

Certificate Course on Participatory Irrigation Management (PIM)

Module 8- Role of Water User Associations in Integrated Water Resources Management (IWRM)

Topic 8.3 – Process of preparation of water budget



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Process of
preparation of
water budget

Topics of Module 8:

- 8.1 Introduction to Integrated Water Resources Management (IWRM)
- 8.2 Introduction to water budget and its advantages
- 8.3 Process of preparation of water budget
- 8.4 Role of department & WUA in preparation of water budget

First of all, the availability of water is calculated from the sources and then the requirement of water is assessed, then the water budget is prepared.



- **Assessment of availability of water**

For irrigation mainly water is available from rains. For irrigation the surface water and ground water are used. Here focus is given on the irrigation by the canal water.

For this assessment, the water in the reservoirs/ canals are assessed and the probable inflow is added to the water. After calculating this, the water for other purposes than agriculture e.g. drinking water, industrial uses, etc. subtracted from the water and to distribute water to the farmers.

For preparation of water Budget following steps can be followed:

1. How much water is available in the rivers, reservoirs and ponds for irrigation?
2. Out of this how much water is to be used?
3. Use in Agriculture i.e. for farmers can be known from the field.
4. Canal losses must be assessed.
5. Use of water when and how much is needed for irrigation?

6. If water is available in required quantity than distribution can be done as per the crops and the carrying capacity of canals.
7. If water is not available in required quantity due to less rainfall and other reasons than in that case crops may be sown as per the advice from agriculture department.



8. Irrigation Department can implement the schedule of distribution of water as per the discussion with farmers and the other water users of the command area.
9. The Irrigation department records firstly the water stored in reservoirs in Mcum.
10. As per the availability of water the area for irrigation is fixed 160-180 hectare per Mcum.
11. For the canals irrigation is fixed as 40 hectares per cusec.
12. The water budget is prepared at all the levels.



The requirement of water for irrigation can be assessed in the following manner:

1. Crops and types are sown by the farmers must be known directly from the farmers and WUAs and the water requirement for their crops is needed and when?
2. When farmers sow the crops and how much water is needed for it and when?

By this process the requirement of water for all the farmers can be known and also the crop cycle of the command area can be known.

In this way the Water Budget can be prepared.

