

SAVING SINDHU: INDUS ENCLOSURE AND RIVER DEFENSE IN PAKISTAN

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ABSTRACT

Ahsan Kamal: Saving Sindhu: Indus Enclosure and River Defense in Pakistan
(Under the direction of Charles Kurzman)

Why do ideas of river defense take hold in some places along the same river and not others? Ideas of river defense emerged at the turn of the 21st century with a broader awareness that we are living in the Anthropocene era. The rapid construction of dams and irrigation systems over the past two centuries altered human-river relations to support modern lifestyles, with high costs for human and non-human riverine communities worldwide. While environmental and anti-dam groups have raised awareness about the adverse human impact on rivers and challenged powerful state and interstate institutions, it is not clear why and how ideas of defending nature emerged and took hold in some places rather than others. Scholars point to pre-existing sacred traditions, political recognition of indigenous groups, or the spread of secular-scientific environmentalism to explain the phenomenon, but these explanations neither explain variations along the same river nor work for the case of riverine movements in Pakistan. The present study focuses on variations in social movements along the northern, central, and southern Indus River to examine the material and cultural drivers of the politics of river control in Pakistan. The study extends the classical theory of the enclosure of commons to the case of rivers to examine how dams and irrigation systems alter the socio-material flows of rivers, impact state-society relations, and lead to different kinds of cultural claims over rivers by the state and societal actors. The study relies on archival and ethnographic data from three contemporary riverine social movements from Pakistan, two of

which represent positive cases of river defense. The study finds that the deltaic and floodplain communities suffer recurring and cumulative impacts of river infrastructure development and have the most potential for the emergence of ideas of river defense. Activists realize this potential by organizing subaltern groups and centering them in existing ethnic identity-based movements. To do so, activists challenge the state's claims to legitimacy and synthesize scientific evidence with cultural attitudes of river reverence to generate new concepts of territory, sovereignty, and rights that link the rights of humans to the rights of rivers. The strategic and creative work by riverine activists helps imagine alternative futures of human-river relations that privilege the defense of global rivers.

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LIST OF ABBREVIATIONS

ADB	Asian Development Bank
CJL	Chashma-Jhelum Link
CRBC	Chashma Right Bank Canal
CRBIP	Chashma Right Bank Irrigation Project
DBT	Daman Bachao Tarla, A Plea to Save the Daman
GoP	Government of Pakistan
IBIS	Indus Basin Irrigation System
IDF	Indus Development Fund
IDP	Indus Development Project
IRN	International Rivers Network
IWT	Indus Water Treaty of 1960
IFI	International Financial Institutions
LBOD	Left Bank Outfall Drainage
MNA	Member National Assembly
MPA	Member Provincial Assembly
NDP	National Drainage Program
PFF	Pakistan Fisherfolk Forum
PNRDP	Pakistan Network for Rivers, Dams, and Peoples
RBOD	Right Bank Outfall Drainage
Samat	Samaji Tanzeem Barai Mutasareen-e Tarbela Dam, Social Organization of the People Affected by Tarbela Dam
SBT	Sindhu Bachao Tarla, A Plea to Save the Indus River

WAPDA Water and Power Development Authority, also Wapda

WB World Bank Group

WCD World Commission on Dams

GLOSSARY OF TERMS

abadkar	Settler – terms used to refer to outside ethnic groups settled in canal irrigated lands; sometimes synonymous with Punjab
abiana	Water tax on canal irrigation, rates calculated on an hourly basis
barani	Rainfed
daman	The narrow strip of land between the right bank of the Indus and the arid Koh-e-Suleiman mountain range to the west.
darya	River
desh	Homeland, country
dharti	Land or territory
Indus	Latin derivation from Ancient Greek Ἰνδός (Indós), from Persian هندو (hindus) from Sanskrit सिन्धु (sín̄dhu)
kalapani	perennial streams in the daman area
kharif	summer crops
khet	fields or farmland
Lok Sath	People's assembly
mahigeer	Fisher
Mutasareen	Affected people. Urdu term commonly used for displaced peoples.
nehri	of the canal
nullah	Streams, also <i>nai</i> in daman
pachad	Towards the mountain – on the right bank of Indus river in Siraiki
rabi	winter crops
rod kohi	The spate-irrigation system in arid and semi-arid mountainous regions of Pakistan. The term <i>rod</i> means water flow or torrent bed and <i>kohi</i> means of the mountains.
sanjh	Siraiki term referring to the cooperation among village communities
Sindh	Refers to the Indus River in Urdu, and also the name of the southern province of Pakistan
Sindhu	Name for river Indus used by Siraiki and Sindhi activists and riverine communities; The name of the river in Rig Vedas
tanzeem	organization; used by PFF to refer to their political organization
Waseb	Abode, homeland
zamindar	landlords

1: THE DAY OF THE RIVER

On March 14, 2018, three social movement groups marked the International Day of Action for Rivers by holding protests along the Indus River in the northern, central, and southern parts of Pakistan. For almost two decades, these riverine movements – social movements that fight to preserve or alter aspects of human-river relations – have contested the harms of various dams and canals in the Indus Valley. The activities of the day locate the Indus protestors alongside the 21st century riverine movements who converged in Curitiba, Brazil, in 1997 and selected March 14 as the day of action for rivers.

The first of the Indus River protestors organized a seminar in a resettlement town in the foothills of the Himalaya-Karakoram mountain range. The *Samaji Tanzeem Barai Mutasareen-e Tarbela Dam* (Samat), the Social Movement for the People Affected by the Tarbela Dam, organized the event.¹ Samat represents the people displaced by Pakistan's largest dam built in 1974. The Pakistani government had resettled a majority of the 96,000 people displaced in five resettlement towns and canal irrigated colonies in the southern parts of the country. However, half a century later, tens of thousands of the Tarbela's displaced still await resettlement.

Samat invited representatives of dam-affected people from across the country and demanded restitution and changes in Pakistan's resettlement policy that still uses colonial-era

¹ The organization goes by the Urdu acronym ت م س or S.M.T from مَنَاطِرِینِ تَرِیلَہ and pronounces this as Samat.

laws.² Ejaz Khan, Samat's leader who founded the group 1996, is one of the most vocal advocates of the dam-displaced people of Pakistan. He summed up the demands of the displaced succinctly as: "No dams without effective resettlement."³

The activists of *Sindhu Bachao Tarla* (SBT), A Plea to Save the Indus River, organized the second protest 300 miles downstream in central Pakistan, where the Indus River flows east of the Koh-e Suleiman mountain range and separates the Iranian Plateau from the floodplains of the Indus Valley. SBT represents fishers, irrigators, and riverine peoples in the Siraiki ethnic majority areas of the Punjab and Khyber Pakhtunkhwa provinces. Its members are also part of the broader political and cultural movement for the demand of a separate province for Siraiki peoples.

SBT members gathered near the Taunsa barrage, a run-of-the-river diversion dam, and protested against irrigation systems that displaced people, destroyed traditional irrigation systems, and the increased risk of floods. Khadim Hussain, Bashira Mai, and Fazal-e-Rab Lound criticized the government and the World Bank for using debt-inducing models of development to build flawed irrigation systems. The participants marched, sang, danced, and held ritual prayers at the riverbank. They demanded the return of the wealth of the Sindhu Darya, as the Indus River is known locally, to the fishers and riverine communities. A verse from the Siraiki Sufi poet Ashu Laal, printed on a large banner, sung by folk singers, captured the sentiments of SBT: "River O river! / Your waters are deep/ You, our father-mother/ We, your (fish-)heirs!"⁴

² Samat works with the affectees of other large dams, including old Mangla Dam and the planned Bhasha Dam. Pakistan does not have a national level resettlement policy, and relies on the Land Acquisition Law of 1894 and some recent environmental legislation.

³ Interview, Ejaz Khan, Khalabat Town, Oct 2017; Conference opposes dams sans new resettlement policy. (2018, March 15). *The News*

⁴ Darya O Darya! Paani tehdhe doonge! Tou sada peo-maa, Asa tehdhe poonge!

The third protest event was the largest of the day with over 3,000 participants, organized by the *Pakistan Fisherfolk Forum* (PFF), with over 70,000 members spread across the Indus Delta in the southern Sindh province. The protestors gathered near the Kotri Barrage, the last dam on the Indus River about 500 miles south of Taunsa. For ten months of a year, no water flows below Kotri for a stretch of about a 100-mile to the Arabian sea – except urban and industrial waste and the rising seawater. The reduced flows of the Indus river have devastated the Indus Delta region and its peoples.

The PFF had organized this type of protest since 2009, a yearly River Caravan or *Darya Yatra* (river pilgrimage) to demand freedom of the Indus River from dams, canals, and embankments. Since 1998, PFF has fought for the rights of the fishers of the Sindh province and to protect the Indus Delta. “Here come the *mahigeer* [fishers]” chanted the protestors as they marched on the streets of Hyderabad city to drum beats and songs. Muhammad Ali Shah, Fatima Majeed, and other leaders spoke about the rights of the fishers, the dying delta, and the need to free the river to save Sindh *Dharti*—the land of the coastal province home to Sindhi ethnic people. Blaming the development of dams for the death of the river, Muhammad Ali Shah demanded to “release Sindhu Darya from imprisonment.” The 2018 campaign signaled a shift in PFF’s River Caravans – what began as protests against dams, for fishers and the protection of the delta, evolved into a movement for the defense of the river itself. The campaign slogan announced this demand: “Give Sindhu Darya [Indus River] Personhood Rights.”

Samat, SBT, and PFF are examples of three different riverine movements along the Indus river, that emerged around the same time in the late 1990s, formed alliances with each other, faced similar opportunities and resources, and received similar ideas from national and international networks. Collectively, they have fought against the displacement of riverine communities,

dispossession of fishers, the disintegration of traditional irrigation systems, legal and illicit enclosure of riverine resources, increased risk of floods and droughts, and the destruction of the Indus delta ecosystem. However, the riverine movements vary in their outlook and significant demands. While Samat focuses on displacement and restitution, SBT and PFF turned to a broader agenda of fighting to save the river.

The goal of this study is to explore the reasons behind this variation and its significance for the broader politics of rivers. Why do some river movements fight to defend the river while others do not?

