

**WATER QUALITY OF PARICHHA DAM RESERVOIR IN RELATION TO FISHERIES
IN JHANSI (U.P.) INDIA**

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ABSTRACT

Physico-chemical characteristics of Parichha dam reservoir of Jhansi in Uttar Pradesh have been studied. The water temperature varied between 23.0 to 37.0°C. The transparency, pH, chlorides and total hardness were in the range of 100 to 145 cm, 7.8 to 9.2, 42.0 to 59.17 mg/l and 100-197 mg/l respectively. The total alkalinity, dissolved oxygen and total dissolved solids ranged between 193 to 389, 5.2 to 8.6 and 90 to 310 mg/l respectively. The study revealed that the reservoir water is suitable for fisheries.

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KEY WORDS : Fisheries, Jhansi, Reservoir, Uttar Pradesh, Water quality.

Introduction

The reservoir came into existence with impounding of Parichha dam in Jhansi (U.P.) India. The morphometric features are depicted (Table-1). The work on water quality of Parichha dam reservoir can provide valuable information to the planners, scientists and fishing authorities to check out strategies for the development of fisheries. There is meagre record of water quality of Parichha dam reservoir.

The study of physico-chemical characteristics of Parichha reservoir includes the water temperature, transparency, total dissolved solids, pH, chlorides, total hardness, dissolved oxygen, carbondioxide and total alkalinity.

Materials and Methods

The Parichha dam reservoir is situated at latitude 78° 36' E and longitude 25° 31' N at an elevation of approximately 258m above mean sea level in Bundelkhand region, district Jhansi, Uttar Pradesh.

The methods used for analysis of various physico-chemical parameters except pH are as given in methodology for water analysis¹⁸. The bottles used for collection of water samples were made up of Pyrex glass and were cleaned by boiling them in dilute HNO₃ followed by distilled water⁵. The characteristics like temperature, pH, conductivity, dissolved oxygen etc. were measured as early as possible after collection.

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