

Certificate Course on Participatory Irrigation Management (PIM)

Module 7- Water Measurements and Water Distribution by Water User Associations (WUAs)

Topic 7.2 – History of Warabandi



Topic 7.2 History of Warabandi

Topics of Module 7:

- 7.1 Objective of water measurements, discharge structure and units
- 7.2 History of Warabandi
- 7.3 Implementation of Warabandi in current scenario
- 7.4 Emerging trends in Warabandi

1. Background

The objective of irrigation management is to provide irrigation water according to his need to each farmer of the outlet command. One of the main objectives of irrigation management is economic and scientific use of water which depends upon how the irrigation water is charged and how the recovery is made? It depends mainly upon the discipline in water distribution. The warabandi system of water distribution is one of the ways to bring water discipline.

The water distribution system in India differs widely in different states. These are described shortly as below:

Warabandi:

Water is distributed among farmers by fixing time slot in an outlet command according to their land holding especially in the states of Punjab, Haryana, U P and Rajasthan. This system is called Osrabandi or Warabandi. The Warabandi has a legal base in Northern India Canal and Drainage act 1873. The farmer is charged according to crop he has grown and the area he has irrigated irrespective of number of waterings he has irrigated his field.

Shejpaali:

Farmers in Maharashtra, Gujarat and parts of Karnataka have to apply for irrigation water for a specified crop and area in each crop season. Irrigation Department satisfies the demand in part or full according to the water availability by sanctioning the applications. The water is provided to the sanctioned application for the crop up to maturity. Farmers are provided water turn by turn below outlet. Farmers has to pay according to sanctioned water. Shejpali is legalized in Bombay Irrigation Act 1879, which is a basic irrigation law for Gjarat. Shejpali is also legalized in Maharashtra Irrigation Act 1976.

2. Introduction of Warabandi: -

Warabandi is a process of water distribution among farmers in which turn of farmers for taking water is fixed according to his land holding. In this process the time at which the water will reach at each farmer's gate from canal is fixed. By this process, the farmer will be informed in advance when his turn of irrigation will be, so that he may be well prepared & plan his cropping priority in advance and will get water accordingly. This process is termed as warabandi.

2.1Need of Warabandi: -

- Some farmers due to their social status or due to position of their farm in outlet command instead of using the water start its exploitation for their vested interest. This results in chaos where some farmers get

water more than their share and at the same time some are deprived of it. It necessitates some arrangement to avoid the situation.

- Canal irrigation is a community irrigation system, therefore at a time all farmers may need water, but capacity of a canal may be limited and may not cater all the farmers at a time but may provide to all in a systematic way. That is why it came in force.
- Farms which receive water more or less than their requirement lose their productivity. Taking water more than the requirement loses slowly their fertility. Distributing water in a disciplined way through warabandi, water is better utilised. This system is widely being practiced since long in Punjab, Haryana, North-western UP & Rajasthan and showing promising results.
- In Warbandi irrespective of the position of farm in the command, it will get a fixed amount of water in proportion of its area.
- In warbandi system each farmer is fixed its amount of water in proportion of the area and when and how much time he will get water is also mentioned. Therefore, every farmer knows it before hand and can plan its crop and well utilize his time.
- Warbandi system is prepared in a combined effort of employees of water resources, project management and WUA if constituted. It is well circulated among farmers through employees of WRD, Gram panchayat and now WUA so that they may prepare their crop plan in advance.

3. Benefits of Wara bandi :

- The farmers get water in time.
- Disciplined way of water distribution
- Ensured crop production
- Farmers' time saving
- Conflict reduction
- Better water management
- Better water management in outlets without gate control
- Reduction in water wastage as farmer must irrigate his crops in given time as much as he can.

- Reduction in canal damages
- Freedom of crop selection
- Development of sense of ownership in water management.

Exercise 1:

Write any four benefits of Warbandi and compare your answers with the benefits mentioned above.

4. History of Warabandi:

The history of warabandi would have been started as soon as the importance of water in irrigated agriculture, because the requirement of this natural resource may arise to everyone at a time, but its supply at a time to all needy is difficult. Following this principle as mentioned in para 1 above the water distribution process with various names like, Osrabandi, Warabandi, Shejpaali, and parabandi or bhaicharabandi would have been started in various part of India or abroad.

In Maharashtra it is known as Shejpali. In olden times in irrigated tracks of the province, the farmers came to irrigate their crops with their cot (SHEJ) for supervision .

Iran which was earlier known as Persia, the Faras , invention of persian wheel (RAHAT) brings farmers using that wheel to lift water from a common well together and to devise a mechanism of brotherhood in using the natural resource in a better way for benefit to all. This may be first effort of water distribution. As use of this wheel spread in other countries in neighbourhood this procedure of distribution got smoothen. In the ambit of this instrument now a days is present Iran, Afghanistan, Pakistan and North-Western India where this warbandi process is in vogue. In southern India Tank irrigation was in use. There also farmers set a procedure of taking water turn by turn. In south when Chola kings started a canal for irrigation by putting a weir (Anicut) across the river, the king handed it over to village Temple Committee for water distribution, maintenance and recovery. The temple committee used to distribute the water turn by turn, a form of warabandi. It called a meeting of farmers for water distribution and decided the turn of water for each farmer. In southern India

they keep a person designating him as *Nirganty* who was responsible for providing water to each farmer turn by turn. These procedures were handled by farmers and local units, the State has no role in it.

The Warabandi system was prevalent in Gaya district of Bihar under Bengal Irrigation Act 1879 (Ref: 'Dying Wisdom' published by the Centre of Science and Environment)

In Northern India the canal irrigation was developed by British Government who managed the water resources as property of Government and farmers had no right to interfere in that. Northern India Canal & Drainage Act -1873 provides right of implementing warabandi to farmers but in case of dispute the Executive Engineer is entitled to prepare and implement warbandi on request of the farmers.

'The history of Warabandi / Osrabandi' Published by U P Irrigation Department cited of an application given by a farmer to Executive Engineer, Meerut Division Ganga Canal complaining that the villagers upstream of his village on an outlet obstructed the water in their village that affect irrigation of his village and requested for a relief. The Executive Engineer based on the command areas of the villages separated the time hours on weekly basis. Later on, the disputes arose among the villagers of same village then thokwar warabandi in the village itself was devised. It later developed as field wise warbandi and came into present shape of warbandi.

Exercise 2 :

Is Warbandi a new procedure or an old one? Was there any interference from government in olden days? Compare your answers with the facts mentioned above.