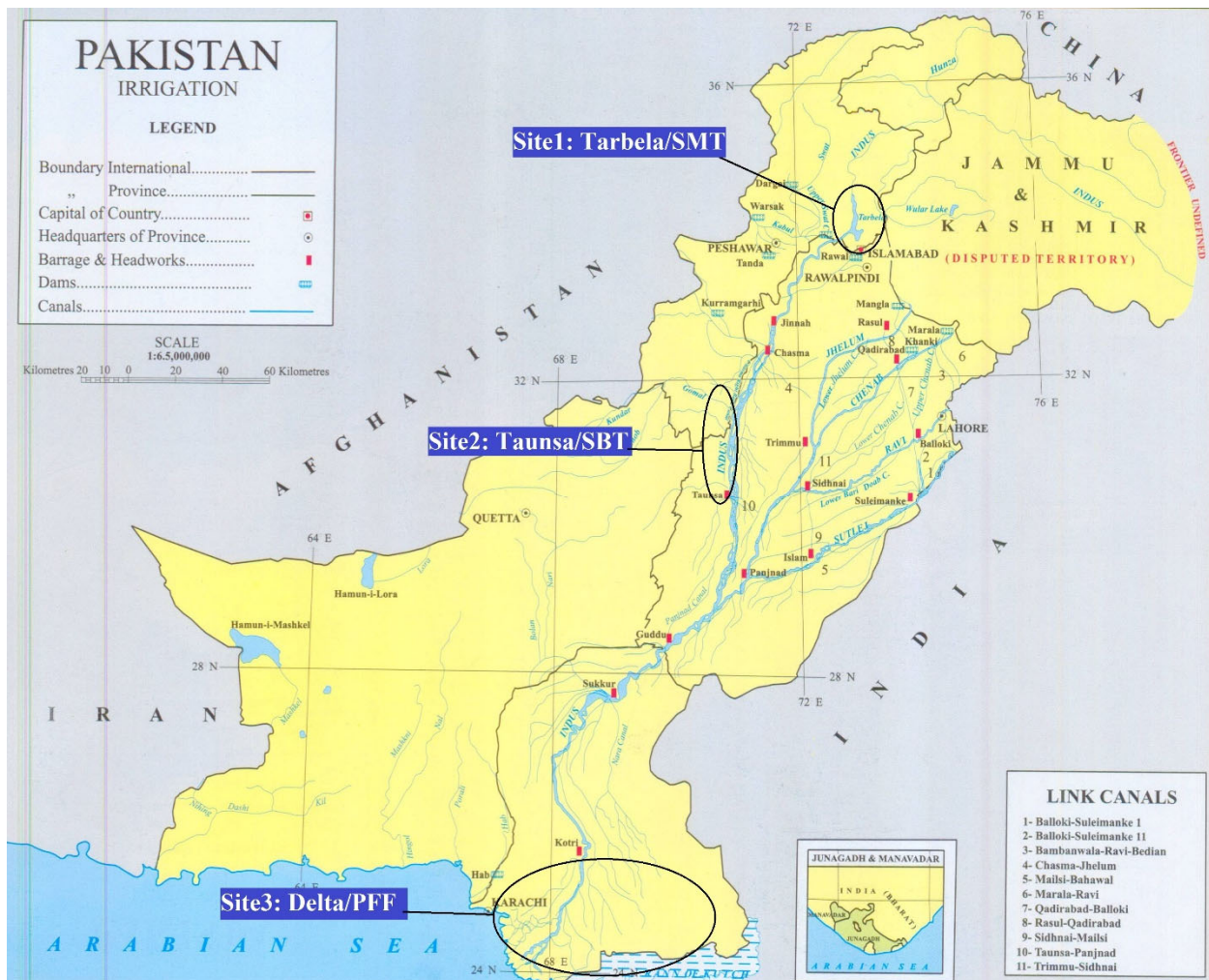


Figure 1: Riverine Movements and Pakistan’s Irrigation System

The river defense movements, as a particular type of riverine movement, emerged in the context when humans started to exercise unprecedented control over rivers by building massive infrastructure projects to support modern lifestyles. The experiments in river control began in the late 18th century when British and French colonizers set out to tame rivers that birthed ancient civilizations in Asia and Africa, in a civilizing mission ripe with biblical fervor and desires for profit.⁵ By the mid-twentieth century, the Bretton Woods Institutes took over this mission and started to build massive dams and irrigation systems, particularly in the underdeveloped and developed nations with goals of modernization and economic growth. In just over a century, the number of large dams rose from 700 to 50,000, covering major river basins across the world.⁶ Today, hydropower dams are the most massive built structures on the planet, dwarfing other forms of human construction. The total volume of the largest dam, Tarbela Dam in Pakistan, is ten times the volume of the world's largest building.⁷ Nine of the ten largest electricity generating facilities are hydropower units. Dams supply water to almost half of global irrigated lands and hundreds of millions of urban dwellers.⁸

⁵ British engineers and administrators often referred to the desire to turn deserts into Gardens of Eden (Bellanta, 2002), and the fact of revenue exploitation from British India, primarily from agriculture based on exhaustive river infrastructure development, amounts up to USD 45 trillion (Chakrabarti & Patnaik, 2018).

⁶ The estimates for displacement vary and are uncertain. The total number of large and small dams to be around 1 million (Lehner et al 2011), most studies rely on the figures provided by the International Commission on Large Dams (ICOLD), which defines a large dams as having “a height of 15 meters or greater from lowest foundation to crest or a dam between 5 meters and 15 meters impounding more than 3 million cubic meters”. Based on ICOLD’s World Registry of Dams, scholars have noted that the number of large dams rose from less than 5,000 large dams in 1950s to over 45,000 by the 1990s (Khagram, 2004; WCD, 2000).. According to ICOLD, the number of large dams as of Feb 2017 was 58,519. I use the 50,000 for the year 2000 as a guesstimate based on the 1990 and current numbers. For definition of large dams, see ICOLD, 2011, Constitution: url: http://www.icold-cigb.org/userfiles/files/CIGB/INSTITUTIONAL_FILES/Constitution2011.pdf; retrieved: 3/7/2017.

⁷ The largest dam by volume of building construction is the Tarbela dam in Pakistan (153 million cubic meters) compared to the largest building which is the headquarters of Boeing Everette Facility in Washington, USA (13.3 million cubic meters).

⁸ U.S. Energy Information Administration, Oct 18 2016. The world’s nine largest operating power plants are hydroelectric facilities, url: <http://www.eia.gov/todayinenergy/detail.php?id=28392> ; access date: 3/8/2017

While dams and canals have molded modern and urban lifestyles, the anthropogenic impact on rivers and riverine communities has been catastrophic. Displacement, biodiversity loss, declining deltas, floods, and water insecurity are pervasive in large river basins. Almost ninety percent of major rivers are dammed, and fragmented rivers fare poorly on biodiversity indices.⁹ Many large rivers no longer flow to the oceans, drying up before reaching their final destination – this includes giants like the Indus, Yangtze, Colorado, Murray-Darling, and the Yellow rivers. Water and sediment from rivers previously nurtured deltaic ecosystems, making them some of the most fertile and unique ecosystems in the world. Now, restricted river flows are causing coastal erosion and deforestation, turning deltas into barren deserts as seawaters rise. The erratic weather patterns of a warming planet are compounding the problems of floods, seawater intrusion, and water scarcity.¹⁰ These processes are driving the migration of human and non-human communities at scales that we do not fully comprehend. Even what we know about the direct impact of large dams is astounding – these dams have displaced an estimated 40 to 80 million peoples worldwide. With almost 5,000 mega-dams in the global pipeline, many untapped river systems are likely to face the same problems.

Over the past two centuries, river infrastructure projects have successfully enlisted rivers into capitalist cycles of production and consumption, but at a high cost to rivers and riverine communities. However, the extent of the transformation in human-river relationships cannot be comprehended merely by looking at the global scale of infrastructure development. Instead, a parallel with another great transformation in the human-nature relationship, with the enclosure of land, will serve to place the issue in the world-historical context.

⁹ State of The World's River database, International Rivers. <https://www.internationalrivers.org/resources/8391>

¹⁰ C.f. WCD, 2000; McCully 2001; Coleman 2008.

1.1 Rivers and Enclosures

Shifts in human-river relations bear resemblance with the historic enclosures of the commons that reordered society-state relations to enable the political economy of modern capitalism. The classical theory of enclosure was generalized from the case of land. Here I expand this through recent theoretical and empirical contributions to look at the characteristics of river enclosures.

The theoretical lens of enclosure looks at the change in human-nature relationships that produce both humans and nature as ‘things’ that fit into the cycles of capitalist production and modern social life. The theory was developed through a historical analysis of the political and social consequences of denying public access to the commons – traditionally, access to land that villages had used in common for generations. In the classical statement, enclosures resulted in prior accumulation that produced land as private property and humans as wage labor, both central to the needs of a market-based economy that relied on surplus accumulation to regenerate capital (Marx, 1867). The historic shift was not limited to the villages but signaled a ‘great transformation’ of societies at large. Karl Polanyi suggested that the movement to enclose land and the counter-movement against the resulting market fundamentalism constituted a double movement that resolved with the emergence of new social contracts that regulated markets to alley the adverse effects of capitalism (Polanyi, 1957).

If classical theorists focused on legal forms of enclosures and processes of modernization, recent scholarship has extended the analysis to cases where the denial of access may not coincide with the emergence of land and labor as ideal-type commodities. Recent analyses have engaged with Polanyi’s work in the context of the rise of market fundamentalism and neoliberal globalization (Block & Somers, 2016; Levien & Paret, 2012; McMichael, 2012; White, Jr, Hall,

Scoones, & Wolford, 2012). Studies have shown that food insecurity, biofuels, environmentalism, and the development of infrastructure corridors and special economic zones are creating new enclosures of land (Levien, 2013; McMichael, 2012; White et al., 2012). Unlike the 19th and 20th century when states were organizing the principals of political economy, the 21st-century enclosures operate in a context when capital has become the organizing principle (McMichael 2008). Property rights may correlate with access to land and other resources, but this access is mediated through technological, financial, bureaucratic, epistemic, cultural, and social capital (Ribot & Peluso, 2003). The focus on different causes, mechanisms, and consequences of enclosure generated a robust theory of enclosure to explain cases where enclosures are defined by legal pluralism, mediated through other forms of social and financial capital, and take legal, illicit, or intimate forms (Hall, Hirsch, & Li, 2011; Peluso & Lund, 2011; White et al., 2012).

While the historical enclosures of rivers did not produce rivers or ‘water’ as a fictitious commodity, to use Polanyi’s terminology, they did put water to *productive* use within the capitalist and market-based systems. The historical transformation did not come through the introduction of private property regimes, or the transformation of water into a commodity, a problematic proposition (Bakker, 2007, 2010). Instead, the transformation came through the separation of water from land, by abstracting water from rivers and diverting it to new areas for choice remixing with land and communities, to fuel modern systems of production and consumption (Mehta, Veldwisch, & Franco, 2012). When rivers used to flow freely, land and water would mix through seasonal rhythms supporting diverse human and non-human communities in the floodplains and along the riverbanks. Now we use dams and canals along with new technologies and bureaucratic arrangements to enclose global rivers.

In the following subsection, I draw on the case of river infrastructure development in the Indus Basin to provide a preliminary sketch of the enclosure framework and highlight three characteristics of river enclosure along its socio-material, political, and cultural dimensions.

Enclosing Indus

The enclosure of the Indus Basin was driven by the British desire to impose a relatively stable order on the unruly peoples and rivers of India. The colonial state sought to increase agricultural revenue by turning ‘barren’ or ‘wasteland’ into productive agricultural farms. The British administrators declared any piece of land that did not fit with their visions of stable and settled agriculture as a wasteland, in line with their biblical and scientific attitudes towards productivity (Gilmartin, 1994). In the Indus floodplains, an arid or semi-arid region, they built dams and canals irrigation canals to turn deserts into Gardens of Eden (Bellanta, 2002). Prior forms of irrigated agriculture worked with the seasonal flows of rain, rivers, where settled forms of agriculture were reliant on the fluid and mobile pastoralist and nomadic communities – systems that were relatively complex and supported trade networks from Bengal in East to Iran and Turan in the West (Dale, 2002; Ludden, 1999). However, the British administrators were remarkably frustrated with the inability to fix revenue demands, particularly in the western Indus Basin, with the fluidity of communities and peoples (Gilmartin 2015).

