

RESEARCH ARTICLE

Watershed Management

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ABSTRACT

People and their environment are interdependent any change in the surrounding environment directly affect the people living therein. A degraded environment results in a degraded quality of life of the people. Thus, efforts to reduce poverty & improves the standard of living of the people must aim at improving the environment they live in. The environment does not recognize people determined administrative boundaries. A watershed management provides a natural environmental unit for planning a developmental initiative.

Keywords: Watershed, Crop management, Afforestation, Rural energy management

INTRODUCTION

Watershed can be defined as the drainage basin or catchment area of particular stream or river simply it refers to the area from where the water to a particular drainage system, like a river or stream, comes from.

Watershed development refers to the conservation regeneration & the judicious use of all the resources natural (land, water, plants, animals) & human - with in a particular waters shed.

Components of watershed development.

1. Human Resource development
2. Soil & land management
3. Water management
4. Crop management
5. Afforestation
6. Pasture/fodder development
7. Livestock management
8. Rural energy management
9. Form & non - form value addition activities

All these components are inter dependent & interactive

METHODOLOGY

The paper examines the importance of watershed development & some successive water management stories in India. The paper based an secondary data which is published by government research institutes, journals, books etc.

RESULTS

Watershed development program ones in India

Conservation of raw water & checking soil erosion is central to the attainment of economic as well as financial sustainability of dry land & agriculture. Integrated watershed development programme is the major policy instrument for achieveing the goal. The importance of watershed development as a strategy of agricultural & overall rural development in rained areas has been recognized in India for the past several decades. It dates back to the establishment of four dry farming, research stations at Rohtak, Sholapur, Hyderabad & Bellaryin.

Watershed development programme which has been increasingly emphasized for dryland plain region in India, is amaifestation of the shifting priorities in agricultural sector which till recently had concentrated mainly on crops & regions with assured irrigation.

The four major projects which have generate much controversy are

- a) Sardar sarovar project Grujarat
- b) Narmada sagar project M.P.
- c) Bodhghat project M.P.
- d) Tehri dam project U.P.

Watershed development project have taken up under different programme, launched by the government of India. The drought prone Area programme (DPAP) The Desert Development Programme (DDP) adopted the watershed approach in 1987. The integrated wasteland development project scheme (IWDP) taken up by the national wasteland development Board in 1989 also aioned at developing wastelands an a watershed basis some success stories of watershed.

Development

With adopting watershed approach, some villages in India made progress. In the development of village & implement the watershed approach the local people has been give their active participation.

1. Jhabua, M.P.
2. Relegan Siddhi (MH)
3. Sukhomajri watershed (Haryana)
4. Recplicability of sukhornajri model
5. Devpimpalgaon watershed project (MH)
6. Adgaon (Maharashtra)
7. Shivani watershed project (Maharashtra)

Some of the points of development of be kept in mid are :

1. Growth of yield among irrigated crops & regions attained during the initial phase of the green revolution.
2. Frequent future of rainfall especially since 1980's has resulted into highly fluctuating productivity in dryland region.
3. The immediate solution of taping ground water
4. With increasing human & livestock population with the uncertain crop yield.

Schematic diagram showing Generalized. Watershed management system.

Natural Inputs		Watershed management system	
1	Land	1	Development of land & biomass resources
2	Soil	2	Integrated farming system approach
3	Water	3	Development of local institutions
4	Ecosystem	4	Management measures of resources
Natural system Effects		Out put	
1	On site	1	Resource conservation (e.g. land, soil etc)
2	Change in rate of soil nutrient	2	Increase in the yield of the agricultural crops
3	Change in the rate of water loss	3	Rural development
4	Off site	4	Increase in the yield of common property
5	Change in soil erosion	5	Balancing between the economic development & conservation of resources (land, water, soil, minerals etc.)
6	Change in flooding		

CONCLUSION

A watershed with catchment or basin, is made up of the natural resource in a basin esp, The water, solid & vegetative factors. The compressive development of a besin as to make productive use of all its natural resources & also protect them is termed watershed management this includes land improvements, rehabilitation & other technical work as well as the human consideration.

The watershed management essentially involved the following principles.

1. Land & water resources are interactive parts of natural ecosystem & should be managed as catchment basis.
2. Catchment are continually changing & need to be managed by considering these changes.
3. Management of land & water resources must be coordinated, with decistion based on the best available information.
4. Sound land & water management is best achieved through the information action of individual users & managers of these resources.
5. A balance of economic development & conservation of land & water resources must be maintained.

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