

Impacts on climate change on the migratory and non-migratory fishers of the Padma River in Bangladesh and their response strategies

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Abstract

Global climate change is impacting and will continue to impact world fisheries. It is assumed that the Padma/Ganges river, contributing significantly to the fisheries and fishers livelihoods of Bangladesh and India, is already affected by the climate change. However, there is a lack of evidence on it and the response strategies are unknown. This study assesses the climatic impacts and response strategies of the migratory and non-migratory fishers of the Padma river. Data were collected using household interviews, focus group discussions and key informant interviews during July to October, 2015. The results show that the higher to lower rank of the climatic shocks based on their level of impacts on fishers livelihoods are as: storm>low rainfall>high temperature>low temperature>riverbank erosion. For both the migratory and non-migratory fishers the common response strategies are embankment construction, permanent migration, livelihoods diversification, changed in fishing duration and fishing gears, selling physical assets or livestock's, reducing food consumption, involving school going children in income generation activities, taking loans, taking shelter in the nearby canal, etc. Non-migratory fishers are more affected by the storm in respect of physical and financial loss and are more exposed to riverbank erosion than migratory fishers. But storm affects the migratory fishers' human capitals more than non-migratory fishers. This study found that climate variability and change has impacts on the Padma river fishery dependent livelihoods. The fishers' households are responding to these impacts and transformed some coping strategies into adaptation strategies, but these are not enough to fully address the impacts.

Keywords: Climate change, Impacts, Adaptation, Migratory and non-migratory fishers, Padma, Ganges, River.

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