

Success story of Kothia Maun Wetland, Bihar: NFDB funded Wetland development pilot project

Project Name: Fisheries Development of Kothia Maun of Bihar-Pilot project

- **Implementing Agency:** ICAR-Central Inland Fisheries Research Institute Barrackpore,
- Kolkata-700 120
- **TPC:** Rs.81.774 lakh
- **NFDB assistance:** 100%
- **Project Location:** Kothia Maun, Tetaria, East Champaran, Bihar

Introduction:

Kothia Maun is a typically oxbow shaped lake situated at 38 km of Motihari town in East Champaran district of Bihar. This Maun is a meander of Budhi Gandak river with a water spread area of 60 Ha. Kothia Maun is presently under the ownership of DoF, Bihar under Bihar Jalkar Act, 2006. This maun was leased out to a Tetaria block fishermen co-operative society named “Tetaria Prakhand Matssyajeevi Sahyog Samiti” for a period of 7 years. At present 300 fishers are under “this society and are solely dependent on this Maun for their livelihood.

The sheer magnitude of the resource makes it possible to increase the inland fish production substantially by practicing scientific management principles for the development of this Wetland. NFDB has taken up this Pilot Project through institutionalizing stakeholder’s participatory mode to develop Kothia Maun Wetland in a sustainable manner with the technical hand holding from ICAR-CIFRI, Barrackpore.

This Wetland development project aimed to bridge the gap between scientific intervention and traditional practice in the wetland by supplying quality seed & feed, capacity building of the fishers and also by introducing strategies to mitigate fish loss due to disease or escape from channel. Nevertheless, doubling the income and providing alternative livelihood to the poor fishers were the prime aim of the project.

Objectives:

- To develop wetland fisheries through institutionalizing stakeholders’ participatory fisheries management model in a sustainable manner
- To disseminate in situ fish seed rearing and fisheries enhancement techniques (stocking enhancement, enclosure cultures) for tapping fish production potential of wetlands
- To empower communities and stakeholders through improved livelihood opportunity and capacity building

- To refine site specific fisheries enhancement technology for the development of wetland fisheries

Achievement:

NFDB with the technical support from ICAR-CIFRI arranged awareness program on “Bihar ke Chaura aur maun me matsyiki prabhandhan” for fishers of Kothia Maun. Also One-day workshop cum training programs were arranged and 100 fishers were trained in scientific fisheries management. Capacity building of the fishers helped them in building confidence for Wetland fisheries in scientific approach.



With the financial assistance of NFDB and technical guidance from CIFRI, the beneficiaries successfully installed 6 nos. of CIFRI GI cages for table size fish production of Pangasius and Exotic carps and also for rearing fingerlings of IMC. Also constructed 4 rearing ponds of 0.5 Ha each in the periphery of the wetland for fry to fingerling production. This way of culture practice helped them to gain high survival rate of fish fry prior stocking in the wetland. Furthermore, CIFRI-HDPE Pen (area covered 1.5 Ha) were successfully installed in the marginal area of Kothia Maun for production of advanced fingerlings.



The fishers followed scientific practices while stocking the seeds and routine monitoring of the growth parameters. Seed production in Pen found to be very useful technology in the Wetland. Stocking density in the was maintained at 25,000/Ha. IMC, Grass carp, Improved verity Amur Carp gave god results. Also Cage culture found to be one of the best suited practice for fingerling production before releasing into the Wetland. The productive volume of the cage for table size fish was 87.5 m³ with an estimated capacity of 4 MT/ cage whereas the fingerling production cage was of 25 m³ with a production capacity of 2,500-4,000 fingerlings of 100 mm size. Stocking rate of fry in Rearing pond was maintained at 30,000/Ha. All the 4 ponds were stocked with IMC, Grass carp, Amur carp and cultured for a period of 5-7 months.

A successful harvest was done by the fishers for a cumulative fish catch of 2.9 MT. Bumper catch of wild and indigenous fishes was also recorded during 2019-20 i.e. 2.8 MT. The Wetland development with scientific approach has doubled the production of Kothia Maun (from earlier production of 1.4 MT to an existing production of 2.9 MT).



Other than Cage, pen and rearing facility, Fishers were provided with Water screen net (1000 ft x 25 ft) at the river side to corroborate the Kothia Maun fisheries. Also supplied 3000 kg of “CIFRI Cage Grow” feed 4700 kg of Cage grow and commercial feed, 30 monofilament gill net and 1 fiber boat to make daily day activities easier.



A mechanism has been initiated among the Fishermen Co-operative Society members of keeping 10% of the income from the catch in the Society account as seed money to fulfill the stocking activities after completion of the project to make the Kothia Maun Wetland fisheries a self-sustainable one.
