Expedition 2: Barrages and the Fragmentation of the River Indus

Pak Khawateen Painting Club

A group of Pakistani women artists called the Pak Khawateen Painting Club ventured to the frontiers of the Indus River for *plein-air* paintings of large-scale infrastructure projects and their effects.

The Pak Khawateen Painting Club (translated from Urdu to English as 'Pure Women's Painting Club') is a collective that was formed in 2020. Its work focuses on gender, environment and geopolitics as the four members gain access to sites that are heavily guarded by the state, under the guise of a group of benign, bourgeois, female painters.

In this photo essay, the group documents its journey to hydrological structures built and imagined by powerful men to generate energy and abundance for the nation, while they subvert the roles prescribed for them as women.

One fine January morning, the five of us[1] from the Pak Khawateen Painting Club set forth on our mission to chart the journey of the waters of the Indus. We were draped in uniforms inspired by Pierre Cardin's design for PIA air hostesses in the 1960s.

Our duty was to unearth, experience and document the path of the waters that had given rise to the glory of our nation. A journey that had begun from the waters of the Great River as it trickled past the snow-capped Himalayan Mountains has now led us to the lush fertile plains of Punjab and towards our final destination, Sindh.

In 1932, the British administration in pre-partition India constructed the Sukkur Barrage (or Lloyd Barrage) spanning the width of the Indus, with the aim to develop the agricultural potential of the barren lands of Sindh. This pattern of development continued after the partition of the region.

The great Indus River was considered a bearer of prosperity and growth, the taming of which would herald a new era of development for the nation. The creation of this structure had

the intended impact: the irrigated agricultural land of Sindh was 792,000 ha in 1885-1890 and by 1970-71, this had increased to 5,604,00 ha.[2] The local economy was strengthened and the country's political and economic institutions benefited from all this construction. However, prosperity comes with a price.

This was evident as we made our way to the noble Lloyd Barrage with its magnificent view of the Indus. The river's sprawling beauty belies the delicate balance it has long maintained for the spiritual and physical presence of all living beings in and around it, and which has now been upset. The fabled *Palla* which once lived in these waters can no longer visit the shrine of her beloved saint.[3] The fate of the endangered local blind dolphin has also been perilous, with its path of yore – from the snowy peaks of the North to the mangroves of the South – now becoming a small stretch in the safe confines of Sukkur.[4] However, what is the plight of a fish before the glory of man? The grandeur of the heroic colonial structure, enormous in size and history, reminded us that the primary function of nature is to serve man after all. What greater delight and joy could there be for any creature but to sacrifice its needs for God's chief creation? So we pondered over our purpose, as our scenic boat rides acquainted us with the history and culture of the land, found in the islands of Khwaja Khizr and Sadhu Bela, protected from the terrific whimsies of nature by the great desert-hued structure of the barrage.

With the construction of the Kotri Barrage, the flow of fresh water in the Indus River has been reduced further, resulting in the loss of the much-needed sediment carried by the river which sustains the mangroves. Saltwater from the sea encroaches into the lands of the delta, affecting the 1.2 million inhabitants of ethnically diverse agrarian and sea communities, causing the end of livelihoods and consequent mass migration. In 1959, 155.36 BCM of water was released downstream from Kotri Barrage. In 1973, it was 118.77 BCM with 274 MT of sediment. In 2002, just 0.32 BCM water with 1 MT of sediment made its way downstream, with the delta receiving fresh water only in the months of August and September. Once prosperous ports in the district of Thatta now lie barren, mere ghost towns as the young migrate to urban centres and leave the elderly behind to fend for themselves.[5]

As we crossed the last barrage at Kotri and headed towards the delta, the change was visible with greater effect. It presents a curious sight: the waters are a brilliant cerulean, yet there is not a drop of vegetation around. The residents of Keti Bandar, a small village at the edge of the delta, claimed they were once farmers, but their share of the water was cut off with the appearance of the structures that now mediate them. Though the Indus had once emptied in the delta, the might of the glorious barrages is such that they now decide who gets what share. The residents of this village have to walk for two hours just to claim a drop of drinking water.

