

SHRIKRISHNA MAHA VIDYALAYA, GUNJOTI



Project Report on

Ichthyofauna of Jakekur Dam

Submitted By

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Tq. Omerga Dist. Osmanabad (MS)

Shrikrishna shikshan sanstha's

SHRIKRISHNA MAHAVIDYALAYA GUNJOTI

DEPARTMENT OF ZOOLOGY

CERTIFICATE

This is to certify that, Mr. /Miss ,Palampalle M. S.,Kadam J.A.,Katkdhond S.M., Parit D. V. Class B.Sc. VI Semester, Zoology has satisfactorily completed the Project on **Ichthyofauna of Jakekur Dam**

as per instructed by Dr. B. A. M. University, Aurangabad during the academic year 2021-22.

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Ichthyofauna of Jakekur Dam

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

Introduction : The physical characteristics of water such as temperature, pressure, density, currents, pH, Transparency, Turbidity, Total dissolved solids, Conductivity etc in one way or another, have significant influence on aquatic life. It should be understood that each physical factor is described not as an isolated physical phenomenon but as a contributor to the sum total of all aquatic environment where the organisms exist, grow and reproduce. Water is a universal solvent and it is one of the fifth most important key elements besides the food, cloth, living place and oxygen it required for the every existence of life. Life on earth would be impossible without water. It is a gift to man by nature. But man's activities have made water as a source of potential danger to his health and every existence. The most basic and important benefit of fresh water is related to the health of people, ecosystem and societies.

Considering the lack of knowledge of water quality, the study of the physical environment of Jakekur project was taken. The Jakekur project (Reservoir) is one of the most important aquatic water bodies in Tq. Omerga Dist. Osmanabad (M.S). The reservoir is used for irrigation, Drinking purpose, as well as pisciculture by the local communities.

The quality of water resources is usually described according to its physical chemical and biological or bacteriological characteristics. Assessment of water resource quality is an important aspect for the developmental activities of this region, because of it is the sum of water supply of Domestic, Industrial, Agriculture & aquaculture practices (Jain and Seethapathi, 1996; Jakher and Rawat, 2003).

Limnological investigations of man-made lakes (reservoirs) are necessary to evaluate potential fish production and to provide information that could be useful in fisheries developmental planning. Keeping these aspects in view many limnological studies have been carried out on reservoirs all over the country. The notable studies on reservoir water quality are those of Sreenivasan (1965&1979), Dwivedi and Chondar (1980), Sugunan (1980&1990), Singh et al (1990), Sharma and Sahai (1990), Kulshrestha et al (1992), Sugunan and Yadava

(1991& 1992), Devi (1997), Pska and Chary (2000), Das et al (2001), Sathe et al (2001), Shastri and Pandse (2001).

Reservoir has large and varied chemical contents. Innumerable materials enter the system from the atmosphere; from the catchments area and from its own basin. The chemical properties of reservoir not only alter the physical properties of medium but also have significant bearing on the distribution and metabolic activities of the existing life. To certain limit, the richer the contained substances in it, the greater will be its biological activity. Thus, the diverse chemical properties of reservoir such as dissolved carbon dioxide, dissolved oxygen, alkalinity, pH, chlorides etc. act as controlling factors for determining the presence and distribution of aquatic organism. There are interactions between the organisms. There are interactions between the chemical compounds of water and the organisms, which live in water. Some of these chemicals are essential elements for metabolic processes of organisms while some are not. Recently much of supply of chemical compounds to aquatic systems by man has created acceleration of the eutrophication (Sakhare 2007).

We depend on water for domestic need, irrigation, industry, shipping, sanitation and disposal of wastes. Normally water in nature is never pure in chemical sense. It contains impurities of various kinds such as dissolved gases dissolved minerals, microbes and suspended matter. These natural impurities are in very low amount. But due to industrial waste and effluents, municipal sewage, material used in religious ceremonies and ashes, many unwanted substances, fertilizer, chemicals pesticides are used in agriculture introduced in water it causes pollution. Polluted water is unfit for drinking and other purpose. They cause many diseases and are also harmful to human beings.

Jakekur dam is an earth fill dam on Local River near Umerga, Osmanabad district in stata of Maharashtra in India.

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Salient Features of Jakekur Project (Reservoir)

1	Place of Reservoir	At -Jekekur Ta -Omerga Dist -Osmanabad State -Maharashtra Longitude -76.34° Latitude -17.48°
2	Catchment area	47 Meil sq
3	Types of reservoir	Earth dam
4	Gross storage capacity	10.176 × 10 ⁶ M ³
5	Dead storage	2.213 × 10 ⁶ M ³
6	Live storage	7.43 × 10 ⁶ M ³
7	Total length of reservoir	1768 M
8	Length of canal	358 M
9	Maximum discharge of canal	46150 Feet ³ /Sec
10	Crest level of reservoir	1480 M
11	Submerged area of reservoir	988 Hec
12	Affected villages	Gunjoti, Aurad
13	Crest level of Reservoir	577.60 M
14	Full reservoir level	574.10 M
15	Minimum – M.D.D.L	570.70 M
16	River Bed Level	562.800 M
17	Canal Crest Level	574.10 M

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

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