



COVID-19 Lockdown: fish in dinner, Gharials, and conservation

Both mighty humans and Critically Endangered Gharials *Gavialis gangeticus* (Lang et al. 2019) are fighting for fish (food for gharials) in various rivers and streams (such as the Narayani and Rapti) in Chitwan. This issue has been ongoing for many years. In Tirtha Man Maskey's 1989 thesis on Gharial Conservation, he raised the issue of entrapment of gharials in nylon gill nets introduced for fishing (Ballouard et al. 2010; Maskey 1989; Whitaker & Members of the GMTF 2007). Then in 2018, there was a ban issued on cooking of fish in the canteen of National Park and Army camp inside the

park territory (Mandal 2018). There is a report in Nature Khabar about the death of three gharials during COVID-19 lockdown in Chitwan, Nepal. Dead gharials were found in Bine Khola Dovan, Leda Ghat and near Sauraha in Dhungre Khola. All three gharials are thought to have been killed by human activities (Nature Khabar 2020).

Nepal government started the effort to conserve gharials four decades ago. From 1976 AD, the Gharial Conservation Breeding (Rearing) Centre in Chitwan has released 1,465 gharials in various rivers in Chitwan

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(Dhakal 2019). Many gharials die or get lost from the habitat due to lack of food or while in search of fish, as well as being killed from entanglement in gill nets. The gharials are extinct from Myanmar, Pakistan and Bhutan. Nepal, India and Bangladesh house the resident population. Human impact in the region has pushed its habitat to only six percent of its historical range. There is 94% or more decline in population of Gharials with only a few hundred in wild left from thousands in 1940s (Lang et al. 2019).

Diversity and abundance of fish (in gharial habitat) is threatened due to:

1. Mixing in river of polluted water from urban and

industrial centers.

2. Extraction of sand and other earth materials from tributaries of river.

3. Over extraction of fish.

4. Tourism, recreation, and other human activities.

Bed Bahadur Khadka, Assistant Conservation Officer at Chitwan National Park, said to the Kathmandu post that around 100 people living near the park have

fishing license. A huge number of people living along Narayani and Rapti river banks depend on the river for fresh fish. There were deaths of seven gharials in Rapti River and two in Narayani River in the fiscal year 2017–2018 after getting caught in fishing nets. Among the nine gharials dead that year, eight were released from breeding center at Kasara (Puri 2016; Dhakal 2019).

Gharials of small size are usually killed by fishermen when entangled in fishing nets. Adults knotted in fishing nets may get released but are still vulnerable to death resulting from inability to swim or open mouth for food and continue living (Whitaker & Members of the GMTF 2007).



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The lack of quality education materials, inadequate awareness plan from national park, and non-inclusion of the subject on wildlife conservation education in curricular books are challenging conservation efforts.

At one point of time, limited procreation of Gharial was deemed due to lack of adult male Gharials in the vicinity of Chitwan National Park. So to induce natural breeding in the region Chitwan National Park authorities translocated a male Gharial from Babai River in Bardiya into Khoriya of Rapti Dovan in December 2017 (Puri 2017). Currently, there are only three male Gharials in the Rapti and Narayani rivers to keep the hope of wild existence of the creature (Dhakal 2019).

The continuous effort from Chitwan National Park and surrounding community forests had brought the species back from brink of extinction in 1970s. The impact of COVID-19 will obviously change morality of community. There is reduction in pollution and extraction of natural resources.

It is wished the fishes will have huge breeding. Community along river bank will respect the right of Gharials to live by leaving fish for gharial's meal. Wish for the day is that the people competing for fish will smile at Gharial with happy family in river and feel proud of themselves. I wish my grandson will see this lone species under its family Gavialidae.

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