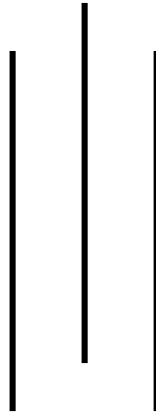


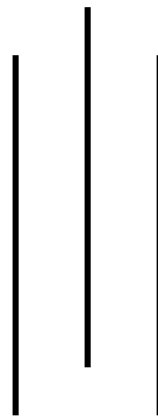
**STUDY OF INTENSIVE FISH FARMING  
IN MADHESHA, SUNSARI**



**A DISSERTATION SUBMITTED FOR THE PARTIAL  
FULFILLMENT OF M.SC.DEGREE  
IN ZOOLOGY (FISH AND FISHERIES)**

**Institute of Science and Technology**

**Tribhuvan University, Kirtipur**



**BY**

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**Kathmandu, Nepal**

**2007**

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**2007**

Date

**Subject: RECOMMENDATION**

This is recommended that Mr. Binod Adhikari has successfully completed the dissertation work entitled "**Study of Intensive Fish Farming in Madhesha, Sunsari**" under my supervision as a partial fulfillment of the requirements for the Degree of Master of Science in Zoology. I recommend his work for approval.

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## APPROVAL

The dissertation submitted by Mr. Binod Adhikari entitled "**Study of Intensive Fish Farming in Madhesha, Sunsari** " has been accepted for a partial fulfillment of the requirements for the Degree of Master of Science in Zoology.

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## ABSTRACT

The research was conducted to investigate the intensive fish culture in Madhusa VDC, Sunsari, Nepal. The study was done in a single pond (800sq.m) and stocked with indigenous and exotic carp as Rohu (*Labeo rohita*), Bhakur (*Catla catla*), Naini (*Cirrhinus mrigala*), Grass carp (*Ctenopharyngodon idella*) and Big head carp (*Aristichthys nobilis*). The study was carried out for 180 days from November 2006 to April 2007 with regular analysis of physico-chemical parameter and growth of fish once in two month. The average weight of fingerling at the time of stocking was 15gm which reached 600gm (Grass carp at the time of harvesting), followed by Bhakur (500gm), Rohu (400gm), Naini (350gm) and Bighead Carp (300gm). The water temperature ranged between 19.5 to 30°C, dissolved oxygen from 4.2 to 8.3ppm and free CO<sub>2</sub> from 6.3 to 9.0ppm. The total alkalinity ranged between 45 to 70ppm and the P<sup>H</sup> from 7 to 10.8ppm. The survival rate was found highest for Grass carp (75%), followed by Bhakur (72.5%), Rohu (62.5%), Naini (45%) and Bighead carp (44%). The total input in the pond was Rs. 7,540 and the total output from the pond was 734kg of fishes which was sold for Rs.62,390 at the rate of Rs.85/kg. This showed the total fish per hectare is Rs.779875 and the net profit of Rs.685,625 per hectare. Hence, this study, showed that polyculture an income generator for fish farmers and local people and contributing greatly to socio-economic development.

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