The British built a vast empire of irrigation canals, barrages, and headworks in the Indus Valley to fix the flows of rivers and the peoples. The construction of the first perennial canal, the (upper) Bari Doab Canal in 1859,¹¹ launched the colonizers into an ambitious and world-historical

¹¹ The first perennial canal of the Indus Basin was built in 1859, the (Upper) Bari Doab Canal diverted at Madhupur from the Ravi River, an eastern tributary of Indus River. Similar canals had been introduced elsewhere in India starting

project of developing the Indus Basin Irrigation System over the next century. They put massive investments in weirs, barrages, headworks, and canal channels, starting with the eastern tributaries of the Indus river, including Jhelum, Chenab, Ravi, Sutlej, and Beas of Punjab.¹² By the time the British left India in 1947, they had built an extensive irrigation system with 20 barrages and 42 canals with 38,000 miles of primary channels that irrigated an area of about 38 million acres. Along with the reengineering the landscape, the British also launched into a project of social reengineering. David Gilmartin's recent work (2015) on the development of Indus Basin shows that the British were concerned with the tension between utilitarian views of rational irrigators and the concerns with maintaining pre-existing structures of tribal and kinship with concerns of maintaining order. New and old social categories were synthesized and fixed as were the hydrological flows that defined the region, serving the demands of the emerging European markets in the global capitalist order.

If the old enclosures of the river began with the goals of perennial canal irrigation, megadams brought on a new stage of river enclosures of the 20th century. The Indus Basin irrigation system created new technical and bureaucratic expertise in controlling rivers, subsequently exported to the rest of the world. The British engineers brought their experiences to the U.S.A influencing infrastructure development in California and Tennessee (Teisch, 2011). The expertise of the U.S. Bureau of Reclamation and Tennessee Valley Authority (TVA) influenced river infrastructure development in China, South Africa, and eventually in India and Pakistan when the World Bank took on the role of the World's Dam Builder (Sneddon, 2015; Teisch, 2011).

in the 1820s. By 1848, the College of Civil Engineering at Roorkee started producing a professional cadre of civil engineers as the demand for irrigation engineers started to rise with the construction of the Ganges Canal in the 1840s.

¹² Punjab derives from *panj* (five) *aab* (water). Along with the Indus and the dried-up Sarasvati, the five rivers make up the seven rivers mentioned in the Rig Veda as *Saptu Sindhu* – Sindhu (Indus), Vitasta (Vehit/Jhelum), Asikni (Chenab), Prusni/Eravati (Ravi) Vipasha (Beas), Sutudri (Sutlej) and Sarasvati

Three Aspects of River Enclosures

The historical enclosure of the Indus River points to the integrated nature of river basin development, with varied *socio-material* impacts, *political* demands, and *cultural* work necessary for powerful institutions to establish and legitimize their claims to authority over rivers.

Consider the varied forms of exclusions or the *socio-material* aspect of river enclosures. The integrated development of river infrastructure over large areas and over time redistributes riverine resources, such as water, sediments, and fishes. The adverse effects spread over time and space. The adverse impacts, or the *overflows*, may occur in project-proximate areas or across the river, may appear as single or recurring shocks or accumulate over time, and might have identifiable, complex, and uncertain causes.

For instance, large dams displace communities from the reservoir area as a single shock in the project-proximate locations, but can also impact downstream riverine groups in the long run (Ligon, Dietrich, & Trush, 1995; Tsikata, 2005). Dams fragment river and influence the migration of fishes and fishers who rely on them (WCD, 2000). Downstream communities suffer from the upstream consumptive use of water or the decline in water quality due to urban, industrial, or agricultural waste. Flood control measures restrict river flows to narrow channels -- these floods would deposit nutrients, rejuvenate wetlands, and recharge aquifers in the floodplains and deltaic ecosystems (Ansar, Flyvbjerg, Budzier, & Lunn, 2014; McCully, 2001; Moran, Lopez, Moore, Müller, & Hyndman, 2018). River infrastructure can fail and increase the risk of floods (ADB & World Bank, 2010, 2010; Chaudary & Sarwar, 2016; Le, Nguyen, Wolanski, Tran, & Haruyama,

2007). The different adverse effects also intersect– large irrigation systems used dams to stock water, canals to bring this to the fields, and drainage channels to remove excess water.¹³

The *political* aspects of river enclosures are related to the governance structure required to manage river flows and the overflows, and these systems tend to centralize bureaucratic and political capital. The fluidity of water poses a complex challenge for state and other actors that seek to abstract water from rivers. Karl Wittfogel provided the classical statement of ‘hydraulic despotic’ thesis and argued that imposing a stable, stationary, and predictable system of water flows generated a despotic state structure (Wittfogel, 1957). Wittfogel later disavowed this thesis, and others also criticized the strong version of this thesis. Steven Lansing's study of Balian water temples shows that complex irrigation systems relied on decentralized coordination that did not rely on state structures (Lansing, 1991). The large spate-irrigation systems of semi-arid regions of Asia, Africa, and Latin America also provide examples of complexly managed irrigation systems without centralized state power. However, studies of the development of large river basins in colonial (and ex-colonial) settings lend some credence to the thesis (Gilmartin, 2015a; Pritchard, 2012; Worster, 1992). River infrastructure development is capital-intensive, technologically driven, and has long gestation periods that create the need for centralized control (Alatout 2009; Swyngedouw 2013, 2015; Sneddon 2003; Mustafa 2007, 2013). Historical enclosures of river enclosures coincided with the colonial project of large-scale material and social reengineering that established the political and moral economy of the state-society nexus (Evers & Benedikter, 2009;

¹³ The types of enclosure effects describe here are not exhaustive, but selected because of their relevance for the cases studies. Other types of river enclosure include contract fishing regimes can grant fishing rights over a particular piece of river to certain parties excluding others. Illegal fishing or occupation of wetlands, and disputes of water distribution disputes within a community are example illicit and intimate exclusions.

Molle, Mollinga, & Wester, 2009; Pritchard, 2012). The demands of river enclosure engendered ‘empires of the river,’ to use the title of Donald Worster's study of irrigation development in the western United States.

In the case of the Indus Basin, the historic enclosure coincided with a colonial state, which influenced the post-colonial developments. The partition of the subcontinent in 1947 exacerbated the problem of managing the Indus river flows, as the new nation-states of India and Pakistan fought bitterly over the split irrigation system as they sought to impose a new political and administrative order that did not respect the river’s geography. The early years of independence saw the first war between India and Pakistan over the disputed territory of Kashmir, which was also the source of most of the Indus basin river. India also threatened to stop the water flowing into the irrigated areas of Pakistan as it had control over some of the canal headworks and diversion dams.¹⁴

Eventually, a deal was struck, mediated by the World Bank, based on ill-conceived notions of the water/land separation that the colonial rule had established. The American water experts hired by the World Bank suggested that Pakistan and India deal with the water dispute in a ‘non-political’ and ‘technical’ manner, and divide the Indus water between them. India got control of the three “eastern” tributaries – Ravi, Beas, and Sutlej, while Pakistan exercised rights over the

¹⁴ Soon after partition, the Indian state claimed rights over rivers that flow through its territory and demanded payments from Pakistan for the use of water from the “Eastern rivers” – the eastern-most of the five major left-bank tributaries of the Indus, which include Beas, Sutlej, and Ravi. Historian Daniel Haines has noted that a precedent for such a demand was set by the British when the British Indian government demanded similar payments from the princely states of Patiala and Bikaner which were getting water from the Sirhind Canal. But the argument was based on the fact that the Sutlej river, from which the Sirhind Canal was diverted, didn’t flow naturally through Patiala and Bikaner, and after independent the Indian government did away with such arrangements, based on the idea of an India united territorially. Pakistan and India agreed to a “Stand Still Agreement” on Dec 18, 1947 to allow sufficient time for reaching agreement around the sharing of the Indus rivers. No such agreement could be reached by March 31, 1948 when the agreement ended, and India stopped supplies to the canals that flowed across the border to Pakistan at a critical period for the *kharif* sowing season. An agreement was reached in May 1948 (Inter-Dominion Agreement on Canal Water Dispute), but Pakistan’s fears were further stoked as India started building river infrastructure projects on the eastern rivers. The issue is far from resolved Cf (Haines, 2017; Naqvi, 2013)

“western” rivers that included Indus, Jhelum, and Chenab.¹⁵ The ‘loss’ of eastern rivers to India meant that Pakistan sought to meet the hydraulic losses by transferring water from the Indus river to Jhelum and Chenab, backed up by stocks of large dam reservoirs.¹⁶ The Indus Water Treaty (IWT) of 1960 envisioned a massive expansion of the Indus basin irrigation system, with Pakistan building three mega-dams, several river-link canals, expanding irrigation channels, and remodeling older barrages and canals.¹⁷

The newly formed nation-state of Pakistan inherited the problem of dividing up Indus waters with India, with an overdeveloped state structure left by European colonizers. The state centralized control over resources, and this shaped how the high and the low levels of bureaucracy operated. The state structure had to balance their desires for revenue with the demands of establishing order, and the British instituted a reward system by giving land grants to soldiers and colonial collaborators. The recruitment drives from Punjab during the early twentieth century meant that about half of the British Indian army came from the Indus basin, and the state gave the soldiers land grants across the province (Yong 2005). A complex military-bureaucratic structure was developed to manage irrigation and soldiers, creating a “garrison state” (Yong 2005) with an

¹⁵ The American lawyer and administrator, David Lilienthal, who headed the Tennessee Valley Authority expressed these sentiments in an article calling for the problem ‘a feasible engineering and business problem’ rather than a ‘religious or political problem’ quoted in (Akhter, 2013, p. 63) See also chapter 2 of Akhter’s thesis for details. Raymond Albert Wheeler, the U.S. retired Lieutenant General, and the Engineering Advisor to the World Bank since 1949, represented the World Bank from 1952 to 1960 in the negotiations between India and Pakistan.

¹⁶ (World Bank, 1960, p. 1) The plans changed over time, but the 1960 documents shows plans to build: two large dams and storage reservoirs on the Jhelum and Upper Indus, hydro-electric power installation at Jhelum, six new major inter-river link canals joining the Indus to Jhelum, to Chenab, to Ravi, and to Sutlej; three new barrages where these new canals crossed the rivers, remodeling of five existing barrages, four existing inter-river canals, and four existing canals, along with tubewell and drainage works (ibid, p2)

¹⁷ (“Indus Basin Development Board,” 1960; *The Indus Basin Development Fund (supplemental) Agreement, 1964*, 1964)

‘overdeveloped’ state structure (Alavi 1972). The strong influence of the military in the early decades of Pakistan set the tone for centralized control over the country’s riverine resources.

The *cultural* aspects of river enclosure are linked to the difficult task of governing river flows and overflows, as the state sought to legitimize its authority and establish sovereign control across the Indus basin by claiming bureaucratic and technical capacity to use the river for productivity for the sake of public welfare (Gilmartin, 2015a, 2015b). Colonial rulers grounded their claims of legitimacy in resolving the tensions between their civilizing mission and preserving existing cultural, religious, and customary traditions. For the post-colonial state or the nation-state in general, the state sought to use nationalist discourse to legitimize the claim to authority over the river and the people. Claims of building the nation through economic modernization, tied to infrastructure development, were at the center of the state’s quest for legitimacy (Akhter, 2015; Bernstein & Larson, 2006; Haines, 2017; Swyngedouw, 2015).¹⁸ In this sense, the control over river flows constructed ideas about the river itself, an object of governance linked to state sovereignty.

