



MANAGEMENT OF WATERSHED IN JHARKHAND

BY

Dr. YogeshRanjan

Department of Geography, TMBU, Bhagalpur, Bihar

ABSTRACT

Water is essential for life. There is only one percent of fresh water available in rivers, lakes, underground reservoirs etc. to sustain life. The mismanagement of the available water has created scarcity in many areas. Over exploitation of groundwater sources and contamination of surface and groundwater aggravate the problem of availability. The ministry of Rural Development has been implementing special area development programmes for the purpose of water harvesting in drought prone desert and rain fed areas in a participatory mode that seeks to secure close involvement of the user-communities.

Thus the main aim and objective of present paper is to highlight the watershed management in Jharkhand state and to give suggestions for their proper utilization.

Key Words: Watershed, User-communities, Management

INTRODUCTION:

Water is essential for life. Although water covers about three-fourth of the earth's surface, about 97 percent of it is salt-water and seas and 2 percent is frozen in Polar Regions. In effect, there is only one percent of fresh water available in rivers, lakes, underground reservoirs etc. to sustain life. The mismanagement of the available water has created scarcity in many areas. Over exploitation of

groundwater sources and contamination of surface and groundwater aggravate the problem of availability.

Over the years harvesting the rainwater is a common watershed approach for the purposes of migration, fisheries, drinking water etc. in rural India. The objective is essentially to achieve through development of wasteland/degraded lands and their greening under various programmes of the Central and State Governments. The ministry of Rural Development is a front-runner in these efforts and has been implementing special area development programmes for the purpose of water harvesting in drought prone desert and drained areas in a participatory mode that seeks to secure close involvement of the user-communities.

The Drought Prone Areas Programme (DPAP) and Desert Development Programme (DDP) were started in 1973-74 and 77-78 respectively. The Integrated Wasteland Development Programme (IWDP) was launched in 1989.

To involve village communities in the implementation of watershed projects under all the area development programmes namely IWDP, DPAP, DDP; the guidelines for Watershed Development were framed on the basis of the recommendation of the Hanumanth Rao committee (1994) and brought into force with effect from 1st April 1995. Subsequently, the guidelines were revised in 2001. To further simplify procedures and involve the Panchayat Raj institutions (PRIs) more meaningfully in planning, implementation and management of economic development activities in rural areas these new guidelines called Guidelines for Hariyali issued with effect from 01.04.2003

Watershed Development Programme (WDP):- To catch the rain where it drops is basically watershed development WDP means conservation, regeneration and judicious utilization of all natural resources in the watershed.

Objectives:

- To develop small water harvesting structures such as low cost ponds, nalla bunds, check dams and percolation tank in watershed area.
- To harvest every drop of rain water for irrigation plantation including horticultural and floriculture, pasture development, fisheries etc. in order to create ecological balance and sustainable sources of income for the village community.

- To ensure the greatest number of village directly involve with the WDP.
- To ensure overall development of rural areas through employment generation.
- To promote formation of Self Help Groups (SHGs) and User Groups (UGs) in the watershed.

In the Jharkhand, there have been no existences of Panchayat Raj institutions (PRIs) for many years. So the Govt. machineries work with the help of some local villages to implement the watershed programme. There is a lack of initiative to involve the villagers in a large number. But what a way to go, we can just wish a good prospect of the watershed programme with non-politicized approach.

WATERSHED:

A watershed is a geo-hydrological unit having a common point. It is the derange basin of a catchment area above any point on defined drainage channel, which receives water from the area for a particular river or stream.

A watershed having average area of 500 hectare or more may be taken up at a time for treatment under Hariyali for development.

WATERSHED DEVELOPMENT PROGRAMME:

To catch the rain where it drops is basically watershed development. Once water is there soil moisture will be restored: there will be vegetative cover and plantation; rich top will be retained; there will be agriculture, fishery animal husbandry, sericulture and various cottage industries entailing alleviation of poverty and ushering in an era of prosperity for the community. The process of development should be participatory aiming at Sustainable Natural Resource Management (NRM).

OBJECTIVES OF WATERSHED DEVELOPMENT PROGRAMME UNDER HARIYALI WILL BE:

- 1 To harvest every drop of rainwater for irrigation, plantations including horticulture and floriculture, pasture development, fisheries in order to create sustainable sources of income for the village community as well as drinking water supplies and thereby creating regular sources of income for the Gram Panchayats from rainwater harvesting and management.
- 2 To restore ecological balance in the watershed through retention of rainwater.

- 3 To ensure overall development of rural areas through employment generation; community empowerment and development of human and other economic resources in the watershed.
- 4 To develop small water harvesting structures such as low cost fan pond nallabands, check dams percolation tanks and other ground water recharge measures.
- 5 To promote Self-Help Groups (SHGs) and User-Groups (UGs) in the watershed.
- 6 To promote simple and low- cost technological instrument by using local technical knowledge and materials.
- 7 To encourage village community and ensure the greatest number of villagers should involve with the Watershed Development Programme (WDP).

CRITERIA OF SELECTION OF WATERSHED:

1. Watershed areas having acute shortage of drinking water.
2. Watershed where people's participation is assured through contribution of labour, cash material etc. for its development as well as for the operation and maintenance of the assets created.
3. Watershed having a large population of SC/ST dependent on it.
4. Watershed having non-forest wasteland/ degraded land.
5. Watershed having an average size of 500 hectares preferably covering an entire village. However, if a watershed is found to have less or more area the total may be taken up for development as a project.

