

**FISH DIVERSITY AND FISHERY RESOURCES OF THE KOSHI RIVER AT  
KTWR, NEPAL**

**A DISSERTATION  
SUBMITTED FOR PARTIAL FULFILLMENT OF MASTER'S DEGREE IN  
ZOOLOGY  
(FISH AND FISHERIES)**

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**2011**

## RECOMMENDATION LETTER

It is my pleasure to recommend that Ms Sindhu Saud has completed her dissertation work entitled "**Fish Diversity and Fishery Resources of the Koshi River at KTWR area**" under my supervision and guidance. It is her original work and brings out useful results and findings in the concerned field.

I recommend this dissertation for approval as a partial fulfillment of M.Sc. Degree in Zoology (Fish and Fisheries).

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**LETTER OF APPROVAL**

On the recommendation of Supervisor Associate Professor Dr. Usha Lohani, this dissertation work of Ms. Sindhu Saud "**Fish Diversity and Fishery Resources of the Koshi River at KTWR area**" is approved for examination and submitted to Tribhuvan University for partial fulfillment of the requirements for Master's Degree in Zoology with Fish and Fisheries as a special paper.

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We, all the members of the evaluation committee, went through this dissertation entitled "**Fish Diversity and Fishery Resources of the Koshi River at KTWR area**" and found satisfactory to recommend Ms. Sindhu Saud qualified for awarding M.Sc. Degree in Zoology with Fish and Fisheries as special paper.

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## **DECLARATION**

I hereby declare that the work presented in this thesis has been done by myself and has not been submitted elsewhere for the award of Master's Degree. All resources of information have been specifically acknowledged by references to the author or institution.

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## ACKNOWLEDGEMENT

I express my sincere gratitude to my respected teacher and supervisor Dr. Usha Lohani, Associate Professor, Central Department of Zoology, T.U., for her constant encouragement, valuable suggestions, corrections and guidance for the completion of this work.

I express my heart full gratitude to Professor Dr. Ranjana Gupta, Head of Department of Zoology.

I am highly obliged to my all honoured teachers for their invaluable suggestions and encouragement to complete the work. Similarly, I am thankful to all other teaching and non-teaching staffs of the Central Department of Zoology, T.U., Kirtipur for all their academic support, invaluable suggestions and cordial help throughout my study period.

I pay my sincere gratitude to my husband Mr. Bishnu Basnet for his help in typing and providing other facilities during preparation this report. Also thankful to my family members, all officials and locals at Koshi Tappu for their interview, valuable suggestion and friendly behavior at field visit around the Reserved Area.

My thanks are always due to all those respondents and fishermen who have rendered their great help and cordial support during my field study.

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## ABSTRACT

The present study deals with "Fish Diversity and Fishery Resources of the Koshi River, KTWR area." The Koshi River flows through Koshi Tappu Wildlife Reserve, in eastern Nepal and famous for wild buffalo and bird sanctuary. This study provides information on the present status of fish diversity, fish distribution pattern, behavioral aspects of some important fishes and also the socio-economic condition of fishermen inhabiting around the Koshi River. The research was done with the help of fishes collected by local fishermen and hiring them as well. Cast nets and other local nets were used for the purpose. The socio-economic conditions of the fishermen were observed by interviewing local fishermen. The Koshi River shows more diversified fish species. Sixty-one species of fish belonging to 7 order, 20 families and 41 genera were collected from the Koshi River system. The most common fish species in the Koshi River were from *Cyprinidae* family and *Barilius*. The physico-chemical parameters show that the water in Koshi River is still good in condition for fishes but may get polluted with the increase of population around the Koshi River just outside of KTWR area. The socio-economic status of fishermen is poor due to illiteracy, insufficient agricultural land and unemployment. It has been observed that the fish population is deteriorating and decreasing rate day by day due to various factors such as dynamiting, poisoning, killing of brood fishes during spawning season and also by heavy flooding and erosion. Because of low catches and difficulties in livelihood some fishermen seek alternative work. Some fishermen are engaged with private fishery in ponds. The study shows that the fishermen as well as local villagers should be provided with some fishery education and other vocational training to prevent the decreasing rate of fishes in Koshi River.

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## LIST OF ABBREVIATIONS

$^{\circ}\text{C}$	Degree Centigrade
DO	Dissolved Oxygen
IUCN	International Union of Conservation of Nature
KTWR	Koshi Tappu Wildlife Reserve
mg/l	Miligram Per Liter
ml	Mili Liter
mm	Milimeter
r	Correlation coefficient
sq. km.	Square Kilometer
sq.m.	Square Meter
cm	Centimeter

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