With the division of the Indus Basin and the IWT in place, the Indus River became the symbolic and material centerpiece of Pakistan’s project of building the nation. The development of new irrigation dams and canals allowed the rulers to claim legitimacy, mainly because Pakistan had failed to establish stable democratic regimes for the first two decades. Daniel Haines has shown that with the development of new projects in southern and western Indus Basin, the

¹⁸ A literal interpretation of political scientist Robert Dahl’s metaphor for legitimacy is highly appropriate for considering the ties between state’s quest for legitimacy and river control: Dahl thought of legitimacy as a reservoir where “so long as the water is at a given level, political stability is maintained, if it falls below the required level, political legitimacy is endangered.” C.F. Dahl, RA. 1971, *Polyarchy: Participation and Opposition*. Yale University Press.

postcolonial state staked its legitimacy on the ability to address the economic and moral economic concerns of the people -- accomplished through technical and engineering feats of building new riverine infrastructure projects (Haines, 2013, p. 112). The transboundary water dispute with India created the conditions where controlling the river flow became a significant part of “the ideology and practice of state sovereignty in [...] Pakistan” (Haines, 2017, p. 4). Central to this enterprise was claims of legitimacy and sovereignty based on advanced engineering expertise and infrastructure development.

The crisis of legitimacy was not limited to the transborder water distribute but was also an internal one, shaping regional politics of water distribution in Pakistan. Historically, the redistribution of river flows and the uneven development of irrigation system-generated water disputes between the upper and lower riparian provinces along the Indus Basin, in particular between Punjab and Sindh provinces. The diversion of water in the upper riparian province of Punjab caused grievances among lower riparian Sindhi landowning elites, who demanded priority in irrigation development schemes in the Sindh. In the context of decolonization movements, these ethnic grievances mapped on to different strands of liberation movements and demand for irrigated land became a salient feature of riverine politics in the postcolonial era. On the one hand, the Sindhi nationalist deployed the Indus River as a symbolic artifact for challenging the hegemonic state-sponsored imagination of nationalism and development, mobilizing a “river-linked identity” (Akhter, 2013; Gilmartin, 2015a, pp. 230–1). On the other hand, the Punjabi ethnic groups aligned with the state’s position, viewing water distribution as a problem of technical nature to be resolved with patriotic, scientific, and economic centric ideas (Akhter, 2015; Gilmartin, 2015a, pp. 230–235; Mustafa, 2007).

While the challenges of distributing river flows, i.e., the transborder and regional allocation of water was a significant threat to the state's claim to legitimacy during the 20th century, the dealing with river overflows posed a more significant challenge in the 21st century. Here *overflow* refers to the inability of the state to regulate the socio-material flows, which result in various forms of social and ecological disasters.

Some of the overflow problems started to emerge in the early 20th century but did not threaten the state's legitimacy until the 21st century. Perennial canal irrigation had created a host of challenges ranging from ecological issues of waterlogging and salinity and health issue of malaria, making canals a particularly costly problem (Stone, 1984; Whitcombe, 1972). These challenges reflected a lack of technical and bureaucratic capacity of the irrigation bureaucracies, both in the colonial and post-colonial era, to deal with problems significant from an economic standpoint. Waterlogging and salinity, a feature of over-irrigation of farmlands with inadequate drainage, had rendered almost 5 million acres of the 23 million acres unusable by the year 1959, and the drainage programs to address this issue caused upward of USD 1 billion – approximately the cost of the Tarbela dam itself (Alam, Sahota, & Jeffrey, 2007). The challenges of managing Indus flows have only worsened in the 21st century, generating a new crisis of state legitimacy in matters of river control. Security experts predict water wars in the region, while water experts speak about the challenges of water scarcity, and environmentalist have pointed to the risk of extreme floods due to rapid glacial melt and extreme weather events of a warming planet (Briscoe & Qamar, 2005; Gaurav, Sinha, & Panda, 2011; Mustafa, 2013).

These new realities of the 21st century signaled a crisis of legitimacy for the state. The state's legitimacy was premised on the fixing the hydrological and social flows, but the overflows (and underflows) have become unmanageable – the rivers are dying, the deltas are declining, and the

communities are drowning. In this new context, science and empire are no longer tightly coupled. The contemporary scientific understanding of riverine ecosystems incorporates the complexities of managing hydrological flows, even without including the complexities of managing the sociological flows. The contemporary scientific view no longer maps on to the economic models that still dominate the developmental models promoted by governments and investors.

From the crises of cultural legitimacy, the political non-viability of centralized governance, and the ungovernability of the socio-material flows and overflows of rivers sprang forth new forms of riverine movements and ideas of river defense.

1.2 New Riverine Movements

The riverine movements of the 21st century generated new ideas of river defense in the context of the new scientific and sociological understanding of the impact of river enclosures. The 20th-century river politics, particularly in Pakistan, was centered around the issue of water distribution – at the level of the farms and the nation-state, articulated at the intersections of class, gender, and social identities. However, new riverine movements appeared with a new understanding of the anthropogenic impact on rivers. These movements operated within parameters of ongoing water conflicts in the Indus Valley but brought in new ideas as well. Where modern enclosures sought to transform rivers into sources of water that could be ‘tamed’ and put to productive use, ideas of river defense challenged the very premise of abstracting and exploiting nature with the mantra of productivity.¹⁹

¹⁹ In this formulation, the new riverine movements can be viewed as a mix of the Polanyian countermovement in the classical sense or in the sense that Phillip McMichael (2005, 2008) has used to discuss the food sovereignty movements of the 21st century. As McMichael has noted, Polanyian analysis of historic enclosures focused on capital and labor as the state was reorganizing society on capitalist principles of political economy, but in the 21st century capital had become the organizing principle of political economy. For Polanyi, the social contract of the mid-20th century state-citizen relationship resolved the double movement that threatened existing forms of social reproduction when

One of the critical features of new riverine movements was their success in building alliances to expand local struggles. Most riverine movements contest the harms of dams and other infrastructure projects but tend to remain local – or contest project-proximate impacts of the projects (Kirchherr et al., 2016) (Aditjondro, 1998; Cernea, 1997; Devine-Wright, 2009; Oliver-Smith, 2011). However, these movements can sometimes scale up by building alliances. In India, the Narmada Bachao Andolan (NBA) movement emerged as local Adivasi groups worked with urban activists who created a sense of unity among the diversely impacted groups. NBA mobilized their expertise and financial resources to counter the state’s knowledge claims, linking the local struggles with the movements against broader trends of development-induced dispossession (Baviskar, 1999; Nilsen, 2012). In Brazil, the anti-dam movement initially framed the issue as a land issue, as Afro-descendant communities mobilized to claim rights to their ancestral lands in the 1970s. The repression against ‘peasant’ movements and broader alliances with other dam-affected communities and the role of environmental advocates shifted the vision of the movement to demands for alternative models of development through the 1990s (Rothman & Oliver, 1999; Thorkildsen, 2016).

By the end of the 20th century, several large riverine movements came together to build a transnational alliance, represented by the gathering at Curitiba mentioned in the opening pages of this chapter. The Narmada Bachao Andolan from India and the Movimento Nacional de Atingidos

subjected to new logics of surplus accumulation with the fictitious commodities of land and labor. In the 21st century, the countermovement to enclosures operate in a context when state and neoliberal capital operates in tandem, and the counter-movement aims to rediscover society in terms of substantive not formal rights (McMichael 2005, 2008). Re-establishing the significance of land and water as vital elements of life, McMichael suggests that the ‘food sovereignty’ movements are movement that envision a new future premised on the logic of social reproduction rather than capitalist production. However, it seems that we can roughly classify the riverine movements that are interested in state regulatory policies as countermovement in the Polanyian sense, and the river defense movement as movements for social reproduction in the sense McMichael suggest. In either case, one key distinction is that for river defense movement, there is an explicit goal of protecting the river, which does not correspond with McMichael’s understanding of ‘food sovereignty’ movements as an analytical category rather than an intentional self-ascribed movement label.

por Barragens (MAB) from Brazil, among many others from the Global South, worked with international advocacy groups, such as the International Rivers Network (IRN) headquartered in the USA, to build an influential transnational movement against dams and for rivers. At the First International Meeting of the People Affected by Dams, riverine movements from 20 countries passed the Curitiba Declaration. The Curitiba Declaration criticized the World Bank's funding of large dams, demanded a moratorium on dams, reparations for the affected people, and measures to undo the environmental harm done by dams, even if that required decommissioning already built dams. Critical of the debt-fueled commodification of water, land, and rivers for the sake of profit, the delegates demanded active participation and control over resources by local communities. They pointed to their shared experience of loss, violence, exploitation, and dispossession despite their different political, cultural, social, and environmental realities. They highlighted the adverse and widespread socio-economic and ecological impacts of dams and hydro-infrastructure projects. They demanded a moratorium on existing dams and asked for an inquiry into the cost of mega-dams across the world.²⁰

The Curitiba moment had two discernable effects on the dynamics of river governances and riverine resistance. The first impact was in the 'state' arena, including multilateral institutions like the World Bank, which introduced new regulations to mitigate the adverse impact of large infrastructure development. The World Bank was undergoing a process of internal reform, responding to its critics, and announced plans to increase participation, hold prior consultations,

²⁰ The Brazilian Movimento Nacional de Atingidos por Barragens (MAB), Indian Narmada Bachao Andolan (NBA), and the International Rivers Network (IRN) headquartered in the USA played a central role in bringing these groups together, building on earlier gatherings of activists and NGOs in Rio de Janeiro in 1992 and Manibeli in 1994. It is at this meeting that March 14, previously the Brazilian Day of Struggles Against Dams, was declared as the International Day of Action Against Dams and for Rivers, Water, and Life. Cf First International Meeting of People Affected by Dams, March 14, 1997. (1997). *Declaration of Curitiba: Affirming the Right to Life and Livelihood of People Affected by Dams*. Curitiba, Brazil. Retrieved from <http://www.rivernet.org/general/movement/curitiba.htm>. Access Date: 2017-06-30

and provide new forums for direct accountability (Shihata). The Bank organized a meeting with the delegates of the Curitiba convergence and subsequently established a multi-stakeholder independent investigative commission, the World Commission of Dams (WCD), that included representatives from the Bank, IUCN, social movements, and the global dam industry. The WCD led a multi-year project to investigate the harms of large dams, using secondary data and selecting 14 projects as case studies consulting local activists, riverine communities, state officials, and project developers. Based on this research, the WCD published its findings in the year 2000, which affirmed most of the demands of the diverse riverine groups – exclusions of land, water, environment, downstream, upstream, short, and long-term kind (WCD).

The other Curitiba effect was in the field of social movements, as it nurtured regional and national level alliances that expanded the scope of local riverine resistance across the world. Regional and national networks of anti-dam and river movements began emerging everywhere. The Latin American Network against Dams and for Rivers, their Communities, and Water was established in 1999 during the proceedings of regional survey convened by the World Commission on Dams in Sao Paolo. The South Asian Network on Dams, River, and People (SNDRP) was formed in 1998 in New Delhi India to bring together Narmada Bachao Andolan movement activists with other formations across the regions. Activists and advocacy non-profits in Pakistan formed the Pakistan Network for Rivers, Dams, and People (PNRDP).²¹ These alliances helped local communities mobilized resources and tap into broader opportunities, adopt a variety of frames that linked these movements to broader struggles of land, water, or environment, and create

²¹ Pakistani activists, PNRDP members, sometime joke about the chosen name for this alliance, pointing out that this is both a network for river and for dams – signifying that many of them view dams as antithetical to rivers and riverine people. However, not everyone in PNRDP shares this position, particularly Samat and many dams affected groups don't opposed dams in principle.

united fronts to challenge large and powerful actors, similar to the cases of the large riverine movements in India and Brazil.

