

Progress report – 2022-23

1. Research

Completed projects/Ongoing Projects/Projects Initiated/Externally Funded Research Projects

- (a) Title of the project: **Range wide estimation of river Dolphin**
- (b) Funding Source: **CAMPA-MoEFCC**
- (c) Investigators: **Prof. Qamar Qureshi, Dr. Vishnupriya Kolipakam**

- (d) Date of initiation: **November, 2021**
- (e) Date of completion: **Ongoing**
- (f) Objectives:
 - 1. **Range-wide estimation of River dolphin population in its ranges**
 - 2. **Estimation of the associated fauna in the river dolphin ranges**
 - 3. **Assessment of Water quality and pollution in the river dolphin habitat**
- (g) Progress during the year:
 - 1. Preparation and publication of standardized multilingual field guide on “Monitoring Ganges and Indus River dolphin, Associated aquatic fauna and habitat”



Image 1: Inauguration of Monitoring protocol on the occasion of MOEF&CC's 'Iconic Week' of Azadi ka Amrit Mahotsav & 'Wildlife Week' celebrations, Environment Minister Shri O- Yadav and Environment Minister for states Shri Ashwini Kumar Choubey ji launched the field guide for the “Monitoring Ganges And Indus River Dolphins, Associated Aquatic Fauna And Habitat”



Image 2: Cover Page of Field guides in different Language

2. Range-wide River dolphin estimation was carried out in 8 states of River dolphin ranges namely Uttar Pradesh, Bihar, Jharkhand, Madhya Pradesh, Rajasthan, Assam and West Bengal and for Indus River dolphin in Punjab
3. Surveys were carried out in the following tributaries:
 - a. Assam-Kulsi and Subansri river
 - b. West Bengal – Rupnarayan river
 - c. Rajasthan, Madhya Pradesh and Uttar Pradesh, -Chambal River
 - d. Punjab-Beas River (Tributary of Indus River)
4. Associated Fauna survey for the bird species of concern, gharial, muggers, otter, turtle in the 8 states main channels and the tributaries of Brahmaputra and Hooghly was carried out
5. Both on field and online training and workshops were carried out for the state forest staffs, partner NGOs and institutions to participate in the range wide estimation exercise.



Image 3: TOT in Punjab



Image 4: TOT in Bijnor (Uttar Pradesh)



Image 5: TOT in Kanpur (Uttar Pradesh)



Image 6: TOT in Buxar (Bihar)



Image 7: TOT in Patna (Bihar)



Image 8: TOT in Sahibganj (Jharkhand)



Image 9: TOT in Farakka (West Bengal)



Image 10: TOT in Kolkata (West Bengal)



Image 11: TOT in Assam

6. Plankton samples were collected during range wide exercise and the analysis is on-going.
 7. e-DNA samples were collected during range wide exercise and the analysis is ongoing
 8. Habitat data collection along with the water quality assessment was carried out in all the 8 states
 9. Acoustic data collection using A-Tags and F-PODs were carried out along with the dolphin abundance estimation for correcting for the unavailability bias
 10. Second phase dolphin survey in the tributaries of Ganga and Indian Sundarbans has started. So far ~2750 km is complete.
- (h) Outputs and Outcomes:
- A total of ~3629 km of survey was carried out in the 8 states for estimating the population of Ganges River dolphin and Indus River dolphins in India
 - The estimation of other associated biodiversity was also carried out
 - A total of ~355 people were trained for the Ganges River dolphin estimation exercise, equipment handling and associated fauna estimation.
- (i) Milestone:
- First time a pan India survey was carried out for estimating the Ganges and Indus river dolphin population in its current distribution range in India

Major achievements:

1. Completed training of ~300 forest department personnel of Uttar Pradesh, Bihar, Jharkhand, West Bengal, Madhya Pradesh, Rajasthan, Punjab and Assam through physical and online workshops
2. Field guides released in local languages of Hindi, Assamese, Bengali, Punjabi and English for ease of conducting surveys
3. Survey undertaken in ~3600km of Ganga (from Bijnore to Ganga sagar including tributary Chambal in Rajasthan- Madhya Pradesh and Uttar Pradesh), and Brahmaputra (including tributaries Subansiri and Kulsi). In Beas river, 101km of the river was surveyed.

Work to be done:

1. Tributary surveys is ongoing. So far ~2750km is complete.
2. Mapping of threats
3. National level workshop for dolphin conservation. This work will be completed by September 2023.