

GO WITH THE FLOW

Restoration of dry season flow in the Old Brahmaputra River

Context and problem
The flow ratio of Old Brahmaputra and Jamuna Rivers in Bangladesh has decreased significantly since 1960. As the dry season flow in the Old Brahmaputra depends on various aspects of the Jamuna River, restoring its flow is difficult.

How can dry season flow be restored in the Old Brahmaputra River?

Researching this question
As smart dredging and adaptive river management would be effective, the Bangladesh Inland Water Transport Authority is implementing the same to restore the dry season flow.

Bangladesh Inland Water Transport Authority is taking initiatives to restore the dry season flow in the Old Brahmaputra River. Planned dredging based on analysis of satellite images, long-term data and mathematical model results will increase water flow and facilitate better transport, agriculture and fishing.

“The model results would support stabilizing the offtake and ensuring dry season flow in the river for sustaining ecosystem services.

Chairman
BIWTA

SMART DREDGING AND ADAPTIVE RIVER MANAGEMENT

1. Dredging programme

By implementing a dredging programme that would increase water depth, Bangladesh Inland Water Transport Authority is trying to shorten the navigation route and enable more economic freight movement between India and Bangladesh. It would also restore dry season water flow in the Old Brahmaputra River, thus enhancing other ecosystem services.

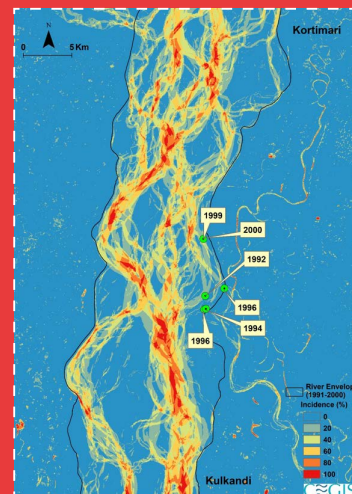


2. Adaptive river management

With the use of long-term data, satellite images and modelling tools, offtake and adaptive river management have been recommended along with dredging. Aggressive dredging at the offtake would divert more water into Old Brahmaputra River from the Jamuna. Minimum navigation depth would be 3m, except for the driest period lasting 15 to 30 days.

3. Co-benefits

The dry season flow would enhance other ecosystem services such as agriculture and capture fisheries in the Jamalpur – Mymensingh region. The flow in Jhinai, Nagda, Banar and other such distributaries would also increase, which is likely to increase the water supply to the mega city of Dhaka.



River envelop (1991-2000)

Joint Cooperation Programme Bangladesh-the Netherlands

Riverbank protection

Flow velocity during the monsoon would increase because of the river restoration. It should be estimated correctly so that the river banks can be strengthened. As the flow would increase during the monsoon, downstream flood protection should be strengthened.

For more information contact Farhana Akhter Kamal at fa@iwmbd.org

KEY MESSAGE

Make use of smart dredging and adaptive river management to enhance water flow in rivers.

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