Curitiba and the Indus Movements

The riverine movements of the Indus Valley felt the impact of Curitiba moment, in terms of the new regulations and new strategies of resistance. Members of Samat, Sindhu Bachao, and Fisherfolk Forum founded national alliances of riverine and dam-affected peoples of Pakistan.²² They tapped into the new opportunities and resources by contesting river infrastructure projects on the new accountability forums, invoking the Inspection Panel mechanism of accountability by the World Bank and the Asian Development Banks. They formed alliances across Pakistan and Asia – members of Samat and PFF, founded the Pakistan Network of Rivers, Dams, and People (PNRDP), and interacted with the South Asian Network on Dams, River and People (SNDPR) both formed in 1998.

Through their connection with these groups, large movements like the Narmada Bachao Andolan in India, and transnational advocacy networks, the Indus riverine movements received similar ideas of resistance and critiques of development. They engaged in new state-centered institutional arenas to contest mega-infrastructure development projects on the Indus River. All three have, in various stages and to different degrees, championed the concerns of diverse groups of people, including landowners, landless, irrigators, fishers, and communities living along the riverbank, in irrigated fields, mountains, and coastal areas. All three celebrate the Day of the River

²² Sindhu Bachao Tarla was founded much later than the emergence of these networks, but some of its members were part of the broader alliances in the earlier period. The Pakistan Network of Rivers, Dams, and People (PNRDP) was founded in 1998. Samat and Fisherfolk Forum were ‘founding’ members of this alliance that was coordinated by national environmental and advocacy NGOs, and Sungi Development Foundation. Some of the key members of Sindhu Bachao Tarla were part of PNRDP as well.

each year. However, they vary in one critical aspect that guides their ambitions, strategies, and practices – the idea of river defense.

The variations in claims and contention along the same river are not surprising, given the diversity of historical contexts of river infrastructure development. Social movements spread over large areas do not achieve homogeneity in the interpretation of movement goals and mobilizing frames, as these are interpreted to fit specific historical contexts (Wolford, 2010). Georgina Drew's study of riverine movements along the Ganga River shows differences in the sources of inspiration for people in the mountains and those in the floodplains, with the former focusing on the river flows in their everyday lives and meaning-making, while the latter heavily influenced by Hindu spiritual traditions (Drew, 2017). With such differences, outsiders can also create disunity and significant controversy among movement circles (Drew, 2017, p. 131). However, studies of other rivers of India show that outsiders can win locals' trust and provide critical leadership (Baviskar, 1999; Nilsen, 2012).

Studies of the impact of new regulatory mechanisms do not clarify whether the reforms in the state arena encouraged ideas of river defense. Existing scholarship shows that the regulations had an impact on both infrastructure development and resistance movements. Some studies claim that reforms addressed long-standing grievances of the excluded and provided a roadmap for building better dams with better mitigation plans (Biswas, 2012; Ledec & Quintero, 2003; Tortajada, Altinbilek, & Biswas, 2012). Others argue that reforms were limited in scope and prioritize economic valuation despite ongoing social and ecological costs (Cernea & Mathur, 2008; Goldman, 2006; Goodland, 2010; ICIJ, 2015; Mehta, 2001; Mohan, 2007). Social movements responded to these changes by using new accountability mechanisms (Sneddon & Fox, 2008). It is not clear from this literature whether these reforms encouraged ideas of river defense or not.

If we compare the Pakistani movements with recent cases of successful river defense where challengers grounded their claims in indigenous, sacred, and scientific traditions, we see that these factors do not readily explain the variations along the Indus River. One can consider the movement composition and broader strategic opportunities that may be conducive to river defense frames. In 2017, the higher courts of New Zealand, India, and Colombia granted legal rights to the Whanganui River, Ganga River, and Atrato River, respectively. The Maori and Hindu hold that the Whanganui and Ganga rivers are spiritual and sacred, and activists invoked constitutional provisions that acknowledge indigenous sovereignty or religious claims over rivers and riverine territories. The Colombian court rulings linked the rights of the Atrato river to existing environmental regulations that classify parts of the river as biodiversity hotspots.²³ No provisions of the same type are available to riverine activists and communities in Pakistan. The ideas of the river's spirituality neither capture the public imagination nor are legible to the state. Riverine peoples of Pakistan do not have any special constitutional status, territorial claims, and for the most part, have not been considered significant actors in the water politics of the country. None of the Indus riverine movements discussed here ground their claims primarily in arguments for protecting biodiversity either.

In the new context where the very idea of saving rivers becomes legible, this study examines the variations in Indus enclosure effects in three different locations and the strategies of riverine movements to explain why some movements fight to defend rivers while others do not.

²³ Mount, R. (2017, October 13). Can a river have legal rights? A different approach to protecting the environment. *The Independent*. London. Retrieved September 21, 2019, from <http://www.independent.co.uk/environment/river-legal-rights-colombia-environment-pacific-rainforest-atrato-river-rio-quito-a7991061.html>.

1.3 Explaining River Defense

This study traces the life of three 21st century riverine movements along the Indus river, who were operating in a shifting field of the historic enclosures of rivers, with new regulatory mechanisms and new strategies of riverine resistance. Focusing on three regions along the Indus river in northern, central, and southern Pakistan, I studied the impact of large dams, irrigations systems, and drainage canals by considering the project-specific and cumulative dimensions of the denial of access to riverine resources. Each of the three sites was examined in its particular historical and cultural specificity, as well as part of the broader story of the enclosure of the Indus River. The study relied on historical and ethnographic data and used descriptive and interpretive methods to explore the comparative and relational aspects of riverine movements.

The study used three cases of contemporary riverine movements from three sites in the northern, central, and southern regions of the Indus Basin in Pakistan: *Samaji Tanzeem Barai Mutasareen-e Tarbela Dam* (Social Organization for the People Affected by the Tarbela Dam, or Samat) in the north; *Sindhu Bachao Tarla* (A Plea to Save the Indus River, or SBT) in the central region, and the Pakistan Fisherfolks Forum (PFF) in the south. Samat, SBT, and PFF represent variations on riverine movements with differences in their membership, organization and strategies, and variations in the enclosure effects. The membership of these organizations encapsulated different class groups with multiple intersecting identities, including fishers, peasants, landlords, and pastoralists with different ethnicities, caste/tribe affiliations, and claims to indigeneity. The organization took different forms, such as small advocacy and welfare NGOs, grassroots movements, and sizeable groups with bureaucratic party structures. (See Table 1: Variations in Riverine Movements)

Samat represents small landowners and peasant groups of northern Indus valley displaced by the Tarbela Dam. Samat's main grievances stem from the one-time shock of the enclosure of land for the construction of the dam and reservoir. It is a non-profit welfare and advocacy organization based in the resettlement towns near the dam. Most of its constituents belong to the Hazara ethnicity from the northwestern province of Khyber-Pakhtunkhwa. Its repertoire of action includes protest, advocacy, and lobbying work towards policy change. The group is a type of riverine movement that represents people displaced by dams and demands restitution.

Sindhu Bachao Tarla represents the fishers and riverine communities, working alongside its predecessor, Daman Bachao Tarla, that represents peasants, pastoralists, and irrigators impacted by various irrigation projects in the central Indus Valley. Like Tarbela, locals dealt with the single shock of displacement, and unlike Tarbela, they had to deal with the recurring problems of floods. These groups are concerned with the problems of overflows caused by modern irrigation systems, with increased risks of river and mountain floods and the disintegration of socio-material worlds of traditional peasant and indigenous fisher communities. The constituents of SBT and DBT belong to Siraiki ethnic groups from southern and western Punjab and parts of the Khyber Pakhtunkhwa province, known as the Siraiki Waseb. It deploys the usual repertoire of social movement action, supplemented by the neo-traditional institution of *Lok Sath*, or people's assemblies that created spaces for deliberations and performances. The group focuses on altering existing interest and identity-based politics of land and water, building broader alliances, and transforming water activism through its synthesis with Siraiki cultural movement. The group represents a river defense movement that ties the defense of the Indus River with the defense of the Siraiki people and their cultural and material heritage.

The Pakistan Fisherfolk Forum (PFF) represents the fishers and peasants of the country, with a large membership in the Indus delta region of the southern Sindh province. The group rallies around a variety of irrigation and drainage canals, and legal and illegal enclosures of wetlands, and the destruction of the Indus delta ecoregion. The enclosure effects are due to multiple enclosures of land and water, and the cumulative effect of the entire Indus basin irrigation system. The group works with fishers as a hybrid identity/interest group, predominantly belonging to the Sindhi ethnic group of the southern province. Its “repertoire of action” includes protest, advocacy, lobbying, and yearly campaigns against river infrastructure development. The group focuses on building a strong organizational base, creating awareness about environmental issues, and transforming existing political discourse to accommodate new ideas of the defense of the Indus Delta and the river. The group represents a river defense movement that links the freedom of fishers with the freedom and rights of the river itself.

The three groups represent three cases of riverine movements but differ from each other in significant ways. While SBT and PFF centered the demands of the fishers and peasants for preserving existing socio-ecological relations, Samat represented landowners demanding land grants from the state. Where Samat and SBT in upper riparian areas worked with their constituents’ desire for irrigation schemes, PFF vehemently opposed any diversion to the detriment of lower riparian deltaic communities. Where PFF and Samat used conventional, albeit, different organization forms, SBT relied on the neo-traditional institutions of Sath as a place to synthesize water activism and Siraiki cultural movement. Where SBT and Samat worked without any pre-existing ethnopolitical challenges to dams and canals, PFF was deeply rooted in the historic anti-dam movement of Sindhi nationalists.

Samat is a case of the displaced demanding restitution. SBT is a case of the defense of river via an ethnic and indigenous movement to preserve the region's culture and history, and PFF a case of the defense of river movement tied to the rights of the fishers of the delta. These variations of enclosure effects, social identity, class interests, organizational forms, and activist strategies help discern why PFF and SBT fight to defend the river, and Samat does not.

Table 1: Variations in Riverine Movements

	<i>Enclosure type & effect</i>	<i>Classes represented</i>	<i>Ethnicity</i>	<i>Organizational type</i>	<i>Key Demands</i>
<i>Samat at Tarbela</i>	Stocks (dams); the one-time shock of displacement	Landowners	Hazara	Single: Non-profit welfare and advocacy group. Primarily using protests, seminars and lobbying, and resettlement policy work	Restitution of the Displaced
<i>SBT (and DBT) at Taunsa</i>	Overflows (dams and canals); recurring floods and displacement	Fishers, peasant farmers, irrigators	Siraiki	Multiple: Community organizations, non-profits, and alliances. Prefigurative institutions (Lok Sath), campaigns against specific projects.	Rematriation of the river to its heirs
<i>PFF at Delta</i>	Underflows (irrigation system); slow-moving and cumulative	Fishers	Sindhi	Hybrid: Large political union (<i>tanzeem</i>) and non-profit advocacy group. Protests, campaigns, and River caravans	Rights of the fishers and the river

I examined the material, political, and cultural dimensions of river enclosure and riverine movements by studying the project designs, the politics of representation in state and social movement arenas, and the cultural work by activists.

