in summer and many farmers, who were convinced by the experience of progressive farmers who planted fruit trees this year are planning to grow perennials for the coming season.

The extent of social cohesion built through the project and the enthusiasm to maintain the structures are evident. The critical learning from the Yelganga River revival initiative will be used at the future initiatives.

The dead river has been revived. Precious water has been stored for the summer months. Village wells have been recharged. New tube wells have been dug. Drinking water is now easily available.

People have now begun to grow winter crops and even to grow vegetables in summer. Horticulture sector is improving. Social cohesion and pride in success of community action are the major spinoffs. However a more robust river revival plan should aim at treating the entire catchment area of the watershed from top to bottom. This requires a landscape based approach demanding the support of government both in technology and finance.

This is extract of one of the seven Success Stories documented by GWP-India partner organization; Institute for Development Initiatives, New Delhi under Low Cost/No Regret Investments of WACREP.

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