

Dangers of the Indus River Delta of Arabian Sea, Pakistan

Nasir Soomro

Climate change and bad policies are wreaking havoc over Pakistan's Indus delta. The over 3,000-km-long Indus may be a lifeline for countless farming and fishing communities in Pakistan, beginning within the Himalayas and flowing right down to the Arabian Sea, where it forms a 600,000 hectare delta. But this delta is now dying a slow death because the construction of dams for irrigation and power has choked off much of the water supply. The result: its 17 major creeks are drying out and salty water from the ocean is steadily entering the basin. The delta stretches 150 km along the Arabian Sea, forming a key part of Pakistan's coastline. It's mostly located within the Badin and Thatta districts within the Sindh province, and is home to 97% of the country's mangrove forests. But the drying creeks and rising salinity are setting these forests up for a serious ecological disaster. The dwindling river flow had already led to the loss of about 86% of mangrove cover between 1966 and 2003, consistent with data from the Coastal Environmental Management Plan for Pakistan. These forests form the backbone of the area's delicate ecosystem, providing a tract and food for various species of fish and shrimps that are a key part of Pakistan's fisheries exports. Over the years, the rising salinity and disappearing forests have drastically reduced the quantity of fish and shrimp stocks available. Another species in danger is that the Indus dolphin whose habitat has been steadily declining since the 1930s when the development of dams first began. With each new dam, small groups of dolphins became trapped in parts of the river, unable to swim upstream or downstream. Many were left to die, leading to an over 50% decline within the total population from 1944. Consistent with estimates from the planet Wildlife Fund, only 1,100 remain today. But for the Pakistani government, building more dams seems to be

the sole way forward. The country is within the midst of a worsening water crisis, the results of the mixture of a growing population, global climate change and poor governance. Last year, researchers estimated the country had just 30 days worth of stored water, making it one of the 36 most water-stressed countries within the world. In response, the country's prime minister Nawaz Sharif last year approved the development of two massive dams on the Indus river: the 4,500-megawatt Diamer-Bhasha Dam within the Gilgit-Baltistan area within the north and therefore the 2,160 megawatt Dasu Hydropower Project within the Khyber Pakhtunkhwa province within the northwest. Over 1.2 million people were estimated to be living round the Indus river's mangrove forests in 2002, and lots of of them still depend entirely on fishing or farming for his or her livelihood. But with fishing catches on a downward spiral and therefore the increasing salinity of the land making farming nearly impossible, the delta's communities face an enormous crisis. The intrusion Seawater has been a challenging issue within the Indus Estuary (IRE) for over the course of your time. Hydrological and meteorological observations were examined through eclectic literature to cause the causes of seawater intrusion within the waterbody, because the matter of fact, seawater intrusion and coastal erosion are causing deteriorating effects on ecosystem besides causing damage to the environment. The Indus Delta is under great vulnerability. The Indus deltaic region isn't only threatened by continuing untoward activities in upstream but also by the near sea within the south, thanks to the impacts of regional weather. Observational results suggest that the seawater intrusion is inching the maximum amount as 84 km upstream within the IRE during the season. Extensive field investigations and a high-resolution

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coastal ocean model are urgently needed for future study. Biography Nasir Soomro is Geologist from Pakistan; he's working with the Department of Energy, at the govt of Sindh, Pakistan. He has eclectic interests within the field of natural science, arts and literature. he's the author of the book, 'Peaks and Perils of Life' (English Poetry). But for the communities who survive the land round the river and therefore the delta, these massive dams will make things worse. "It is clear that the (Diamer-Bhasha) dam will sink everything—from our properties to our social and cultural values. we've given up all of those for the sake of this dam," Attaullah Khan, the top of the 'Affectees Committee of Diamer-Basha Dam', told The Third Pole, an NGO focused on Asia's water crisis, in January. The sector of natural science, arts and literature. He's the author of the book, 'Peaks and Perils of Life' (English Poetry).

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