

A CASE STUDY

Current status of fish fauna of river Gomti in Faizabad and Sultanpur districts of U.P., India

PRAMOD KUMAR AND A.P. RAO

Accepted : October, 2008

Previously, river Gomti harboured more than 265 species of fishes of various groups of carps, clupeoids, silurioids, live fishes, prawn etc. However, in the present study a total of 64 species of fishes belonging to various families were recorded. Catch of various fishes were decreased. Cyprinidae were the most dominant group contributing 42.5% share. Indian major carps were dominant species throughout the year. Previously, the catch of *Rita rita* was sizable. However, now decreased. The catch of exotic carps *i.e.* silver carp, grass carp and common carp is increasing. The *Labeo calbasu* was among one of the dominant species in river Gomti, however the present share is limited. The catch of *Silondia silondia*, *Bagarius bagarius*, *Wallago attu*, and *Pangasius pangasius* was significantly decreased.

Uttar Pradesh is most populous state of our country. The agriculture and allied activities forms the backbone of its economy. Being land-locked it is endowed with an abundant supply of inland water resources (11.65 lakh ha) that are ideal for fishery and aquaculture. At present, the state ranks 6th in inland fish production in the country. The availability of 7.20 lakh ha of running water in the form of rivers and canals harbouring ichthyofaunal diversity further enrich the state. Till yester years the rivers of the state formed the mainstay of inland fish production which has gradually declined alarmingly.

One aspect of the environment of the water bodies is that they are facing the threat of pollution from an increasing number of new chemicals released into the aquatic environment continuously. It has been reported that almost every river system of India is now polluted to a

considerable extent (Martin, 1998; Singh and Aggarwal, 1998). Huge amounts of agricultural pesticides used for crop protection eventually enter into the aquatic system. Similarly, sediments of heavy metals which are released as industrial effluents form a major part of aquatic pollution. The presence of excessive quantities of contamination in water caused death of aquatic organisms in past (Wanganeo *et al.*, 1994).

Gomti river is one of the major tributaries of river Ganga with a stretch of about 940 km from Pilibhit to Jaunpur is one of the major rivers of Uttar Pradesh. The river Gomti has its sources in tarai region of district Pilibhit and comes to Lucknow, passing through Sultanpur and Jaunpur then joins the river Sai at Rajepur and finally joins the river Ganga in Gazipur district of Uttar Pradesh. It contributes 7.39 billion of m³ per year water to the main stream of river Ganga. The basin drains an area of 28, 375 sq km, and provides drinking water to over 1.39 million peoples. The present study was planned to know the status of fish catch, available species and changing scenario of fishes in the river. Study was also conducted on water quality, phyto and zooplankton to know the complete status of the river.

MATERIALS AND METHODS

For the present study, five sampling stations were made on the river Gomti in a stretch of 20 kms. These stations were named as site G₁, G₂, G₃, G₄ and G₅. Study was conducted for 9 months from July 2006 to March 2007. The monthly sampling of water was done. Various physico-chemical and biological analysis of water was done with suitable and standard techniques. Water colour was judged at

See end of the article for authors' affiliations

Correspondence to :

A.P. RAO

Department of Fisheries
N.D. University of Agriculture
and Technology, Kumarganj,
FAIZABAD (U.P.) INDIA

Key words : Plankton,
Fauna, Harbours,
Heterogenicity,
Alarmingly, Indiscriminat.