

**FISH DIVERSITY OF KALI GANDAKI RIVER, BHARATIPUR VDC,
NAWALPARASI, NEPAL**



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Submitted To:

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RECOMMENDATION

This is to recommend that the thesis entitled “**Fish diversity of Kali Gandaki River, Bharatipur Vdc, Nawalparasi, Nepal**” has been carried out by **Mr. Deepak Shamsher Rana Magar** for the partial fulfillment of Master’s Degree of Science in Zoology with special paper ‘Fish and fisheries’. This is his original work and has been carried out under my supervision. To the best of my knowledge, this thesis work has not been submitted for any other degree in any institutions.

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On the recommendation of supervisor “**Prof. Dr. Surya Ratna Gubhaju**” this thesis submitted by **Mr. Deepak Shamsher Rana Magar** entitled “**Fish diversity of Kali Gandaki River, Bharatipur Vdc, Nawalparasi, Nepal**” is approved for the examination and submitted to the Tribhuvan University in partial fulfillment of the requirements for Master’s Degree of Science in Zoology with special paper Fish and Fisheries.

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I hereby declare that the work presented in this thesis entitled “**Fish diversity of Kali Gandaki River, Bharatipur Vdc, Nawalparasi, Nepal**” has been done by myself, and has not been submitted elsewhere for the award of any degree. All the sources of the information have been specifically acknowledged by reference to the authors or institutions.

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ABSTRACT

The Kali Gandaki River had a good habitat to support several freshwater fishes. A total of 17 Fish species have been collected belonging to 4 orders, 7 Families and 12 genera. Common fishes were *Barilius barila*, *Barilius bendelisis*, *Garra annandalei* and *Pseudecheneis eddsi* species. While the fishes like *Tor putitora* and *Channa orientalis* were rarely caught. Cyprinidae family remained dominant throughout the study period. The distribution and composition of the fishes depended upon the physiochemical parameters. The fishes were not found uniformly distributed in the river, it might be due to variation in temperature, depth, transparency, pH, DO, free CO₂, hardness, etc. of water. However no significant difference in the diversity composition was obtained during the investigation period; rather the composition of fish species was the seasonal phenomenon. The study showed the decline in density and species richness of fishes; which might be due to illegal fishing, pollution and habitat destruction etc.

Key words: Diversity, Illegal fishing, Degrading, Habitat destruction.

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LIST OF ABBREVIATIONS

Abbreviated form	details of abbreviations
⁰ C	Degree Centigrade
AAPA	Aquatic Animal Protection Act
APHA	American Public Health Association
CBS	Central Bureau Statistic
DOFD	Directorate of Fisheries Development
DO	Dissolved Oxygen
ha	hectare
IUCN	International Union for Conservation of Nature
VDC	Village Development Community
WWF	World Wildlife Fauna
EIA	Environment Impact Assessment
BOD	Biological oxygen demand
Conc.	Concentrated
F.D	Fish Diversity
RCNP	Royal Chitwan National Park
FAO	Food and Agriculture Organisation