



## WATERSHED MANAGEMENT THROUGH PARTICIPATORY PLANNING

**DR. DHANWATE K. G.**

Associate Professor and HOD Geography,  
Shri Dnyaneshwar Mahavidyalaya, Newasa,  
Dist- Ahmadnagar.(M.S. INDIA)

**DR. DARADE J. U.**

Associate Professor and HOD Geography,  
Jamkhed Mahavidyalaya, Jamkhed,  
Dist- Ahmadnagar.(M.S. INDIA)

### ABSTRACT

A watershed contributes a natural topographical and hydrological unit in which surface water from rain converges and discharged through a single outlet. The available water in the watershed required planning for better environment. Therefore the planning and management of watershed is done to achieve the tasks related to overall development of watershed. Watershed management involves watershed programs like Livelihood Security, Capacity Building, Cost Sharing, Participatory Planning etc. In relation to Participatory Planning means public participation in the planning of the watershed. People can suggest an ideal watershed project which may offers lots of benefits to the community or villagers too. The villagers of 'Ustal Dumala' erases water scarcity problem of the village by evolving watershed project is the best example of watershed management through participatory planning.

**Key words:** Watershed, watershed management, participatory planning, etc.

### INTRODUCTION:

A watershed is a modified name of 'Drainage Basin' as well as 'Catchment Area'. It is a natural topographical and hydrological unit where surface water from rain converges to a

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single outlet. Simply watershed bounds a geographical area through which water flows across the land and drains into a common body of water, whether a stream, a river or a lake. Therefore watershed is the area which contributes surface runoff to the main stream and its tributaries.

Watershed management includes developing a watershed management plan for the removal of problem in the watershed. It is also a process of integrated decision- making regarding use and modification of land and water resources within the watershed boundary. Therefore all the management strategies related to watershed, its surface and subsurface water are included in watershed management.

Watershed planning involves watershed programs such as Livelihood Security, Cost Sharing, and Participatory Planning etc. which can help to improve the overall environment of the watershed.

#### **OBJECTIVES:**

The present study has undertaken following objectives-

1. To understand overall process of management and planning of watershed.
2. To analyze role of Participatory Planning in the management of watershed.

#### **DATA BASE AND METHODOLOGY:**

This study mainly based on primary as well as secondary data regarding watershed and role of participatory planning in the management of watershed.

#### **RESULT AND DISCUSSION:**

**PARTICIPATORY PLANNING:** Participatory planning means public participation in the planning of the watershed. Even individual participation is also welcomed. The expected peoples participating in the process of watershed management are mainly villagers, farmers and common man. They are the participants, beneficiaries and promoters of any development works of the watershed. It is found that full cooperation and participation of public or villagers in the development of the local watershed is at the root of success of any project.

#### **ADVANTAGES OF PARTICIPATORY PLANNING:**

- 1) Brings improvement in the overall environment.
  - 2) Builds a strong base for the involvement among the people.
  - 3) Bringing more people to the planning process.
  - 4) Helps to bound long term relationship between the people.
  - 5) Helps to break down barriers if any in relationship among the community.
  - 6) It gives respect for everyone on the community.
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7) If any project is developed by the villagers, it brings special benefits to the village.

#### **A CASE STUDY OF VILLAGE ‘USTAL DUMALA’:**

The village ‘Ustal Dumala’ is in Newasa tahsil of Ahmadnagar district in the Indian state of Maharashtra. It lies between  $19^{\circ}29'09''$  North latitude and  $74^{\circ}55'27''$  East longitude. It is mainly agro based village. The village is characterized by hot summer and general dryness during major part of the year. Rainfall is uncertain, which creates shortage of water except monsoon season.

To mitigate shortage of water villagers evolved a watershed management project through raising fund by public contribution. Main River in which project is made is river ‘Padmavati’. The engineering work of watershed includes excavation i.e. deepening of river is made, 1.5km in length, 100 feet wide and 40 feet deep. While machinery used is pockland and JCB for excavation and Tipper, Dumper, Tractor for transportation. The main issue of fund is solved by public contribution. This created a best example of participatory planning in the watershed management.

**BENEFITS :** The project has made distinguished benefits in village as-

- The water harvested in the project has increased water level in wells and tube wells.
- Soil erosion is reduced due to compartment bunds applied in the project.
- As water is available for irrigation, cropping pattern is changed obviously.
- At present village is self sufficient in drinking water. Before 2016 government was providing drinking water through tankers to the villagers during summer.
- Effective increase in animal fodder and milk production too.
- Change in cropping pattern generated additional employment mainly to agriculture laborer.
- Benefited to adjoining villages.
- Release in government pressure regarding provision of drinking water in summer.

#### **CONCLUSION:**

The studies of watershed management through participatory planning bring out improvement in overall environment of the village. Participation of the community in the development and management of watershed helps the people to bound association and examine their knowledge. The villagers monitor the whole project. They are the beneficiaries and promoters of any development work of the watershed.

The project made available plenty of water for drinking, household and irrigation. Crop production in the village increased on notable level. The project improved ground water table providing sufficient water to the farmers during summer season, and removed the problem of scarcity of water in the village.

This public participatory project reduced soil erosion, provided employment to villagers and completely drop the call of tankers on which thousands of capital were spent by the government. The watershed management participatory planning is ideal program adopted by the villagers of 'Ustal Dumala' improved overall status of economic and agricultural development of the village.

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