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Sub-committees/working group name: SM

**Updates on progress made on the recommendations of the IWC Task Team Report on
South Asian River Dolphins (May 2020 - April 2021**

South Asian River Dolphin Task Team



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Updates on progress made on the recommendations of the IWC Task Team Report on South Asian River Dolphins (May 2020 - April 2021)

Primary paper submitted to the International Whaling Commission Scientific Meeting 68C, 27 April-14 May 2021, by the IWC task team on South Asian River Dolphins.

Summary

In 2018-19, a task team on South Asian River Dolphins of the genus *Platanista* was formed with the objective “to coordinate research and conservation efforts for South Asian river dolphins across all range countries”. The first meeting of the task team took place in Kuala Lumpur, Malaysia, in August 2019, and their report was approved by the IWC Sc. 68B in May 2020 (conducted virtually). The report made ten priority recommendations towards addressing the major knowledge gaps that affected science and conservation objectives for these endangered species.

Upon the recommendations made during the IWC Sc. 68B, the task team was expanded to include a significant number of new members, taking the strength of the team to about 22. The members included scientists and conservationists from the four range countries: India, Pakistan, Bangladesh, and Nepal. However, throughout 2020, due to the COVID-19 pandemic and related restrictions, it was not possible to conduct a meeting of the task team. There were some online interactions between task team members, but unfortunately, it was not possible to sustain communication, primarily due to “non-response” from most members for extended periods of time.

This primary paper summarizes the progress made on the recommendations of the task team as part of the inter-sessional work conducted in the aforementioned period. The progress updates have been compiled from inputs from some task team members to the convenors, and also includes information compiled by the convenors on publications relevant to the enlisted recommendations.

Lately, conservation initiatives focusing on Ganges and Indus dolphins, which include WWF-International’s Global River Dolphin Strategy, the Convention on Migratory Species (CMS)’s

development of strategic proposals in 2020, the IUCN's Integrated Conservation Planning for Cetaceans (ICPC), and national conservation action plans by the governments of range countries, have been going on in parallel from 2019-2020 onwards. With the emergence of these initiatives, and the observation of a very low level of participation on part of this task team's members, we suggest that the task team consider concluding its current work. The IWC task team has completed work on many of its recommendations, and many of its members are actively engaged in the other initiatives as well. At the same time, the IWC will need to remain vigilant to gaps in the goals of the on-going work in case of future need. This could help to ensure that IWC remain aware of all efforts being undertaken to conserve these species.

Progress on Recommendations

1. By 2022, all range states identify key sections of national habitat that should be surveyed every five years, so that population trends can be monitored. Methodology should be replicated in each identified habitat but need not be standardised throughout the range, as different habitats require different methodological adaptations.

Progress: No specific progress updates were reported on this recommendation.

2. This recommendation is targeted at the following:

Pakistan: WWF Pakistan, Punjab Wildlife Department, Sindh Wildlife Department and KPK Wildlife Department – co-ordinated through WWF Pakistan.

Nepal: Department of National Parks and Wildlife Conservation, Department of Forest and Soil Conservation, WWF Nepal, Institute of Forestry Pokhara and Hetauda Campus, University of Tribhuvan (co-ordinated by Shambhu Paudel and Usha Thakuri).

Bangladesh: Forestry Department and WCS

India: already a recommendation in India's Conservation Action Plan for Ganges dolphins and Species Recovery Program, and co-ordinated through State Forest Departments, who will identify teams best suited for river stretch-specific surveys (based on experience and available expertise).

Progress

- 1. The Government of India announced a “Project Dolphin” for the conservation of freshwater and marine dolphins. The project is currently in the planning stage.**
- 2. The Government of Nepal’s Department of National Parks and Wildlife Conservation (DNPWC) is currently compiling a Conservation Action Plan for Ganges river dolphins in Nepal’s rivers.**
- 3. In Bangladesh and Pakistan, efforts towards the above have also continued.**
3. All existing survey methods in use for population estimation be reviewed, and a decision system prepared to guide monitoring agencies and conservationists to identify and implement statistically robust and optimal survey methods based on river conditions and survey resources available with them.

Progress: No specific progress updates were reported on this recommendation.

4. Starting from 2020, surveys to establish population size are initiated at the earliest in the Padma, Jamuna, Meghna main stems and tributary networks (excluding the Bangladesh Sundarbans), Bangladesh and the Budhi Gandak, Baghmata, Rapti and Mahananda, India.

Progress

- 1. Field teams of the Wildlife Institute of India conducted surveys along the Budhi Gandak and Baghmata rivers in 2019. People interviewed along these rivers reported the occurrence of few Ganges river dolphins mainly in the monsoon flood season.**
- 2. In Bangladesh, efforts are currently underway to survey the stretches of the Padma, Jamuna, Meghna main stems and tributary networks.**
5. The current review of the taxonomy of *Platanista* is completed and published.

Progress

1. Braulik et al. (2021) recently published a detailed taxonomic paper on *Platanista* in the journal *Marine Mammal Science*. They provide strong and clinching evidence to split the Ganges and Indus dolphins as separate species. Based on 20 years of data collection from diverse field and museum sources, the paper compiles information on skeletal and external morphology, growth patterns, sexual dimorphism, and colouration of Indus and Ganges dolphins that supports their proposed reclassification as distinct species. The paper also includes formal re-descriptions of the two new species. The Society for Marine Mammalogy will now be reviewing the paper and considering the validation of both taxa as two separate species, *Platanista gangetica* and *Platanista minor* (Ganges and Indus dolphins).