To study the materiality of rivers, I examined the project design documents and the socio-material effects, to ask: do variations in socio-material impacts explain the spread and retention of ideas of river defense. The study looks at a variety of river infrastructure projects, including large and small dams, irrigation and drainage canals, embankments, and flood protection systems. I relied on project planning documents and interviews to study the project-proximate and system-wide impacts and traced their influence on movement composition and strategies.

To examine the political aspects, I focused on both the state and social movement arenas. In the state arena, I examined if variations in the state's capacity to recognize excluded groups relate to the phenomenon of river defense. State policies may differentiate between claim-makers. Landowners displaced by dams or canals have recourse to legal action, but riverine fishers and landless groups do not. The state may respond to the 'moral economy' based claims by groups without legal access. The new regulations that included requirements for environmental and social impact assessment, new accountability forums, and participatory mechanisms, might have impacted whose grievances were recognized and addressed. I investigated the impact of old and new regulatory mechanisms on the riverine movements.

In the social movement arena, I looked at the composition and strategies of the different social movement groups, to examine if the variations in their capacity to represent the affected people influenced variations in movement outlook around ideas of river defense. Activists faced the challenge of representing groups with varied interests that generated tensions between the beneficiaries and the adversely affected. The uneven distribution of riverine waters also created historical grievances that mapped onto identity-based claims, mainly ethnic and indigenous identity claims. Whether the riverine movements could transcend the conflicts of interests and identities and forge alliances, deep and wide, could help explain the emergence of river defense.

Finally, I considered the cultural work done in social movement spaces to synthesize the different received and generated ideas. Riverine movements faced the challenging task of incorporating new and old ideas of river defense, worked with sacred and scientific traditions, and contested the established symbolic meaning of the river, viewed as a natural resource both by states and ethnic groups. At the granular level, their work with fishers, irrigators, pastoralists, peasants, and landowners also generated tensions in different meanings associated with different relations

to rivers. Variations in the cultural work that riverine movements do, through their deliberations and performances, can help explain the variations in outcomes.

Methodological Considerations:

The enclosure framework draws attention to the relational and integrated nature of the three cases, with some implications. The design of this study evolved, starting with a comparative framework to trace variations in projects and movement characteristics, with attention to the evolving material, political, and cultural context of the Indus enclosure. Due to the integrated nature of the river infrastructure projects, their effects were spread over time and space and generated conflicts of interest that intersected with social identities. However, these also altered the very constitution of these identities. For instance, both Sindhi and Siraiki activists wrestled with the new dynamics of riverine politics and in so doing transformed these ethnic identities in significant ways. Similarly, the very constitution of categories of peasants, fishers, or traditional and modern irrigators are linked to the historical enclosures, and these identities are in flux, particularly with the shocks created by the new riverine projects.

The empirical analysis also suggested that activists relied on both purposive and creative rationalities that differ from the rational and normative models of action that map onto interest or value-based choices that activists make (Joas, 1996). Instead, the activist relied on ‘situation-directed astuteness’ rather than goal-directed purposive action. In this formulation, establishing why ideas of river defense emerged constituted describing the various choice that activists made responding to the different challenges they faced – in particular, the challenges of confronting state power, building alliances, and representing the diversely excluded groups. While activists worked with strategic goals in mind, they also experimented when faced with the difficult questions around

the fundamental nature of citizen-state and human-nature relations. I have attended these complexities through detailed descriptions and interpretative analysis.

The outlines of the chapters listed here reflect this tension. In a sense, the cases are comparative, in that the variations listed above give a preliminary explanation of why river defense movements emerge, and relational as the categories of comparison are not assumed to be stable and the cultural work done by movement activists is a significant part of explaining why (and how) some movements defend rivers, and others do not.

The dissertation used historical and ethnographic data that I collected over a year in Pakistan. I conducted 75 semi-structured interviews with activists, community members, state officials, and development experts; and collected more than 15,000 pages of newspapers, state archives, movement documents and videos, pictures, and audio recordings of movement events. I participated in protests and meetings and traveled extensively with activists, keeping a daily fieldwork journal. The data were collected in four different languages (English, Urdu, Siraiki, and Sindhi). I've attended to the use of specific terms when activists switch between different languages and use particular words to emphasize specific meanings.

I triangulated the facts provided in interviews and conversations against documentary evidence when available. I paid attention to the discourses and performative elements of activists, internal conflicts and tensions, and doubts and uncertainties about strategic choices. I also relied on my personal experience as an activist and academic in Pakistan to understand activists' decisions.

This study of riverine movements has certain limitations. First, the study focused on the social movement along the Indus river itself rather than the entire Indus river system. While I

discuss the issue of water distribution, there is not sufficient depth to the empirical analysis of the water distribution conflict, particularly at the level of the field. Given the tension between demands for water by irrigators and the idea of river defense, an empirical focus on this conflict will help explain why ideas of river defense emerge or do not in other contexts.

Second, I omitted any discussion of the status of other rivers and riverine communities on the five large tributaries of the Indus. The Indus enclosure framework applies to all these rivers, but the idea of river defense may be linked to the unique symbolic significance of the Indus River, both in the cultural and spiritual sense. This issue can only be addressed through comparison with the politics of riverine movement and riverine groups along these other rivers.

Finally, the riverine movements of this study are complex and have asymmetries that I have not explored. Given the salience of gender, class, and patronage networks in the politics of Pakistan, it's likely that these variations would also bear upon whose ideas travel and take hold. Another related limitation is in focus on activists rather than non-activists. I've taken the emergence and spread of ideas of river defense as the question of why some activists fight for river defense without considering how these ideas spread among the broader membership base or, the broader communities.

Chapter Outline:

The dissertation is divided into six chapters, including this introduction. The subsequent four chapters focus on the substantive story of river enclosure and riverine resistance along the Indus, followed by a concluding chapter on the significant findings of the study. The story moves in a rough chronological order and covers a large geographical area, starting in the foothills of the

Himalayas in the Khyber Pakhtunkhwa province of Pakistan, through the central Indus floodplains of southern Punjab, and all the way south to the Indus delta in the Sindh province.

Each chapter introduces key features and impact of various physical infrastructure technologies: mega-dams (chapter 2), irrigation canals (chapter 3), barrages (chapter 4), and drainage canals (chapter 5). Each of these technologies impacts local ecological, hydrological, and social formations in particular ways—ranging from storage and inter-river transfers, irrigation of ‘barren’ lands, fixing and diverting the river flows, the problems of over-irrigation, and the issues of water scarcity. While the projects created particular local and system-wide beneficiaries, they also excluded certain peoples through displacement, environmental destruction, and social disintegration. The chapters describe the intent and impact of these projects. Chapters 2 and 3 focus on single projects, the Tarbela Dam and the Chashma Right Bank Irrigation Project, while chapters 4 and 5 examine a variety of intersecting projects and their cumulative impacts.

Chapter 2, *A Dam and the Indus Lands*, focuses on Samat and the Tarbela dam in the north of Pakistan. On paper, this was a suitable candidate for the emergence of a river defense movement, since mega-dams spread exclusions over a large area and have been focal points for river defense movements in India and elsewhere. Tarbela Dam, built in the 1970s, became a target for global anti-dam activism in the late 1990s and was selected as a case study by the multi-stakeholder World Commission on Dams set up by the World Bank. Despite the attention, and consultations with riverine communities across the Indus Basin, the state only recognized the losses suffered by landowners who had been displaced by the dam reservoir, and not the losses that downstream communities suffered. Samat represented these landowners, who were promised resettlement in new irrigation colonies produced by river enclosures in downstream areas, which generated

identity-based conflicts between upstream and downstream users. Samat activists chose to focus on upstream landowners and lost their downstream allies.

Chapter 3, *The Dry Side of Indus*, focus on riverine activism in a region of central Pakistan that is the homeland of the Siraiki people, an ethnic minority. The conflict emerged when the government started to build a 275-km long canal irrigation canal built over three decades to bring the so-called Green Revolution to the right bank of Indus River. This project caused widespread displacement due to faulty design that increased the risk of flooding and other ecological problems for traditional irrigators, pastoralists, and riverine communities. Local activists sought to represent the interests of various excluded groups. The state forums failed to address local concerns of increased flood risk and the disintegration of the community-led spate-irrigation system. The activists decided to build alternative representative panels to deliberate on the conditions of the excluded groups. The Lok Sath assembly, combining traditional and transnational ideas of justice and truth, became particularly significant as the movement expanded to challenge other irrigation projects.

Chapter 4, *Sath and Sindhu*, picks up the story from the previous chapter to describe how ideas of river defense took hold at Taunsa, bringing together irrigators, fishers, and other riverine people who were impacted by a variety of projects to remodel, repair, and extend the Indus irrigation system. In 2005, the indigenous fishers faced displacement as the government started to remodel an old irrigation dam. They allied with the traditional irrigators and Siraiki ethno-nationalist activists of the area. Riverine resistance in the central Indus floodplains spread from irrigated fields to the riverbank as local activists used the Sath as a social movement institution to build solidarities, unravel state power, and center the indigenous riverine communities in the broader struggle. The Sath, in its performative and discursive aspects, brought together elements

of water advocacy, indigenous rights over the river, and Siraiki cultural nationalism to generate ideas of river defense.

Chapter 5, *Sindhu Darya and Indus Delta*, focuses on the Pakistan Fisherfolk Forum, a massive social movement group organizing among coastal and inland fishers in the Sindh region of southern Pakistan. PFF built an impressive organizational structure by challenging multiple aspects of river and sea enclosures. The group fought against illicit control of wetlands by the military and landed elites, contested the adverse impact of irrigation drainage canals, and popularized the concerns of a rapidly declining delta due to the cumulative effect of upstream Indus enclosures. The sizeable organizational structure and visionary leadership built PFF's 'strategic capacity' as the group fought on multiple fronts. In so doing, PFF transformed the term "delta" from a hydrological classification of land to a politically contested territory, moving beyond long-standing Sindhi nationalist political claims around water distribution. With yearly multi-week using river pilgrimage and long marches, PFF became the most significant movement for the defense of the Sindhu river.

The study shows that ideas of river defense took hold through deliberative and performative acts in social movement spaces, with the representation of riverine groups and the cultural transformation of local identities in light of received ideas about the harms of river infrastructure development. Focusing on the state-centric forums shows the limitations of representation as the state failed to recognize diversely excluded groups. By contrast, the strategic and creative choices of activists sought to address some of the problems of exclusion and recognition. Their strategies created semi-autonomous spaces where riverine groups could question the state's claim over river flows and assert their sovereignty. The sense of empowerment through collective action and self-representation also helped activists and riverine communities expand existing identity-based

discourses to incorporate new ideas of rivers. The non-goal directed creative work done by social movement actors generated news ideas that did not offer immediate strategic advantages but imagined alternative futures of human-river relations --imagination that privilege the defense of global rivers.

2: DAM AND THE INDUS LANDS

2.1 The Displaced and Resettlement

I met Ejaz Khan, the founder of the *Samaji tanzeem barai mutaserin-e Tarbela Dam* (Samat), the Social Organization for the Affectees of Tarbela Dam, in Khalabat Township about 65km north of Pakistan's capital city, Islamabad. Khalabat is the largest resettlement town of the people displaced by the Tarbela Dam, with a population of about 40,000. Ejaz Khan was among the people displaced by the Tarbela Dam. He now runs Samat from a three-room single-story building in the main bazaar of the towns that also doubles as the office of the local chapter of the International Red Cross and Red Crescent Society.

