

Shri Vilas Balwant Salunke

Recipient of Jamnalal Bajaj Award for Application of Science and Technology for Rural Development-1986

Shri Salunke (born in 1937) is an engineer by profession. His interest in application of his scientific and technological knowledge to solve the pressing problems in rural areas was aroused in 1971-72, when there was a severe drought in the Purandhar block of Pune district. The drought was, in fact, widespread throughout Maharashtra and posed a challenge to planners.

Salunke toured Purandhar block; the plight of the people moved him, He decided to fight against famine by finding out some permanent measures to overcome recurring droughts.

Naigaon Experiment :

The main thrust of his efforts was on reducing the severity of the impact of drought; stabilizing the income of the people, particularly the weaker sections; and restoration of ecological balance. The strategy was to maximize the production in good rainfall years and minimize the losses when the rainfall is inadequate. This was sought to be achieved by conservation of run off from watersheds of a village by construction of tanks, reservoirs, barrages and percolation tanks and harnessing the water directly from the water storages or by digging open wells fitted with electric pump sets.

The optimum utilisation of all available water was sought to be achieved by equitable sharing of water; soil conservation; designing of low-capital-cost minor lift irrigation schemes; possibility of regenerating scarce water by building small check bunds and farm ponds at upper levels; evolving suitable irrigation techniques and management; trying different cropping patterns to ascertain drought resistant varieties of crop; and use of fertilizers and insecticides to improve production.

To prove the feasibility of the above conceptual ideas, Naigaon village was selected for developing a model in 1975. 16 hectares of barren land were got on lease from a village temple. A trust called Gram Gaurav Pratishtan was formed. To carry out the experiment Shri Salunke shifted to Naigaon with his family and spent almost four years there.

In the third year, the experiments bore fruits. On 9.60 hectares 200 quintals of food grains were produced, whereas 16 hectares earlier hardly produced ten quintals. The farm generated full time employment for 15 people, besides supporting 16 animals. 4000 trees on the rocky rim land and 20 fruit trees along field bunds began to thrive. The one million C. ft. of water stored in the small percolation tank proved quite sufficient to irrigate 2.43 hectares in Kharif season, 8.20 hectares in rabi season and 0.50 hectares in summer.

Pani Panchayat :

In October 1979, Shri Salunke thought that the time had come to move forward for economic transformation of the villages, building upon the experience acquired at the experimental farm. Thus Pani Panchayat was established. The modalities of Pani Panchayat for effective and efficient use of water are significant from socio-economic considerations. They are :

1. Lift irrigation schemes would be undertaken only for groups of dry land farmers and not for individual ones.
2. Water is to be shared on equitable basis according to the number of members in a family and NOT in proportion to the land holdings. This revolutionary concept is the key to altering the 'refraction effect' of technological inputs.
3. The rights of water do not go with the land. If the land is sold the rights of water revert to the trust.

4. The beneficiaries have to share 20 percent of the capital cost of the lift irrigation project, according to their share in water, The remaining 80% is given by the trust, as interest-free loan.
5. Crops requiring more frequent watering and consuming more quantity of water are forbidden.
6. The landless could also take share of water, so that they gain full time employment in the village itself by becoming sharecroppers to farmers having more land.

Today, there are 62 schemes on hand, out of which 51 are in operation, involving 1800 families and 1500 hectares.

Impact :

- a. Many of the farmers who had migrated to cities have returned permanently to their farms. Members of the erstwhile nomadic shepherd community have been permanently settled on their lands as productive farmers.
- b. People have regained self-confidence. With assured supply of carefully rationed water, the farmers have been able to raise several food crops, vegetables and fruits.
- c. A Land-Water-Manpower Training Centre has been established in Purandhar Taluka to create a cadre of well-trained extension workers from rural drop-outs aged 18-21 years. They would be absorbed in the programme of Pani Panchayat itself. The training centre has already trained 35 extension workers who are manning the operational schemes of Pani Panchayat.

Shri Salunke shared the 1986 prize for Water instituted by the International Inventors Award, Sweden.

