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ENVIRONMENT-PAKISTAN: Death of a Delta

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KHARO CHAAN, Sindh, Feb 28 (IPS) - Sitting on a rickety bench outside the dispensary of Dr. Abdul Jalil at Deh Bublo, Issa Mallah, a centenarian, watches the world go by. He says he comes to this 'city' everyday to buy his groceries.

Jalil is not a doctor but a dispenser. And Deh Bublo does not even remotely fit the definition of a city - though it once was a flourishing town.

To Mallah and the other 5,000 or so inhabitants of the scattered 25-30 villages on this 25 sq km island of Kharo Chhan (salt water swamps in the Sindhi language), Deh Bublo - which has no electricity and depends on a muddy pond for drinking water - is the nearest thing to a city. It does boast of a primary school, a mosque and Jalil's clinic.

The Indus delta, on which Kharo Chhan stands, once occupied an area of about 600,000 hectares. It consisted of creeks, forests and mudflats. The active delta, say experts, is now just 10 percent of the original area.

For the last 25 years, Jalil, who has studied till grade 12, has been practicing medicine at the government-run clinic. But, his own family has moved to Karachi for a "better, cleaner" lifestyle.

Jalil's practice is good thanks to the highly contaminated water the villagers buy from the vendors who tank up from the muddy swamp. "I tell them to boil the water, but fuel is expensive and these people cannot afford it," he says. "Most of the children (some 800 are under-five) suffer from diarrhoea, cough and fever," Jalil says.

Kharo Chhan, stands at a distance of 80 km from Gharo town on the National Highway, town, and 150 km from the port city of Karachi. It is located in the Mutni Creek of Thatta district.

A ferryboat trip costing Rs 25 (31 US cents) is the only way to get to the island. The ride lasts about 15 minutes but the boat will not leave the rickety jetty until it is full and that may take well over an hour. Passengers may have for company chickens, goats, buffaloes, bags of grocery and the odd bicycle.

There are waiting areas near the jetty in the form of chai khanas (tea stalls) where endless cups of sweetened milky tea may be had, even on credit, since people here are related to or are known to each other.

Mallah is old enough to remember a time when Deh Bublo was a major town, if not a city. Pointing to the market place with a stick he said: "There was a post office, a proper school, a customs and revenue office, and a police station."

"Muslims, Sikhs and the Hindus lived here amicably till the Muslims shouted the slogan of Allah-o-Akbar (God is great), in 1947 [when India and Pakistan were partitioned on religious grounds] and the non-Muslims fled in a hurry, leaving all their property with us to pillage and usurp, "Mallah reminisced.

"The barren land that you just came through to get here was once fertile. It was lush green. There were mango orchards, banana plantations, red rice, olive trees, coconut trees etc. We grew maize, barley and various lentils. It rained during the monsoons and we had ample fresh and clean water," Mallah said.

The inhabitants of the Indus Delta who were predominantly farmers and herders have had to take to fishing in order to survive. "Its only when our land became infertile that we turned to fishing," says 56-year-old Abdullah Baloch.

Over the years Baloch lost 250 acres of cultivable land to the sea, some 50 buffaloes and around 80 goats. "Altogether my family lost 3,500 acres. We were once considered big landlords in this place with farmers working for us. We even paid tax to the government. Now we don't even have even an acre to plough," he says wistfully.

According to the revenue department, 86 percent of the 235,485 acres of fertile land in Kharo Chhan has been swallowed by the sea. The population, over the past decade, has declined from 15,000 to 5,000.

Migratory birds like the red cranes, swans and geese would come in droves. Now, even the birds peculiar to this part have disappeared, said Shafi Mohammad Murghar, head of Delta Development Organisation, a local non-governmental organisation.

According to Murghar, the degradation of mangrove forests, loss of fresh water supply and the change in climatic pattern have not only disturbed the nesting and breeding patterns of birds but have also resulted in the birds changing their routes completely.

Mallah believes that the land has been ravaged by seawater intrusion - something that environmentalists have been crying hoarse about for the past three decades.

As the sweet waters of the mighty Indus get increasingly diverted by dams and other projects upstream, there just is not enough left to battle the seawater pushing its way inwards. "And this ingress of brackish seawater," says Mallah "is the reason why swathes of fertile tract have become barren."

The climate change phenomenon, say experts, is another challenge for the delta's delicate ecosystem. The United Nations International Panel on Climate Change (IPCC) has warned that global temperatures will rise by 1.4 to 5.8 degrees centigrade by the end of this century, causing glaciers to melt and sea levels to rise. Since 1850, the sea level has risen by 165 mm.

Many trace the woes of the deltaic community to the period between 1923 and 1932

when the first barrage across the Indus was built at Sukkur.

"When the British engineers came here, we garlanded them. We thought they were channeling the water for our land. But, look at what happened. All the water has been diverted upstream," said Mallah.

More than Sukkur, it was the construction of the Kotri barrage (1955) further downstream, and then the Guddu barrage (1962) closer to the sea, that dealt a deadly blow to the delta. Sea ingress began affecting the underground water in the delta, turning it brackish and unfit for drinking.

Today, with 19 barrages and 12 inter-river link canals handling over 106 million acre feet (MAF) of surface water, the Indus Basin irrigation system is one of the largest irrigated networks in world. But the price of this is being paid by people who live on the delta.

Ironically, while the uneducated and poverty-ridden people of the delta know what is needed to breathe life back into the delta, policy makers appear clueless and consider fresh water flowing into the sea a waste.

"It is the very mixing of the sweet and the salt water that provides sustenance for the delta," says Baloch.

"Do you know the palla fish (only found in Sindh in the Indus) develops its delicate flavour because, although a marine species, it swims into the mouth of the river where sea and river water mix?" "Now palla is a rarity and, even if we catch any, the taste is just not the same," Baloch adds.

Fresh river water flowing into the sea brings many benefits. It maintains salinity in the estuaries, allowing aquatic life to thrive and maintain a balanced eco-system. And most importantly mangroves need both river and sea water to thrive.

According to the ministry of environment, of the mangrove forests of Pakistan, located at four geographical locations along the 1,046 km-long coastline, the Indus delta accounted for 98 percent.

The Sindh mangroves once extended over 26,000 sq km. A combination of natural causes and human activity depleted this valuable protective cover to just 2,600 sq km, leaving the deltaic people here vulnerable to cyclones and tsunamis.

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