

PROTECTING MANGROVES

By

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Whilst on a recent trip to the Port Qasim channel, I happened to recall that according to the data gathered by the Government of Pakistan, between 1999-2021, the vulnerable mangrove area along Pakistan's 1,050-kilometer coastline had increased from 46,000 hectares (over a 113,000 acres) to over 200,000 hectares (over 494,000 acres). The term mangrove is said to have come to English from the Portuguese *mangue* or the Spanish *mangle*.

The International Day for the Conservation of the Mangrove Ecosystem is celebrated on 26th July annually and the World Wide Fund for Nature (WWF) Pakistan has observed that Pakistan is the only country where mangrove cover has increased dramatically over the last two decades. This is indeed one of many success stories of Pakistan that deserve to be highlighted.

Approximately 110 species of mangroves are found around the world. They occur worldwide in the tropics, subtropics, and even some temperate coastal areas, mainly between latitudes 30°N and 30°S, with the greatest mangrove area within 5° of the equator. The preferred environment for mangroves includes saline/brackish water usually near the edge of the river or swamp water and low-oxygen soil. Only four species of mangroves found in Pakistan, of which 90% of all the mangroves are composed of the *Avicennia marina* species. These four types are:

1. *Avicennia marina* – Grey Mangrove – White Mangrove
2. *Rhizophora macronata* – Looe Mangrove – Red Mangrove

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3. *Ceriops tagal* – Spurred Mangrove
4. *Aegiceras corniculatum* – Black Mangrove

Mangroves are significantly important for marine ecosystems and are considered the first line of defense against cyclones, strong surges, tsunamis, and other natural calamities.

Over the past several decades, the coastal area of Sindh, particularly the port city of Karachi, has been reeling from a relentless process of morphological changes mainly due to anthropogenic activities including industrial pollution, soil erosion, deforestation, rapid industrialization, urbanization, and land degradation in addition to natural processes.

God has gifted us mangroves at Port Qasim and I can somewhat benchmark what I saw at the Sundarbans forest at Mangla Bangladesh, where some local inhabitant animals were spotted whereas we mostly have sea birds inhabiting our mangroves. Port Qasim lies in or Indus river delta, thus brackish water helps in mangrove growth and sustainability. Pakistan did make a record of planting mangroves near Ketibandar but their growth has been very slow as the area lacks brackish water due to low discharge at the Indus Delta.

I admire an environmentalist lady journalist on Geo TV and architect cum environmentalist who had documented how to protect and recognize mangroves by airing concerns on electronic media. There is also a sizable mangrove forest at Bundal Island and some on way to Sandspit from Keamari.

Port Qasim is blessed by God to have the best mangrove forest in Pakistan. When we speak of the Blue Economy, we may also consider building resorts for tourists at Port Qasim Mangrove Forest in a controlled manner so as not to harm the environment. Yet, also make

the area accessible and available to the public who can be educated about the importance of mangroves. Thus making them stakeholders in the efforts towards protecting these forests.

Port Qasim gets silting to keep water brackish thus it is imperative to dredge about 5 million cubic meters annually to maintain the depth of the channel at 12.5 meters. The soil excavated from such dredging could be used to rejuvenate those areas of the forest where erosion has occurred the most. It is well known that Khalifa Point was the most suitable site for a second port but for reasons best known to the government of the time, Port Qasim was selected as Pakistan's second port. This was a decision that is now proven to have been a bad one.

I recently attended a meeting of the Senate Standing Committee on Maritime Affairs where the topic of discussion was mainly business related. I would suggest that the committees and forums at national level also regularly take up matters of environmental significance that have an impact on our environmental integrity. During the said meeting of the Senate Standing Committee on Maritime Affairs, I suggested that PNSC may embark upon feeder service by acquiring four to five hundred TEU ships that may call at Port Qasim and also cabotage to Karachi, thus reducing road and terminal congestion and reducing emissions causing pollution and availing logistic benefit cutting the cost.

On the business side of things, it may not be denied that Pakistan's logistic cost is the highest in the region while we continue to fail to use available inland waterways and sea mode being the cheapest mode of transportation. This cost is not limited to monetary costs but also includes environmental costs. We use rickety old trucks which are road diggers and cause pollution. This was conveyed to the Senate Standing Committee and the Chairperson was very gracious to listen to the recommendation.

It is hoped that in addition to planting more mangroves, we may also consider other means by which to contribute towards arresting the perineal degradation of our environment. If not done so, then we remain guilty of leaving Pakistan susceptible to the adverse effects of global warming. I strongly recommend that Pakistan increase the use of cargo transportation by sea instead of by land wherever possible. PNSC Feeder container services will give a kickstart to learning box trade by PNSC which is vital to our economy.