Tall, sturdily built, and energetic, Ejaz Khan spoke to me for several hours recounting his life story – his military service, a career in sports and coaching, becoming an educationist after retirement, and his activism and social work. He told me about the disaster relief missions where he led UN teams through the mountainous of Hazara district after the 2005 earthquake, his encounters with Taliban fighters during the relief operations after the 2010 floods, and his travels abroad where he represented the dam-affected peoples. But most of all, we spoke about the ongoing issues of the displaced people of Tarbela. Khan began by speaking about the land lost to the dam:

The reservoir submerged our entire valley, with 125 villages and fertile agricultural land. Our abundant land gave us bumper crops [...] We used to fill up bags and bags of onions and take these to the *sabzi mandi* [markets] in Lahore. [...] Local farmers would get about PKR 1,500 from a single crop of opium... it was legal at the time. A single crop would give us enough money to buy a decent plot of land.

[...] The river economy was thriving. This area was famous for its fishes. We also used the river to transport timber, and people used to prospect for gold all along the river.

People were happy and lived like kings, Khan said, even those who did not own any land. But the dam consumed all the abundant land along with fruit gardens, farms, and green pastures. Riverine fishers, boaters, gold prospectors, and the landless were the first to leave. Others followed with no prospects for residence or employment in the area.

Planned through the 1960s, the construction on the Tarbela dam began in 1967, and the valley impounded in 1974. The 143-meter high mega-dam is the largest in the world in terms of construction volume,²⁴ and its reservoir has a surface area of 250 square km, which submerged 120 villages and displaced 96,000 people. At the time, the Pakistan government used colonial-era legislation, invoking the doctrine of eminent domain,²⁵ to forcibly remove and resettle the local people. However, the project attracted significant attention from the President and his cabinet, who wanted to reward the sacrifices of the locals and promised them resettlement in alternative locations. Most property owners received cash compensation and options to buy residential and agricultural land. Some were allotted residential plots in five resettlement hamlets near the lake reservoir, but few people had sufficient funds to build new houses.

Ejaz Khan listed a host of problems that the displaced people of Tarbela Dam faced: most resettlement villages didn't have basic facilities; a large number of the landless and tribal peoples received nothing; many landowners had been waiting for alternate land allocations for half a century, and those who could afford lawyers were still tied up in protracted legal battles around

²⁴ Tarbela is an 'earth-filled' dam with the largest construction volume of any dam in the world, about ten-times more than the largest concrete-filled dam, which is the Three Gorges Dam in China. Tarbela is also amongst the world's biggest dams on other measures for dam sizes such as height, reservoir surface area and volume.

²⁵ The right of the sovereign, in this case the Pakistani state, to expropriate privately held property for public use.

land acquisition. The official estimates for land acquisition undervalued land prices and offered the 1967 prices, when construction started, rather than the 1974 prices when the reservoir submerged the valley. During this time, the currency had devalued significantly due to inflation adjustments. The government didn't care about affected people, Khan noted, and the compensation wasn't enough to build a decent house. Even those who had owned fertile agricultural land "could not build a house by pooling all their savings and adding the land and housing compensation."

We walked through Khalabat, where the architectural diversity displayed the unevenness of the resettlement outcomes. Unlike the design consistency of large housing societies that reflected the relative homogenous socio-economic status of the residents, Khalabat Township was strangely inconsistent with modern mansions standing amidst small houses with rural designs. Most of the landless and many small landowners of Tarbela valley sold their plots at less than market prices to wealthier groups and left. Those who managed to build small houses could not accommodate their growing families, who would previously add rooms to the village houses on the adjacent, empty land. "A family of five in 1970 could live on a five marla plot, but now almost five decades later twenty or more people are living in small houses," Khand told me.

Apart from land acquisition prices, the lack of provision of alternative agricultural land was the most significance grievance. The government had allocated a total of 60,000 acres of canal irrigated land in the central and southern Indus Valley for the displaced people with agricultural landholdings. The government hasn't distributed 11,000 acres or about twenty percent of the promised land. Samat works on the problems of land acquisition and distribution, focusing on the Tarbela's displaced peoples. They also work with the dam affected people across the country. Their main demand, as Ejaz Khan noted: "We are not against dams. But the government cannot build more dams without an effective resettlement policy."

The Tarbela Dam is the world's largest earth-filled dam, the largest structure by volume in human history, and the centerpiece of the Indus Enclosure of Pakistan. The dam on the Indus was part of Pakistan's plan to replace the water 'lost' to India at the time of Partition. The epitome of debt-inducing modernizing infrastructure development helmed by the World Bank at the height of the Cold War, the dam was built as part of the broader project to resolve the transborder water dispute between India and Pakistan. When the British exited the Indian subcontinent, they left the Indus Basin Irrigation System split between the two newly born nation-states. Tarbela was built to continue the irrigation supply to the older eastern canal colonies and to provide water for new irrigation schemes in the river basin.²⁶ For the ruling elites of Pakistan, Tarbela was the fulfillment of the promises of postcolonial prosperity and economic growth – a central part of the nation-building project started by the military dictator turned President Ayub Khan. The project helped entrench the status of the new water bureaucracy, Wapda. It helped cement the new partnership with the World Bank. It helped to legitimize the state's claims to authority over the Indus River.

On paper, the Tarbela dam appears as a good candidate for the emergence of a river defense movement. The displaced people received significant attention from the state when it built the dam in the 1970s. The government assumed a moral responsibility towards the displaced and went beyond the limited resettlement framework. The government's attention to the displaced created opportunities for the people to present their claims at the highest levels – even holding meetings with the Prime Minister. While the issue subsided for a while, the Curitiba moment breathed new life into it. Samat, founded in 1996, was influenced by the riverine movements elsewhere and formed alliances across the river basin to challenge powerful actors on new arenas. The World

²⁶ Ibid; Cabinet files. 1973. *General investigations of the overall Planning and Post-Tarbela Multipurpose projects*, NDC, file # 400/CF/73

Bank and the World Commission on Dams (WCD) took on Tarbela Dam as one of their case studies and put pressure on the government of Pakistan to solve the problems of the displaced.

Riverine alliances also created opportunities for the upstream displaced to engage in dialogues with downstream riverine communities, forming river-wide alliances. These alliances introduced new information about the harms of dams on the river and riverine communities. However, a river defense movement did not emerge at Tarbela. In this chapter, I look at how the potential for Samat to become a river defense movement was foreclosed, by looking at the history of the Tarbela resettlement policy, how it shaped the interests of the Tarbela movement, and created tensions with riverine communities elsewhere along the Indus.

I first present an account of the postcolonial state's attempts to capture Indus River flows to sustain and produce newly irrigated land, followed by an account of how the state went about addressing the problem of the social overflows – the displacement of Tarbela communities. The state's primary focus was on the problems of the landowners. Then I consider the dynamics of early protests and how new riverine movements of the 21st century altered early forms of protests. Subsequent sections look at the river-wide alliances and dialogues among the diversely excluded peoples of the Indus basin, as they sought to overcome the interest- and identity-based conflicts. The story of Samat and the resistance to Tarbela demonstrates the impact of river enclosure on the possibility and limits of lasting riverine alliances that could have retained ideas of river defense.

2.2 Distributing the Indus Waters

In September of 1952, a team of an American and four Pakistani engineers set out to find a site to build the world's largest dam on the Indus River.²⁷ Previous missions had identified three potential sites at a gorge few miles upstream of the Jinnah barrage near Kalabagh, the confluence of Kabul and Indus rivers near Attock, and the small town of Darband in the State of Amb. At the time, Kalabagh and Attock were receiving little support, but Darband held the most promise as a previous investigative team had identified this site suitable for the construction of a 900-ft or 275-m tall dam. The Darband dam would have been taller than the Hoover Dam on the Colorado River in the U.S.A and the Bhakra Dam on the Sutlej River in neighboring India. But when the team of engineers visited the gorge above Darband, they realized that it was all but impossible to build a dam there because of prohibitively high cost of diverting the river and clearing up the riverbed that was full of large boulders. The team decided to travel north along the river to look for a better location -- perhaps Kotkani where the river split into two channels with an island in the middle. As they started their journey upstream the next morning, they faced warning gunfire from the tribesmen across the river and swiftly turned around to travel south along the river flows, eventually reaching a widening valley with mountains on three sides. Here the Siran and Dor rivers merged with the Indus River as the watery giant split into multiple braided channels. The site wasn't ideal for the type of dam the engineers had in mind – a narrow gorge would have been more suitable, the valley was too wide, and the depth of bedrocks was unknown. Nevertheless, the team

²⁷ The team included the American consulting engineer, Mr. R.J. Tipton, whose firm Tipton and Hill was later tasked for conducted feasibility studies along the Indus and the Jhelum in subsequent years. Cf (Tarar, 1975, p. 5)

marked this location as a potential site for building an earth-fill dam, possibly about 100 m tall with a reservoir storage capacity of 4 MAF.²⁸



Figure 2: Location of Tarbela Dam

About a decade later, with half a dozen studies²⁹ and negotiations to resolve the India-Pakistan water dispute, this spot was selected for the most ambitious civil engineering project of

²⁸ Million Acre-Feet, or the volume of water that would cover 1 million acres to a depth of 1 foot. An acre-foot is 1,233.5 m³. The unit of measure has been historically used in the U.S. for water management, and also followed in Pakistan, along with Cusec, which is a measure of flow rate and an informal shorthand for ‘cubic feet per second’ which equals 28.317 liters per second.

²⁹ Subsequent studies were conducted in Jan 1953 and Oct 1954, proposed a large dam that could store about 4 MAF of water and generate 600 MW of power. Pakistani government constituted the Dam Investigation Circle in 1953 and appointed an advisory board of foreign consulting firms, retaining the U.S. firm, Tipton and Hill, to prepare feasibility of the projects being considered. Tipton and Hill conducted studies along the Jhelum and Indus, and finalized plans for the construction of a large dam on Jhelum by 1954, but revisions continued to be made to these plans during the late 1950s and the 1960s. The design and feasibility of Tarbela wasn’t completed until after the completion of IWT. Cf. “Summary for the Governors’ Conference (10 June, 1961),” 1961. Implementation of the Indus Basin projects arising out of the Indus Water Treaty and Indus Basin Development Fund Agreement, 674/CF/59-II, NDC. (Naqvi, 2013; Tarar, 1975)

the time. The Pakistani government and the World Bank set about to build the world's largest dam, the biggest earth-filled dam, and the largest volume-structure ever built by humans.³⁰ The Tarbela dam, named after a small village famous for its fishes, became the centerpiece of Pakistan's ambitious plans to enclose the Indus River.