Looking at the weary ships and boats at rest, some broken and abandoned amidst the saline fields, it was hard to imagine this village was once a thriving and major port. The importance of the Indus was impressed upon us once more. Truly, the great *durya* was the bringer of life and, where her mercy had waned, survival was hard.

The reins of power at the top have kept changing hands but the mind-set that equates development with prosperity continues to thrive. Multiple structures for harnessing the power of the Indus have appeared and the once unabated wild flow of the water has seen a decline as it reaches its final destination of the delta. National growth plans see this decline as positive, since it reduces wastage of fresh water. However, the impact of these interventions is borne by communities and the environment whose needs are not accounted for. With the combined effects of reduced freshwater flows, environmental destruction and unchecked construction activity, the once-thriving mangrove forest in the delta which once spanned 600,000 ha had been reduced to merely 80,000 ha by 2013.[6]

To see how the Indus shaped history is to know the future of the people who can no longer depend upon its waters for their daily survival because they have taken its ecological generosity for granted for too long. We came face to face with these fearsome effects as we ended our journey: the diminution of the mighty kingdom of trees that once stood as fair sentinels guarding the coast of our great nation, the loss of sustenance that left entire lands to die. This is what being bereft of the mercies of the great Indus means.


FLOOD DATA BOARD
IRRIGATION DEPART MENT
TAUNSA BARRAGE
FLOOD LIMITS
DISCHARGE (IN LAC CUSECS)
FLOOD STATUS
1. BELOW 2.50 - NORMAL
2. 2.50 TO 3.75 - LOW
3. 3.75 TO 5.00 - MEDIUM
4. 5.00 TO 6.50 - HIGH
5. 6.50 TO 8.50 - VERY HIGH
6. 8.50 TO 10.00 - EXCEPTIONALLY HIGH
DATE
U/S POND LEVEL
D/S LEVEL
U/S PEAK DISCHARGE
D/S PEAK DISCHARGE
FLOOD STATUS

Notes

1. We were accompanied by a videographer on our journey.
2. Haines, "Building the Empire, Building the Nation: Water, Land, and the Politics of River-Development in Sindh, 1898-1969."
3. Khan, "The Palla, the Shrine, the Catch and the Cook."
4. Sindh Irrigation Department, "Environmental and Social Assessment."
5. Kalhoro et al., "Vulnerability of the Indus River Delta of the North Arabian Sea, Pakistan."
6. International Union for Conservation of Nature, Pakistan Country Office, "Sindh Coastal Community Development Project - Mangroves Raised by Coastal Forest Division Sindh Forest Department, Government of Sindh At Shah Bundar & Keti Bundar."

Haines, Timothy Daniel. Building the Empire, *Building the Nation: Water, Land, and the Politics of River-Development in Sindh, 1898-1969*. Doctoral Thesis, Royal Holloway, University of London, 2011.

International Union for Conservation of Nature, Pakistan Country Office. *Sindh Coastal Community Development Project - Mangroves Raised by Coastal Forest Division Sindh Forest Department, Government of Sindh At Shah Bundar & Keti Bundar: Final Environmental Monitoring Report*. Asian Development Bank, June 30, 2013.

Kalhoro, NA, Zhiguo He, Dongfeng Xu, Faiz Muhammad, L.V. Yafei, Naimatullah Sohoo, and A.H. Bhutto. "Vulnerability of the Indus River Delta of the North Arabian Sea, Pakistan." *GlobalNEST International Journal* 18, September 1, 2016: 599–610.

Khan, M. Hussain. "The Palla, the Shrine, the Catch and the Cook." *Dawn*, September 3, 2015. http://www.dawn.com/news/1204243.

Sindh Irrigation Department. *Sindh Barrages Improvement Project - Sukkur Barrage Rehabilitation and Modernization*. Environmental Assessment. World Bank, January 7, 2018.