

REVIEW ARTICLE

ORGANIC FARMING AND CONSERVATION OF RESERVOIRS IN M.P. STATE

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ABSTARCT:

Madhya Pradesh state has the largest water spread area under the reservoirs among the Indian states. Madhya Pradesh offers immense potential for fisheries development. This review article encompasses the need of organic farming for the conservation of reservoirs in Madhya Pradesh.

KEYWORDS: Organic farming, Reservoirs, M. P. State.

INTRODUCTION:**RESERVOIRS:**

India has a total of 19,370 reservoirs units covering an area of 31,53,366 hectares. Nearly 70% of the 0.71 million active fishermen in India are employed in the inland fisheries sector. Since the reservoir fishery is a labour intensive activity, development of this sector will lead to the provision of gainful employment to this weaker section. For export demand there is urgent need to expand our production base. In addition it is always stressed that there is a need to utilize our natural resources productivity to ensure the much needed food security. Fisheries should be an avocation for better livelihood for improving the economic standards of rural poor.

Madhya Pradesh state has the largest water spread area under the reservoirs among the Indian states. Madhya Pradesh offers immense potential for

fisheries development. By virtue of its land locked geographical position the states fisheries sector is entirely of "Inland category".

In Madhya Pradesh state total available water spread area is 3.245 lakh Ha till date, 3.15 lakh Ha of water spread area has been brought in inland fish farming. 96.90 Ha area has been developed by the private fish farmers through construction of new ponds. The Government of India with the support of Union Government is attempting to improve the economic condition of fish farmers, especially the unemployed youths by self employment opportunities through centrally sponsored Scheme for the development of Aquaculture in the state.

Situated in the centre of India, the State of Madhya Pradesh is one of the largest geographic units in the country. Except for the valleys of Narmada and Tapti river systems, Madhya Pradesh is mainly a

plateau with mean elevation of 488m above MSL. The Vindhya and Satpura ranges of mountains crisscross the State and it has an average annual rainfall ranging 760-1500 mm. Four great rivers viz. Narmada, Tapti, Mahanandi and Mahi originate in this state. The rivers, tributaries, rivulets and streams in the state have a combined length of 20,661 km.

Madhya Pradesh has an approximate number of 3,700 reservoirs when all the categories are taken together. It has a total water spread area of 4.6 lakh ha. Under man made impoundments, which is the maximum among all the states in India. The Total available area under fish culture comes to about 2.71 lakh ha which is 58.9% of the total water spread area. Fish production from this area contributes to about 84.6% of the total fish production of the state.

A reservoir may be defined as a man-made impoundment with a large body of standing water. They are generally created by impoundment of a river or stream for irrigation, power generation, flood control or water supply as primary objective. The first man-made reservoir is believed to have come into existence about 6,000 years ago (Fernando, 1980). The productive level of Indian reservoirs is generally low.

PRESENT STATUS AND FUTURE POTENTIALS

Organic Farming:

Organic Farming defined as per National Programme on Organic Farming (NPOP) is ' Holistic System of Farm design and Management that seeks to create a healthy ecosystem which can achieve sustainable productivity without the use of artificial inputs such as chemical fertilizers and pesticides'.

Advantages of Organic Farming:

- i) To use on farm resources as far as possible
- ii) To preserve and enhance traditional and indigenous knowledge in farming, seeds and varieties.
- iii) To consider social and ecological impact of farming system

- iv) To produce healthy, nutritious and quality food.
- v) To minimize all form of pollution that may result from agricultural practices.
- vi) To maintain and enhance long term fertility of soils.
- vii) To help in water and soil conservation.

Indian Scenario of Organic Farming

- i) Organic Farming since Vedic Age and Sir Albert Howard (A British Agronomist) in 1900.
- ii) Farmers practicing Organic Farming either by default or due to lack of resources.
- iii) Only 0.05% area in India is under Organic Agriculture.
- iv) Large export oriented Industry
- v) APEDA Nodal Agency.
- vi) Capital Investment Subsidy Scheme (CISS) on Organic Farming started during Feb. 2005.

Scenario of Organic Farming in Madhya Pradesh

- i) Organic Farming being promoted as Bio-farming.
- ii) More than 3000 Bio Villages in M.P.
- iii) Ten Villages from each Block selected for Organic Farming.
- iv) On farm:- FYM, Vermicompost, NADEP, Biogas slurry, Green Manure and cow dung manure.
- v) Off- farm:- Bone meal, Poultry Manure, Neem cake, Karanj cake and Bio-fertilisers.
- vi) Fifty percent area in State Govt. farms put under organic farming.
- vii) Focus of the State Govt. to make it as Jaivik Madhya Pradesh.
- viii) Focus on Floriculture Mission of Organic Farming.
- ix) Certification:- MP Rajya Jaivik Pramanikaran Sanstha setup by MP Rajya Seed Corporation Ltd.

TAWA RESERVIOR:

The Tawa reservoir is a man made reservoir situated on the river Tawa in the Hoshangabad District of Madhya Pradesh. The river Tawa is a tributary of Narmada River. River Denva joins with Tawa River 823m upstream of Tawa dam site. The reservoir is also fed by a number of seasonal streams. It is located near Ranipur village, 35 km away from Itarsi Railway junction. The Dam is positioned at a Latitude of 22^o 30' 40" N and a Longitude of 77^o 58'30" E. The catchment area of the project is 5982.90 km². Construction of Tawa reservoir project was completed in 1974. The total area submerged due to the project comes to about 20,055 Ha of which

15056Ha. Was forest area, 1081Ha was farm land 3453Ha was grass and small forest and 151Ha was inhabited area. George Ninan et. al (2002)

HALALI RESERVIOR:

Halali reservoir is situated in the Raisen District of Madhya Pradesh at an altitude of 458m MSL. It is about 40km from Bhopal on Bhopal-Vidisha route. It is constructed on the Halali river system and serves as an irrigation dam. The dam is positioned at Latitude 23^o 30' N and Longitude of 77^o 30' E. The average water area of the reservoir is 4795Ha. The dam was commissioned in the year 1973 and named as Ashok Sagar Project. George Ninan et. al (2002).

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