

Certificate Course on Participatory Irrigation Management (PIM)

Module 1- The Necessity of Participatory Irrigation Management (PIM)

Topic 1.4 – Successful Examples of PIM – Past and Present

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Topics of Module 1:

- 1.1 Status of Agriculture and Irrigation
- 1.2 Problems in Traditional Irrigation Management
- 1.3 The Concept and Need of PIM
- 1.4 Successful Examples of PIM – Past and Present

Is participatory irrigation management possible?

Participation in our country is nothing new. Farmers have always been involved and helping each other in farming and daily activities. Farming is such that it cannot be done without participation. Whether it is planting and harvesting or filtering the crop, in the villages even today many people like work, marriage etc., share their hands in each other's work and its benefits are known to all.

Successful examples of participatory irrigation management in ancient times

- Farmers' participation in irrigation in India has been in place since ancient times. In the following section, some examples of traditional irrigation management are given.
- King Krishna Dev Rai of the Vijayanagara Empire of South India developed several irrigation systems on the Tungabhadra River and assigned them to local committees (mainly temples which were strong local bodies of the time). The state received one-sixth of the produce as tax, but the management of these systems was entirely in the hands of the local bodies.
- Water Masters (known as "Neeraghanti") were deployed to distribute the water, which were under local panchayats and the panchayat used to take a small part of their produce from the farmers in exchange for their services. In this management, water used to go from one field to another and farmers used to take it as per their requirement.
- Every year, a third of the systems for monitoring and repair were shut down for some time and the subjects used to do shramdaan. If money was required for the repair work, the panchayat collected service tax from the farmers. Farmers were given advance notice of the opening and closing of the canal. The biggest feature was that it was managed by the local people and there was no interference in the governance.
- In the Chola Empire of South India also, notable works related to irrigation were done. In the second century, Emperor Karthikeya built a large dam on the Kaveri River. This made the availability of irrigation water to the farmers of the entire empire. The Chola emperors also built tanks to store water for irrigation and entrusted the responsibility of irrigation management to local bodies (mainly temples).

Irrigation management was done by the gram sabha. There was an irrigation management committee under the Gram Sabha. These committees were free from the interference of the government and had the right to construct, clean and repair irrigation systems, sale of members' shares, purchase of water from other committees, fisheries and sale etc. Some of the salient features of water management adopted by them were:

- The farmers used to get water in proportion to their arable land.
- In certain cases water use was also restricted by certain individuals.
- Local rules were made for irrigation.
- There were also rules for saving irrigation water.
- Water was measured by the hour, by the cycle and by the turn.

Related disputes were also settled by these committees. Disputes were often settled at the local level, only under certain circumstances would the government intervene. The gram sabha used to arrange funds for construction and repair from the farmers. When needed, money was also available from the government. According to the information received from the inscriptions, the members of the committee were considered personally responsible in the event of loss of funds or loss due to mutual quarrel. In this whole process, the role of governance was of the associate. Local bodies were responsible for irrigation management. The emperors built the irrigation system and handed it over to the public. If someone else built these systems, the state would provide the land to him. The system of repairing the system also ruled. There were clear orders that a certain part of the state's income be kept safe for repair.

Even before the arrival of the British, some part of the irrigation system was looked after by the rule of the Marathas and some part was looked after by the public. Even now, the part of the government in that area is called "government", while the part of irrigation systems that farmers had to take care of is called "Khudimarmat".

- Many reservoirs in Balrampur district of Uttar Pradesh are still known as Zamindari reservoir. These were built by the old zamindars and handed it over to the public for operation and maintenance.
- Even in Uttarakhand and Himachal Pradesh, private branches will be found, which are being run by farmers with mutual participation.

Come, let us know that two committees are successful saga-

Chhabaliya is a village under the Dharoi Irrigation Scheme located in Mehsana district of North Gujarat. The village has a population of around 6500 and the main occupation here is farming and animal husbandry. Most of the land falls under the irrigation area of the canal, but the canal was completely absent.

- A team of farmer representatives sponsored by DSC (Farmers Sphere Het Team) visited Chhablia village. The team made a few selected villagers visit a successful committee of the neighborhood and encouraged the farmers to form irrigation committees.
- The farmer became a member of the committee and thus the committee was started. The technical shortcomings of the canal were studied and a budget of 5 lakh 18 thousand rupees was prepared by the government engineer.
- The farmers contributed 10% financially and the remaining amount was received with the help of the government. The repair work was carried out by the committee under the supervision of the department. The committee contracted with the government and took over the management of the canal. The very next

year, after the release of water in the canal in Rabi, the farmers engaged in labor and cleaned the entire canal.

- After estimating the expenditure and income to be incurred in irrigation, the committee made a budget and accordingly fixed the irrigation fee per hectare. Make rules related to water distribution. Local youth were hired as operators. Made a system of distribution of water by adopting the Varabandhi method.
- In this way, for the first time in the history of the village, an area of 135 hectares was irrigated. Which used to be in an area of only 30 hectares in the east. In this way, irrigation increased to 105 hectares. Taking out the expenses of farming, assuming a net income of 10 thousand per hectare, in the same year, farmers received income of Rs. 10 lakh 50 thousand from farming. Apart from this, milk production increased by about one liter due to adequate fodder for livestock.

Similarly, people of village Khatoda, located about 50 km from Chhablia, also took steps towards resolving the problem. In a village with a population of about 2300, located 5 km from the tehsil headquarters Vadnagar, 280 hectares of area were deprived of irrigation due to technical flaws in the canal. When the loss due to non-irrigation was calculated, the farmers estimated that if the annual average production of one hectare was Rs 18,000, then in 280 hectare area, the production would be 50 lakh 40 thousand rupees. If half of the total income was spent in agriculture, the net income would have been 25 lakh 20 thousand rupees. Thus, there was loss of this income every year due to lack of irrigation. Farmers have been taking this loss for the last 12 years. Thus, this figure of loss in the last 12 years was estimated at a total of 3 crore rupees. On making a budget for its canal repair, it was found that this work would cost only 11 lakh rupees, the farmers were shocked. Such loss is not to be incurred any more, with this determination, the farmers deposited an amount of Rs. 2 lakh 20 thousand according to 20 percent of the budget for the improvement work of the canal. In the first year of canal improvement, the irrigation area increased to 82 hectares, besides the availability of adequate grassland for animal husbandry increased milk production.

The successful stories of these committees make it clear that if the departments and institutions that motivate farmers and farmers, the water consumer organizations keep the central spirit of “Participatory Irrigation Management Program” as “solution to the problem” and “benefit from small expenditure” at the center. If formed, success is certain. In order to maintain the increased participation and enthusiasm of the farmers, economic and policy support of the government are key.