

SHRIKRISHNA MAHA VIDYALAYA, GUNJOTI



Project Report on Biodiversity of Makani Dam

Submitted By

Karbhari Mahadevi Rajendra, Seat No: NAF664925

Sultan Rumana Shafiyuddin, Seat No: NAF664971

Majge Girish Ashok, Seat No: NAF664932

Shahir Vishal Parmeshwar, Seat No: NAF664962

Pise Nikita Vaibhav, Seat No: NAF664954

Guided By

Dr. D. M. Pathan

Asso. Prof. & Head, Dept. of Zoology

Submitted to
Department of Zoology
SHRIKRISHNA MAHAVIDYALAYA, GUNJOTI
Tq. Omerga Dist. Osmanabad (MS)


Shrikrishna shikshan sanstha's

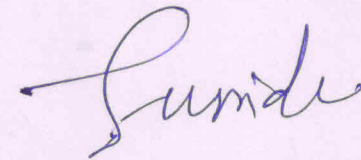
SHRIKRISHNA MAHAVIDYALAYA GUNJOTI

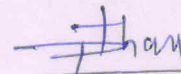
DEPARTMENT OF ZOOLOGY

CERTIFICATE

This is to certify that, Mr. /Miss Karbhari M. R., Sultan R. S., Majge G.A., Shahir V.P., Pise N.V. Class B.Sc. VI Semester, Zoology has satisfactorily completed the Project on **Biodiversity of Makani Dam** as per instructed by Dr. B. A. M. University, Aurangabad during the academic year 2021-22.


Guide


External Examiner


Head

HEAD
Department of Zoology
S. K. M. Gunjoti Tr. Omerga

Biodiversity of Makani Dam

The present water reservoir is perennial water body across the river Terna near Makani Dam village Tq. Lohara Dist. Osmanabad [M.S.] India.

The length of Terna dam is 1787 meters with gated spillway on right side the maximum height of the dam. In river bed 207 meters. It is situated within the latitudes 18-1.735' – 0" to 76-25.811'-0". Irrigation was the main aim behind the construction of this project, about 66.95 million mt³ water was used for irrigation about 1787 million mt³ water stock, but urbanization and development of around the reservoir changed the utilize of water due to this water body ultimately affecting diversity and density of biomass the water body of the reservoir is main source of water for irrigation. Drinking and huge amount of fish farming and different domestic purposes of peoples who live around the reservoir.

1	Place of reservoir	Maharashtra State, Dist. Osmanabad Tq. Lohara Village – Makani Dam Latitude – 18-1.735'-0"
2	Water shed area	1787 Sq. Kilometer
3	Type of Dam	
	Main dam	Soil dam
	Cannal	Construction of cement
4	Dead stock	29.967 cmc
	Live storage	91.221 cmc
	Projected storage	160.460cmc
5	Length of canal	207 meter
6	Area under irrigation	3188
7	Crop water requirement	66.95 cmc
8	Overall efficiency at canal release/ H. R. of eh project	14513/66.95=216 cmc



Water is very essential and important factor all life of plants, animals and human beings, thus the use of water for various purpose mainly drinking and agricultural therefore water conservation and water management plays an important role in future, it is unique component of nature, water is economically culturally and biological important natural resource on Earth from this water has been estimated only 0.00192 % of total water on the Earth is available from human consumption

Any human activity in the whole of the water shed is bound to influence the water in the reservoir and downstream. The agricultural practices in the catchment area not only helps in silting but are also responsible for the addition of large quantities of nutrients, pesticides and organic matter brought into the dam by the runoff through the streams. The present water body is manmade dam, on Terna river. The morphometric details of the present dam are summarized below. Now year by year decrease in average of rain fall.

Maharashtra State govt. also announce Marathwada region is drought effected region.

The major quantity of water dam is supplied to drinking purposes and domestic uses, due to less rainfall for about 3 to 4 years has made the possibility of depth of the dam. The water from dam is supplied to Nilanga Taluka (30 villages) AUSA taluka (5 villages).

Water samples were collected in the morning the month June 2013 to March 2014. The physico-chemical parameters like water temperature, p^H , turbidity, electric conductivity at the sampling sites.

According to APHA (1980), Kodarkar (1992) and Trivedi 1986, Goel P. K., Trisal C. L. (1998) method, T.D.S., chlorides, Alkalinity hardness, sulphates, dissolved oxygen, Nitrates, phosphates, carbonates were analyzed in the laboratory.

The Terna reservoir was under the investigations for the water analysis for about one year June 2013 to March 2014. In the investigation temperature is differs by 2 to 6°C. throughout the study period.

The p^H of the reservoir is alkaline ranging between 8.0 to 8.6 the volume of the water affected by rain fall and use for the irrigation, drinking for the population of about different villages in addition to natural processes like percolation evaporation.

The parameters like turbidity, T.D.S. were co-related to each other. Turbidity ranged between 21.1 to 143 cm. The T.D.S. value ranged between 100 to 285 mg/litre and the conductivity during the study is in limit. The parameter like dissolved oxygen is the indication of respiration to photosynthesis ratio in the water body. Dissolved oxygen value ranged between 6 to 9 mg/litre.

The total alkalinity of the water from the present water body ranged between 130 to 250 mg/litre. The total hardness was higher in winter and lower in summer. It was 20.1 to 110 mg/litre. Due to Ca^{++} and Mg^{++} ions. The chlorides of the water is ranged between 17 to 35 mg/litre during summer it is high and low during winter. The overall result is in limits this indicates water body is unpolluted. Phosphates, sulphates, nitrates are present in very less amount that is within the permissible limits.

Studies on the quality criteria for different uses indicates that the present water body is healthy with different parameters within the permissible limits, but scarce rainfall and drought for long duration, exploitation of water from the water body for different purposes is creating strain on the amount of water volume in the water body.

The fresh water fish tests were gathered from Makani Dam water District Osmanabad (Maharashtra State) in India. The land circulation being. It is worked over Makani Dam Dam stream close Makani Dam town, locale Osmanabad, Maharashtra.

RESULTS

During tenure of my study, 39 fish species were found. Among 39 fish species, 25 genera and 12 families were assembled under seven requests. Family Species Cyprinidae Labeo rohita (Hamilton,1822) Cyprinidae Labeo calbasu (Hamilton,1822) Cyprinidae Labeo fimbriatus (Hamilton,1822) Notopteridae Notopteus chitala Cyprinidae Hypothalimichthys molitrix

References

- 1) APHA (1995) standard methods for examination of water sewage and industrial waste. 10th edition American water works Association. New York.
- 2) Indian standard (IS:2490) (1981) domestic water specification, BIS, New Delhi.
- 3) Trivedy R. K., Goel P. K. Trisal, C. L. (1998).
- 4) Kodarkar M. S. (1995), conservation of Lakes IAAB Publication no. 3, Hyderabad.
- 5) Kodarkar M. S. (1998), Methodology for water analysis IAAB Publication, Hyderabad.