## **Certificate Course on Participatory Irrigation Management (PIM)**

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

**Topic 1.2 – Problems in Traditional Irrigation Management** 

# Topic 1.2

Problems in Traditional Irrigation Management

## **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

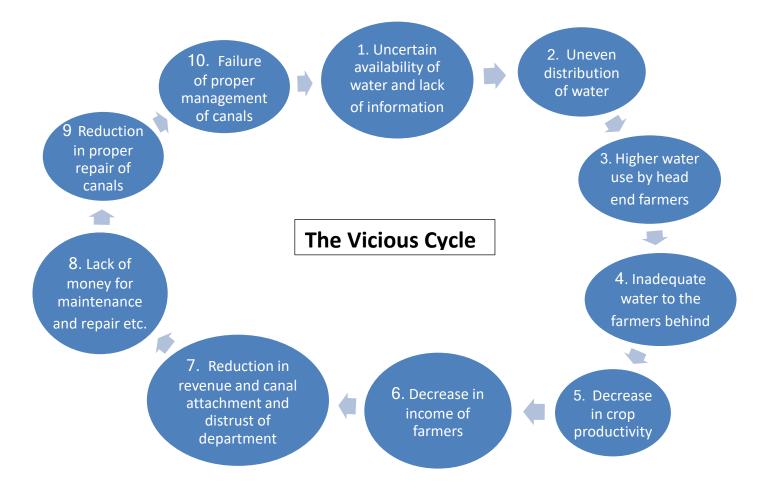
### 1. Problems of traditional canal irrigation management

Although canals are the main means of irrigation in command areas, the performance of system is not good due to the following reasons:

• Due to improper repair and cleaning of the canal, it cannot run to its full capacity.

- Farmers often do not have enough information about when, for how long and how much water will come in the canal. With this, they are unable to make advance plans for planting and irrigating crops.
- Due to the large amount of water being taken by the farmers of the head reach, the water does not reach the end of the canal and the fields of that part remain dry. The farmers of this part have to depend on other sources for irrigation such as tube wells, which increases their agricultural expenses and reduces their income.
- Due to non-receipt of water from the canal, groundwater in the tail end areas of the command area is heavily exploited.
- Due to lack of confidence of getting their turn, the farmers, especially those in the front of the canal, take more water than necessary. This leads to disputes, as well as precious agricultural land.
- Due to lack of satisfactory and proper use of irrigation water, farmers do not even want to pay irrigation charges. As a result, the government does not receive full revenue. This affects the repair and maintenance of irrigation systems later.
- Lack of involvement of farmers in the maintenance of irrigation systems is a major problem.
- There is a shortage of skilled personnel with the irrigation department and there is also the problem of not allocating funds on time. On the other hand, farmers are plagued by the problem of shortfall in production and its consequences, due to lack of timely irrigation.
- Some farmers want to cooperate with other farmers to overcome this chaos, but due to lack of collective actions, they are in a fix.

With the current irrigation systems, the farmer feels trapped in a vicious cycle. Its effect can be easily understood through the diagram shown below-



As shown in the vicious cycle above, communication gap between the department and the farmers is a serious problem. Due to this, accurate information about the availability of water in the canals always remains wavering. Due to this, at the time of release of water in the canals, the farmers want to take more and more water at once.

Due to the disproportionate water being taken by the farmers in the head reach, the water in the tail end could not reach in time. This leads to a reduction in their production and consequently a reduction in revenue. Farmers' attachment to the canal decreases.

To understand this, if you study the canal irrigation of your village with the help of other colleagues, more understanding will increase in this subject.

### Behavioral change required

The dull and obstinate attitude of the parties related to irrigation is a big problem in itself. Traditional canal irrigation management has two patners - one is the irrigation department and the other is the farmer. The department thinks that it is the owner of irrigation systems and they have to provide irrigation facilities to the farmers, but the farmers do not cooperate. On the other hand, the farmers understand that the canals have been built by the government and the irrigation department is responsible for their maintenance and water distribution, and they are concerned with only water.

For a long time, both the department and the farmer have been firm on their thinking, but now the time has come for both the parties to work together as partner institutions. The old saying is that the clap rings with two hands.

In a changing environment where both sides are troubled by their respective problems, is it possible that both the parties together can overcome this problem? Could it be that the farmers, through their organization and with the cooperation of the department, take over the management of the canals and take responsibility for all the things related to maintenance, repair, water distribution and irrigation of the irrigation systems themselves?

#### Who is paying the price for the loss ..?

According to a research conducted by the Development Support Center, Ahmedabad, a farmer who grows wheat in the canal command incurs an annual loss of about Rs 10,000 per year due to lack of irrigation at the right time. This figure of loss on hundred farmers is one million rupees. So, what do they do?

Should you be sitting idle or take the arrangement of the canal together in your hands? After all, the cost of cleaning canals and minor repairs will be less than the loss of 10 lakh rupees every year, so no more waiting. Come, do something together ... Farmers should take irrigation system in their hands and the officials give them guidance and support. This is the way to change. In which the cost is less and the profit is more.