Reference

Braulik, GT, I. Archer, F, Khan, U, Imran, M., Sinha, R.K., Jefferson, T., Donovan, C., & Graves, J.A. (2021). Taxonomic revision of the South Asian River dolphins (*Platanista*): Indus and Ganges River dolphins are separate species. *Marine Mammal Science*. <https://doi.org/10.1111/mms.12801>

6. As a priority, studies should be conducted to fully understand movements of dolphins across barrages in all countries and quantify the extent of population connectivity and impacts on dolphin populations in fragmented riverine habitats.

Progress: No specific progress updates were reported on this recommendation. There have been some recent studies from Nepal (Paudel et al. 2020a, b) that may contribute useful hydrological information to future studies that specifically target the above recommendation.

References

Paudel, S., Koprowski, J.L., Thakuri, U. et al. (2020a) Ecological responses to flow variation inform river dolphin conservation. *Sci Rep* 10, 22348.

Paudel, S., Koprowski, J.L. & Cove, M.V. (2020b) Seasonal flow dynamics exacerbate overlap between artisanal fisheries and imperiled Ganges River dolphins. *Sci*

Rep 10, 18798.

7. Pingers should be assessed as an effective tool to minimise bycatch and to reduce the risk of dolphins stranding in canals.

Progress

1. **The Wildlife Institute of India has been conducting field-based experiments and monitoring to test the efficacy of pingers in deterring Ganges river dolphins from fishing nets, in the Brahmaputra River.**

8. A feasibility study should be conducted to assess areas and methods to translocate Indus River dolphins (WWF-Pakistan) and to adapt existing marine mammal translocation initiatives specifically for river dolphins (co-ordinated by SMM and IUCN).

Progress

1. **Braulik et al. (2020) reviewed prospects for ex situ conservation and translocation of Indus and Ganges river dolphins in a 2018 IUCN workshop in Nuremberg, Germany**
2. **In the World Marine Mammal Congress in Barcelona, December 2019, Braulik attended a workshop on conservation translocations, and also discussed the scope to adapt existing translocation approaches for Indus river dolphins.**

Reference

Braulik, G.T., Kelkar, N., Khan, U., Paudel, S., Brownell Jr., R.L., Abel, G. 2020. Indus and Ganges river dolphins (*Platanista gangetica*): ex situ options for conservation. In: B.L. Taylor, G. Abel, P. Miller, F. Gomez, L. von Fersen, D. DeMaster, R.R. Reeves, L. Rojas-Bracho, D. Wang, Y. Hao, F. Cipriano (eds.), Ex situ options for cetacean conservation. Report of the 2018 workshop, Nuremberg, Germany, pp. 79-96. Occasional Paper of the IUCN Species Survival Commission No.66. Gland, Switzerland: IUCN. <https://doi.org/10.2305/IUCN.CH.2020.SSC-OP.66.en>

9. As a priority and with data currently available, assess the level of dolphin bycatch throughout the species' range and evaluate its impact on local populations. From the outcomes of this assessment, provide recommendations for future monitoring and actions to mitigate negative impacts, ranging from technical changes to the revision of fisheries policies.

Progress

1. **Kelkar & Dey (2020) conducted a review of bycatch cases from the four range countries yielded preliminary estimates of likely annual bycatch rates of approx. 5% of the total population (based on currently available data). They found that over two-thirds of river dolphin bycatch cases occurred in fishing net mesh sizes declared “legal” by regional fishery laws. Their perspective highlighted the challenges in implementing fishery laws in the context of bycatch mitigation and reduction. Recommendation 9 was partly addressed by this contribution, in terms of providing an assessment of levels of bycatch throughout the range of Ganges and Indus river dolphins, and legislation gaps in addressing bycatch. These authors recommended an urgent review of minimum mesh size restrictions in existing fishery regulations across riverscapes of the four range countries. An additional recommendation emerging from this study is to develop a glossary of fishing net and gear types, with local names, legal restrictions, and common terms for classification categories. This point was also emphasized in the IWC TT report 2019-2020.**
2. **Kolipakam et al. (2020) estimated, using a combination of molecular genetic tools and interviews with fishers in Assam and West Bengal (India) that Ganges river dolphin oil was still being regularly used and traded by a large number of fishers. They reported that the uptake of alternatives to dolphin oil (e.g. oil from fish scraps) was low and there was a need to not only promote such alternatives, but also increase fishers' awareness about why poaching of river dolphins for oil is illegal. Accordingly, legal sanctions and enforcement was deemed crucial to prevent the continued mortality and salvage or poaching of Ganges river dolphins.**

References

Kelkar, N. & Dey, S. 2020. Mesh mash: legal fishing nets cause most bycatch mortality of endangered South Asian river dolphins. *Biological Conservation*, 252, 1008844.

Kolipakam, V., Singh, S., Ray, S., Prasad, L., Roy, K., Wakid, A., Qureshi, Q., 2020. Evidence for the continued use of river dolphin oil for bait fishing and traditional medicine: implications for conservation. *Heliyon*. 6, e04690.

10. To assess the extent of targeted take and the use of dolphins for oil and as wildmeat, particularly in India and Bangladesh by involving social and ecological scientists – *as part of co-ordinated survey actions listed above.*

Progress

1. The study by Kolipakam et al. (2020), which is described above under recommendation number 9, made a contribution towards assessing the extent of use of dolphins for oil in Assam and West Bengal states of India.
2. Continued efforts in mortality monitoring by Wildlife Conservation Society-Bangladesh, and by researchers working in the Ganga River in Bihar (India), will be helpful towards contributing information on this recommendation. In the Bangladesh Sundarbans, it is likely that targeted killing of Ganges river dolphins has reduced after dedicated efforts to increase conservation awareness among fishing and other riverside communities.