**Rising sea level: Threat to coastal Life (Part 2)**

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The effects of the risks coming about because of dynamic environmental change are evident up and down the drift. The antagonistic impact of ocean level ascent on the Pakistan is even more evident as geographically, it is a salt marsh zone in Indus Delta. The low-lying regions along the Baluchistan drift may likewise apply a critical impact. The possible impact of sea level rise would be on the coastal industry such as power plants, ports & harbors, real estate & housing, tourism, coastal fishing/agriculture etc. Even a modest rise in the sea level will threaten storm barriers and increase salinity of fresh water reservoirs along the coastal belt. The erosion processes (wind and wave) are severe along the Makran coast particularly on coastal cliffs composed of soft rocks. At places, the erosion is very fast and the shoreline between the promontories of hard rocks is receding at a very high rate.

Lately, the rate of disintegration seems to have expanded at a few focuses along the drift. The islands at the approaches of the creeks have been severely eroded. The creeks, which are near the present outfall of the Indus River at the concave bulge of the delta, are facing erosion due to natural hydraulic forces. The high-energy wave actions are strong during South-West monsoon period. The soil cover in the deltaic area is drift type, made up of material transported by rivers, mostly mudflats and marshy areas and can easily be encroached upon by sea. Creek region shows recession towards inland.

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The Sea Level Rise (SLR) will cause significant flooding impacts in the coastal zone particularly in the low-lying Deltaic regions. Low-lying coastal areas would become more vulnerable to flooding for four reasons: (1) A higher sea level provides a higher base for storm surges to build upon; (2) Beach erosion would leave coastal properties highly vulnerable to storm waves (3) Higher water levels would increase flooding due to rainstorms by reducing coastal drainage. A rise in sea level would raise the water table. Floods along the Sindh coast continue to be a regular event although damage has always been variable. Frequent flash flooding because of torrential rains in Baluchistan, particularly Makran division during the Southwest monsoon period causes heavy losses to both human and their property. Hundreds of persons including women and children in villages swept away and thousands rendered homeless by flash flood in recent years. A large part of lower Indus deltaic area would be at risk from frequent flooding by the end of the next century according to these scenarios, even if storms did not become more intense or frequent. Although the marshy area Rann of Kutch can adapt to moderate rates of sea level rise, but these areas may be unable to keep up with the accelerated sea rise rates. If the number of coastal storms increased, the impacts of flooding would certainly aggravate. The coastal Sindh is prone to storm surges associated with the severe cyclonic storms generated in the adjacent Arabian Sea. A significant number of the cyclonic storms produced in the Arabian Sea move towards North and Northeast and some of them hit Pakistan Coast, resulting in huge losses to life and property in the coastal areas. Indus Deltaic Creeks are critically located on the path of cyclones of the Arabian Sea. The winds and low pressure creates storm surges which when combined with high tides, can create destruction in the coastal areas.

The effects of SLR do not stop at the prompt drift. As ocean level ascents, there is an expanded danger that saltwater will enter upstream and inland. This impact would be especially apparent amid the dry season conditions that are progressively likely under environmental change. The ocean level ascent would empower saltwater to entrance more distant inland and upstream in to the waterways, wetlands, and aquifers, which would be destructive to the amphibian greenery, and would undermine human employments of water. Expanded saltiness has just been referred to in the greater part of the seaside territories uncommonly in bring down deltaic plain district. The water conditions will become brackish and would causing great economical and health problems in the coastal region.

Mangrove Backwoods Mangrove cover in the Pakistan have diminished and incapacitating the survival of the normal assets and in this way the business of an expansive number of anglers. Aimless misuse and disintegration of the seaside assets because of changes in the natural conditions, for example, hyper-saltiness, contamination, soil disintegration and digging and conceivable effect of ocean level ascent and environmental change and so on. Sediment and mud stores lift arrive and the mangrove plants have restricted access to tidal water, the plant development consequently ends up impeded and the mangrove backwoods break down. The mangrove woods of the Indus Delta are under worry because of changing levels of water and dregs release from the Indus and the expanding impact of marine hydrological forms.

Karachi is situated beside the Indus River Delta, where the Indus streams into the Arabian Sea. This delta is presently nearly at an indistinguishable level from the Arabian Sea, which is causing seawater intrusion and making devastation to the complex biological community of mangroves in the locale. Mangrove backwoods cover has diminished because of rising ocean levels, as well as because of land encroachment and badly managed population settlement plans. One such illustration is the construction of the Port Qasim Power Project along the coastline of the Arabian Sea resulting in a large number of locals, who once lived in this district, having been dislodged because of changes in the Indus delta’s biological community caused both by such man-made projects as well as atmosphere interventions (To be concluded).

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