**Predicting Long- and Short-Term Climate-Related Impacts in the Bengal Delta, a Robust Natural System Limited by Societal Constraints**

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Most predictive studies of climate-related change on river deltas focus on the next century of increased relative sea-level rise and tropical storm activity as the primary threats for coastal flooding and land loss. Often overlooked in the literature is the coupling of these longer term predictions (century scale) with short-term (i.e. decadal) effects of upstream landscape modifications by humans that may exacerbate climate-related effects at the coast. In spite of a large sediment discharge to the modern coast and lower delta plain (~700 MT/y), the densely populated delta nation of Bangladesh is considered particularly susceptible to the 1m rise in sea-level predicted for the next century. This susceptibility is due in part to a low elevation (avg. ~3m above MSL), frequent storm surges and high seasonal monsoon wave set-up. However, early Holocene sedimentary deposits demonstrate that a strengthened Asian monsoon enhanced fluvial sediment fluxes to the coast such that the Bengal delta remained stable during very rapid sea-level rise. These seemingly contradictory patterns from the modern and Holocene delta challenge effective assessment of this system's ability to respond to environmental change. Further complicating matters are short-term strategies in Bangladesh and India to mitigate flooding, including artificial leveeing of the rivers and the diking of coastal lowlands, both of which would limit sedimentation and diminish relative elevation of the delta surface. River damming to address demands for hydroelectric power and water resources may also significantly reduce the amount of sediments delivered to the Bangladesh coast. We present field-based observations of sediment dispersal in the modern Bengal delta that demonstrate how the system could remain relatively stable over the next century of climate and sea-level changes. However, this potentially acceptable outcome becomes increasingly unlikely if human interferences are considered. Ultimately, it may be the impacts of such direct human-modification to the Bengal delta and river systems that outpace - in time and severity - those resulting from climate and sea-level changes alone.