FUNDING PATTERN:

The sharing of fund between the Govt. of India and the State Government will be in the ratio of 11: 1 for IWDP and in the ratio 75:25 for DPAP. The present cost none Rs. 6000 per hectare and shall be divided in such a way

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|---|-----|
| i) Watershed treatment/ Development Works/ Activities | 85% |
| ii) Community Mobilization and Training | 5% |
| iii) Administrative Overheads | 10% |

WATERSHED DEVELOPMENT FUND (WDF):

One of the mandatory conditions for selection of villages in Watershed Development Programme is people's contribution toward Watershed Development Fund (WDF). The contribution to WDF on individual lands shall be 10%, in case of SC/ST and BPL (Below Poverty Line) 5% and contribution to the Fund in respect of community shall be 5%.

REVOLVING FUND FOR SHGs

The Gram Panchayat(GP) will set up a Revolving Fund not exceeding one lakh rupees to be given as seed money for vocational development by the Self-Help Groups (SHGs) at a rate not exceeding Rs 10,000/- per Self-Help Group (SHG) for undertaking income generating activities. This seed money must be recovered from the SHG members in a maximum of 6 installments on monthly basis. This may be reinvested in the same or other SHGs.

USER CHARGE:

The Gram Panchayat shall impose user charges on the User Groups for use of common utilities like water for irrigation from the village tanks/ponds, grazing from community pastures etc. while one-half of the collected charges may be given to WDF for maintenance of assets of the projects; the remaining one-half may be utilized by the Panchayat for any other purpose as it may seem fit for the objective.

WATERSHED DEVELOPMENT TEAM (WDT):

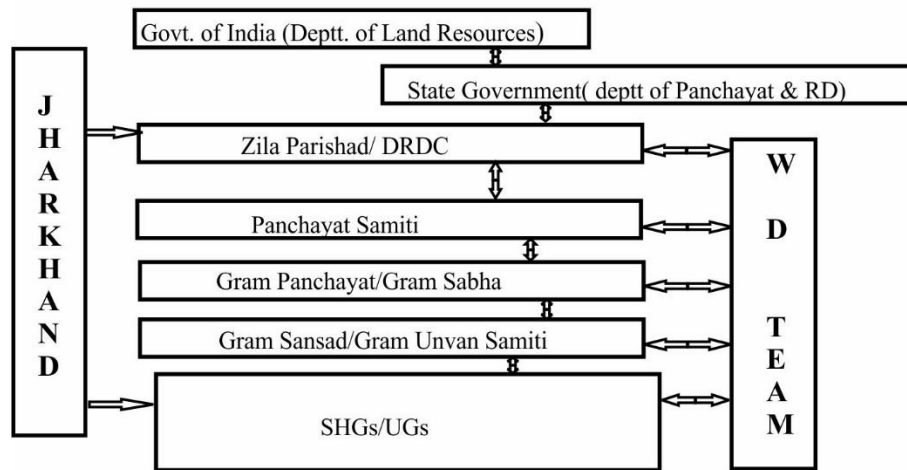
The WD Team will consist at least of the following members:

- a) One member from the discipline of Agriculture/Soil conservation.
- b) One member from the discipline of Forestry/Plant Science
- c) One member from the discipline of Civil Agricultural engineering.
- d) One member from the discipline of Animal Science.
- e) One member from the discipline of Social Science.

**At least one of the members of the WDT should be a woman.

Table No.-1

INSTITUTIONAL SETUP



HOW TO CHALK OUT THE PROBLEM OF A VILLAGE:

1) Drawing a Delineation map of the village. i.e.

- Name of the village:
- Name of the panchyat:
- Name of the panchyatsamity:
- Name of the district:
- Area in hectare:

2) Description of natural assets of the village.

3) Transect Diagram.

4) Social Map.

5) Venn diagram.

6) Seasonality Diagram.

7) Land characteristics Data and Map.

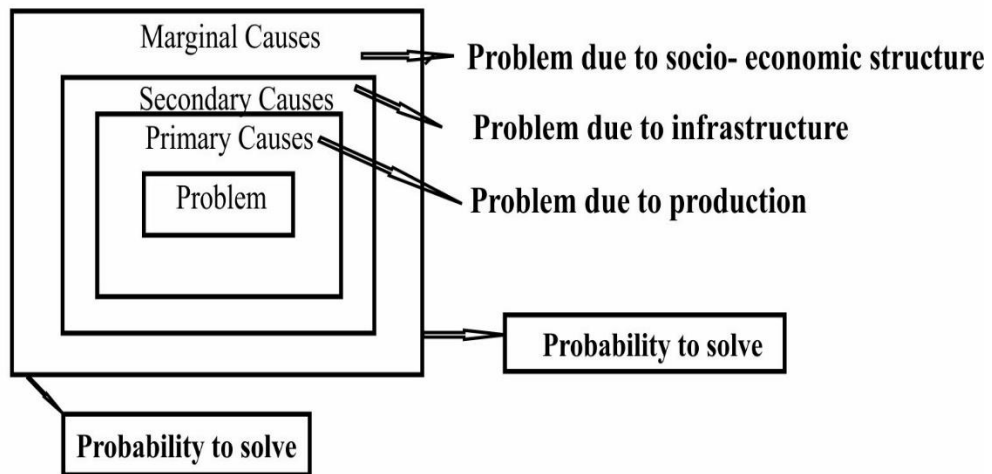
8) Water Resources Data and Map.

9) Socio-economic Data.

10) Land use Data and Map.

11) Problem Map.

Table No.-2
Watershed Management



CONCLUSION:

In Jharkhand, there have been no existences of Panchyat Raj Institution for many years so the Govt. machineries work with help of some local villagers to implement the Watershed Programme. There are lacks of initiatives to involve the villagers with a large number. But what a way to go, we can just wish a good prospect of the programme with a non- politicized approach.

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