

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

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

### **Topic 8.4 - Role of department & WUA in preparation of water budget**



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**Role of  
department &  
WUA in  
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

#### **The role of Department and Water User Committee in the preparation of Water Budget**

After rains, before each crop season the Irrigation department in consultation with farmers, agriculture department prepares the plan for the distribution of water to the farmers.

The department in consultation with the WUAs members i.e. all the farmers and water users prepares the plan for the maintenance of canals.

The plan for the distribution is approved by the District Committee in which EE Irrigation Department and the district heads of Agriculture, Horticulture, Animal Husbandry, Industries, Municipal corporations and the presidents of WUAs members and District Collector is president.

After the approval of plan the as per the plan the program of distribution of water is announced in each WUAs.

For this purpose followings points are to be taken care of:

- Farmers of all ends should sow the crops as per the advise of availability of water from the sub engineer and officers from the agriculture department.
- The plan prepared by the Executive Engineer in consultation with WUAs should be followed strictly.

#### **Water Distribution:**

- After the approval of water budget, the water distribution plan for all the farmers of the command area should be made as per the requirement of the crops sown in the area.
- The date of opening and closing of canals should be intimated to WUAs, farmers.

#### **Role of Department in preparation of Water Budget:**

- Right Assessment of water- The assessment of water is done on the basis of water level in the reservoirs.
- The uses of water in different sectors
  - i) Drinking water
  - ii) Irrigation
  - iii) Industries
  - iv) Animal Husbandry, fisheries horticulture and others

After calculating the requirements from above, it is deducted from the available water and the quantity of water to be supplied is known.

- The irrigation department firstly after the rainy season record the level of the reservoir and also record the available water in Million cubic meter tank wise. This quantity is live storage available.
- As per the available live storage in M. cum., the area of irrigation is decided on the basis of 160-180 hectares per M. cum. This process is exercised at state level. Also in case of canal flow, it is calculated on the basis of 40 hectares per cusec in the main canal, distributaries, minors by the concerning division and WUAs.
- After knowing the crops specie wise sown by the farmers, the quantity of water supplied to the farmers can be assessed by including the canal losses.
- By knowing the crops sown by the farmers in the command area, time and quantity of water supplied to the farmers can be known in consultation with the WUA.
- If the available water is sufficient then the distribution plan of water can be prepared as per the crops sown and the carrying capacity of the canal
- If the available water is not sufficient because of less rainfall or other reason, then the crops should be sown as per the availability of water in consultation with Agriculture department.
- On the basis mentioned above, the irrigation department should prepare the detailed plan of distribution of water in consultation with the farmers and other water users and implement it.
- On this basis the water budget is prepared at every level and accordingly distribution and control system is prepared.

#### **The role of WUA in preparation of Water Budget:**

- After the approval of Water Budget from district Committee WUA shall prepare the plan to distribute water to all the farmers in a manner :
  1. Prior intimation of date of opening and closing of canals should be given to all the members of WUA.
  2. To provide required water to all the farmers the approved plan should be followed strictly.
  3. WUA will monitor the plan of water distribution on the basis of the water flow in the canals.

4. Every farmer should use the water only as per the plan.
  5. Each Kolaba should be provided water as per Warabandi or Osarabandi.
  6. For Irrigation Department WUA will keep record of water distribution crop wise in the command area.
  7. WUA will keep continuous monitoring of the implementation of the plan.
- Farmers have an important role in Participatory Irrigation Management, so it is necessary to understand and keep in mind. Every farmer wants that he should get water in right quantity and right time, so that he can get good production of crops. It is only possible when the department should be aware of farmers' requirement of water. WUA should assess the requirement of water of the farmers collectively so that if the available water is more or less so the farmers can change their crops accordingly on the participatory basis.
  - After this field staff of the department should in consultation with the farmers and with their participation and discussion in the WUA, manage the distribution of water distributary wise, minor wise. Also meanwhile minor wise osarabandi and farmer wise warabandi can be implemented.

Self-Exercise:

If the live capacity available for irrigation 260 M cum. How much Rabi Irrigation from this available water can be done?