



## PRESENT FISHERIES STATUS OF SARIAKANDI FISH PASS, SARIAKANDI, BOGRA

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Fisheries are a prospective sector of Bangladesh contributing 5.7% of the total export earning and 4.92% to the GDP (BBS 2003-2004). But this sector has been facing serious problems due to unplanned water development structures. The water development structures (dam, polder, sluice gate etc.) block the movement of fish to and from the floodplain, which serves as the spawning and nursery ground for fish and throw thousands of fishermen out of work (Kabir and Sharmin 2003). Fish pass is a structure which helps to overcome this problem by facilitating upstream or downstream migration of fish. Sariakandi fish pass was established in 2001 at Sariakandi upazila under Bogra district to facilitate fish migration between the Rivers Jamuna and Bengali. The field study was conducted at Sariakandi, Fish pass of Bogra, Bangladesh during the first part of 2007 to know the impacts of the fish pass on fish diversity of Bengali river, socio-economic condition of fishermen and ecological condition near the fish pass area. To perform this study interview, case study, structured questionnaire and eye observation methods were used.

About 12 genera of Osteichthyes fishes were recorded in the Bengali river before establishment of fish pass. The fishes were *Labeo rohita* (Hamilton), *Catla catla* (Hamilton), *Cirrhinus mrigala* (Hamilton) and *Puntius sophore* (Hamilton) under Cypriniformes; *Wallago attu* (Bloch and Schneider), *Mystus tengara* (Hamilton), *Ailia coila* (Hamilton) of Siluriformes; *Colisa fasciata* (Bloch and Schneider), *Ambassis nama* (Hamilton), *Glossogobius giuris* (Hamilton) of Perciformes; *Mugil corsula* (Hamilton) of Mugiliformes and *Mastacembelus armatus* (Lecepede) of Mastacembeliformes. At present in the Bengali river about 23 genera of Osteichthyes comprising of *L. rohita*, *C. catla*, *L. calbasu*, *L. bata* (Hamilton), *C. mrigala*, *Amblypharyngodon mola* (Hamilton), *Puntius sophore* (Hamilton), *Botia dario* (Hamilton) of Cypriniformes, *Wallago attu*, *Mystus aor* (Hamilton), *Rita rita* (Hamilton), *Pangasius pangasius* (Hamilton), *M. tengara*, *M. cavasius* (Hamilton), *Ailia coila*, *Ompok pabda* (Hamilton) of Siluriformes, *Gudusia chapra* (Hamilton) of Clupeiformes, *Colisa fasciata*, *Ambassis nama* (Hamilton), *Glossogobius giuris* of Perciformes, *Mastacembelus armatus* (Lecepede) and *M. pancalas* (Hamilton) of Mastacembeliformes and *Mugil corsula* (Hamilton) of Mugiliformes. Belonging to crustacean *Macrobrachium lamarrei* (DeMan) and *M. davanus* (Henderson) are available. Now the fishermen capture more fish from the Bengali river and earn more money (about 200-300 Tk/day). They are making semi-paka and paka house and they are using sanitary latrine. The number of school and college-going children of the fisherman family are also increasing. The ecological condition near the fish pass area is degrading year after year. The connecting part of the Jamuna River to the fish pass is becoming high land due to heavy siltation during the rainy season.

From the study we may conclude that the fish pass has positive significance on fish diversity and socio-economic development of the fishermen. But the fish pass is going to be inactive due to siltation. So this study recommends overcoming the siltation problem near the fish pass area in future.

### References

- BBS (2003-2004) Bangladesh Bureau of Statistics. *Statistical Year Book of Bangladesh*. Statistical Division, Ministry of Planning. Govt. of the People's Republic of Bangladesh. pp. 69
- Kabir M R and Sharmin N (2003) Fish friendly structures. A new motivation in Bangladesh. *The Second International Symposium on the Management of large Rivers for Fisheries. Sustainable Livelihoods and Biodiversity in the New Millennium*. 11<sup>th</sup>- 14<sup>th</sup> February 2003, Phnom. Penh.Combodia. pp. 85-91.