The 'dam on the Indus,' as the planning documents referred to Tarbela Dam, was the last project completed as part of the audacious multi-project plan dreamed up by the World Bank and Pakistan to develop and extend the Indus Basin Irrigation System (IBIS). The IBIS was built over a century of river infrastructure development when the British colonizers started damming and diverting the eastern tributaries of Indus River from the middle of the 19th century. The (Upper) Bari Doab Canal was the first perennial built by diverting the Ravi River at Madhupor in 1859.³¹ By the end of British rule in 1947, Indus River and its eastern tributaries (Jhelum, Chenab, Ravi, Sutlej, and Beas) had been dammed and diverted into 42 canals spanning over 38,000 miles and irrigating about 38 million acres of land.³² The Indus Basin Irrigation System is the largest integrated irrigation system in the world, with an irrigated area that equals the total irrigated area in the United States and an eighth of the total irrigated area of the world.³³ The British built several small run-of-the-river diversion dams, also known as barrages, across the Indus Basin. The post-

³⁰ Tarbela dam is the largest by structure volume, a massive 153 million cubic meters, compared with 65.4 million of Mangla, 44.3 mil of Aswan dam, and 27.4 mil of the Three Gorges Dam. Earth and rock-filled dams might be the largest built-structures on the planet. [source/verify claim!!]

³¹ While the Indus Basin boasted of an already impressive irrigation system built before the British colonial rule, these were inundation canals. The practice of damming and diverting rivers to build perennial canals began with the British, with the construction of weirs, barrages and headworks across rivers and the rehabilitation and remodeling inundation canals starting in 1820s [cite]. By 1848, the College of Civil Engineering at Roorkee started producing a professional cadre of civil engineers as the demand for irrigation engineers started to rise with the Construction of the Ganges Canal in the 1840s. After the British conquest of the Punjab in 1850s, the British sought to extend the irrigation in the newly acquired province, and to put the population to 'productive use' [cite].

³² (Bank, 1976)

³³ *ibid*

colonial states of India and Pakistan started to build mega-dams after the partition of British India 1947.³⁴

The partition of British India split the Indus Basin Irrigation System between the two newly born and mutually hostile nation-states. The early years saw India and Pakistan go to war over Kashmir, and India threatened to stop the water flowing into the irrigated areas of Pakistan.³⁵ Negotiations led to temporary agreements, but the water conflict continued to persist as India insisted on its right to divert rivers that flowed through its territory while Pakistan pointed to the doctrines of prior use and lower-riparian rights. To reach a permanent solution to the problem, the World Bank suggested a division of Indus water: India gets to control the three eastern tributaries – Ravi, Beas, and Sutlej, while Pakistan has rights over the “western” rivers that include Indus, Jhelum, and Chenab.

The project and subsequent plans for the Indus enclosure provided a “technical” and “non-political” solution to the water dispute between India and Pakistan. David Lilienthal, the American

³⁴ Bhakra dam was the first mega-dam on the Indus river system, built on a major eastern tributary, the Sutlej River. Pakistan’s first mega-dam was built on another eastern tributary, Jhelum River at Mangla. Tarbela is the first mega-dam built on the Indus river itself.

³⁵ The partition of Punjab was ostensibly done on religious-demographic grounds, and led to controversies around the decisions of the British boundary commission’s Radcliffe Award, disputes that were most prominent around the state of Jammu & Kashmir and Indus river systems. Soon after partition, the Indian state claimed rights over rivers that flow through its territory and demanded payments from Pakistan for the use of water from the “Eastern rivers” – the eastern-most of the five major left-bank tributaries of the Indus, which include Beas, Sutlej, and Ravi. Historian Daniel Haines has noted that a precedent for such a demand was set by the British when the British Indian government demanded similar payments from the princely states of Patiala and Bikaner which were getting water from the Sirhind Canal. But the argument was based on the fact that the Sutlej river, from which the Sirhind Canal was diverted, didn’t flow naturally through Patiala and Bikaner, and after independent the Indian government did away with such arrangements, based on the idea of an India united territorially. Pakistan and India agreed to a “Stand Still Agreement” on Dec 18, 1947 to allow sufficient time for reaching agreement around the sharing of the Indus rivers. No such agreement could be reached by March 31, 1948 when the agreement ended, and India stopped supplies to the canals that flowed across the border to Pakistan at a critical period for the *kharif* sowing season. An agreement was reached in May 1948 (Inter-Dominion Agreement on Canal Water Dispute), but Pakistan’s fears were further stoked as India started building river infrastructure projects on the eastern rivers. The partition had set the stage for the future conflicts around the state of Jammu & Kashmir, and the control over the Indus river system – two issues that have been at the heart of the four wars fought between the two hostile countries. Cf (Haines, 2017; Naqvi, 2013)

lawyer and administrator who headed the Tennessee Valley Authority and oversaw a comprehensive study on the development of Indus Valley, urged the concerned parties to see the challenge of splitting the Indus basin as ‘a feasible engineering and business problem’ rather than a ‘religious or political problem.’³⁶ Pakistan’s hydraulic losses due to Indian control of the eastern rivers were to be “irrigated by supplies transferred from the Western Rivers by a system of link canals, backed up by a volume of reservoir storage.”³⁷ After a decade of negotiations, the two countries signed the Indus Water Treaty on Sept 16, 1960. The World Bank set up the Indus Basin Development Fund fed by loans from USA, UK, Australia, Canada, and Germany, and announced plans for Indus Basin Development Project were announced overseen by the Water and Power Development Authority (Wapda) of Pakistan.³⁸

The Tarbela dam became one of the most critical parts of the Indus Basin Irrigation System, extended it by stocking the seasonal flows of Indus River. It diverted these stocks eastwards to compensate for water lost to India and southwards to extend perennial canal irrigation to parts of

³⁶ Quoted in (Akhter, 2013, p. 63) See also chapter 2 of Akhter’s thesis for details. Raymond Albert Wheeler, the U.S. retired Lieutenant General, and the Engineering Advisor to the World Bank since 1949, represented the World Bank from 1952 to 1960 in the negotiations between India and Pakistan.

³⁷ (World Bank, 1960, p. 1) The plans changed over time, but the 1960 documents shows plans to build: two large dams and storage reservoirs on the Jhelum and Upper Indus, hydro-electric power installation at Jhelum, six new major inter-river link canals joining the Indus to Jhelum, to Chenab, to Ravi, and to Sutlej; three new barrages where these new canals crossed the rivers, remodeling of five existing barrages, four existing inter-river canals, and four existing canals, along with tubewell and drainage works (ibid, p2)

³⁸ Government of Pakistan established the Indus Basin Development Board in January, 1960 with the Water and Power Development Authority (Wapda) to oversee these projects. The Board was responsible for approving: (A) the final layout of various projects, (B) Overall programme for carrying out the Plan which would include the proposed scheduling and financing, and "the plan for the utilisation of water and power developed after the projects have been completed." World Bank offers some feedback (dated Dec 22, 1959), clarifying that the board's tasks in terms of approval are not merely "purely engineering" plans, asks for reducing the number of members to five instead of the proposed 7, suggest revising the subjects that the Board will review to (a) the physical programs of the works as compared with the original schedule; (b) the actual expenditures on the projects compared with the original estimates. Signed John C Wilde, WB Resident Representative to W.A. Shaikh, Joint Sec, MoWorks, Irrigation & Power. ("Indus Basin Development Board," 1960; *The Indus Basin Development Fund (supplemental) Agreement, 1964, 1964*)

the western and southern Indus basin.³⁹ About half of the canals of the IBIS were operating on a non-perennial basis, drying up during the winter.⁴⁰ Large reservoirs could stock summer flows and temporally extend river irrigation systems to the *rabi* or winter cropping season. Additionally, Pakistan lost the control over the easternmost tributaries of Indus basin,⁴¹ and the stocked water from large reservoirs could also be used to “replace” lost water, as per the Indus Water Treaty, by spatially linking rivers through canals and transferring flows from Indus and Jhelum eastward, but also for stocking water during the high-flow season (*kharif* or summer cropping months corresponding with increased snow-melt and monsoon rains).

The massive undertaking of building Tarbela dam was, unsurprisingly, fraught with financial and technical challenges. The financial woes stalled progress for a decade. The Government of Pakistan insisted on the inclusion of the Tarbela dam in the Indus Water Treaty and the corresponding Indus Development Plan (IDP). Under the Indus Water Treaty (IWT) of 1960, Pakistan built two mega-dams on Jhelum and Indus rivers, but the latter at Tarbela was more daring with higher potential for irrigation expansion. The dam on Jhelum river, built at Mangla had an initial live storage of 5.3 MAF, designed to capture more than 20% of the annual discharge of the Jhelum river. But Pakistan was preparing to replace 25 MAF it would lose if India had diverted all of the flows of the eastern rivers. Tarbela could provide 11 MAF of gross storage

³⁹ The dam also has the biggest powerplant in Pakistan and made a significant contribution in the power sector, but at the time of its primary significance was with regards to agriculture.

⁴⁰ This also holds true for the canals diverted from Jinnah, Taunsa, Guddu, and Kotri barrages built by Pakistan in 1947, 1958, 1962, and 1955 respectively. While these barrages converted old inundation canals into permanent structures controlled by headwords on the river, and added 9 million acres of irrigated land to the IBIS, 50% had nonperennial supply indicating that the winter (*rabi*) flows were already committed. On this and the need for the reservoirs, see *Indus Special Study* (Liefertink et al, 1967a).

⁴¹ 167 of 175 MAF of the average annual Indus flows enter Pakistan, but with the IWT India got the right to divert all the flows of Ravi, Beas, and Sutlej from March 31, 1970 (or 1973 if Pakistan used a contingency extension period). Leaving 142 MAF from Indus, Kabul, Jhelum and Chenab. *Indus Special Study*, p28

tapping a larger source with average annual flows of 65 MAF – almost three times that of Jhelum. Furthermore, flows of Jhelum are dependent on monsoon and more variable, ranging between 65% to 135% of the annual average of 23 MAF, making it less reliable from year to year. Indus flows, on the other hand, depended less on rain than on snow and glacial melt. The high variability of Jhelum also made it more flood-prone– at the time of design, the maximum-flood at Mangla was recorded to be 1.1 million cusecs compared with 0.875 million cusecs at Tarbela since 1929. The enclosure of Indus at Tarbela held the promise of a greater quantity of water, more equally distributed over the years and across seasonal cropping cycles. But the World Bank initially only agreed to the construction of one large dam, at Mangla, and then later a second ‘dam on the Indus’ was agreed upon, was unconvinced about the financial viability of the Tarbela project.⁴² The Bank insisted that Pakistan explore alternatives, like raising of Mangla dam or building a cheaper dam at the Kalabagh site. Wapda held its ground and eventually prevailed.⁴³ The Bank decided to conduct a comprehensive study of the water and power resources of Pakistan from 1964 to 1967,⁴⁴ and declared that the Tarbela Dam was technically feasible but required USD 900 million in investment with a promise of 12 percent return on investment. By that time, the Indus Development Fund (IDF) was running low, and major donor countries were reluctant to invest in the Tarbela project.⁴⁵ With the World Bank on board, the high cost of Tarbela dam project as compared to

⁴² Agenda for Governors' Conference to be held May 23-25, 1962, RWP, 353/CF/62, NDC

⁴³ Interview, Shamsul Mulk, ex-Chairman Wapda and Project Director Tarbela Dam Project. Also see *ibid*.

⁴⁴ Published in three volumes in 1968, this study is also known as the Indus Special Study. (Liefstinck, Sadove, & Creyke, 1968a, 1968b, 1968c)

⁴⁵ Cost overruns were a problem even before Tarbela dam was finalized. Total cost of the Indus Basin Development Plan was originally estimated at USD 838 million, and the Indus Fund raised USD 867 largely through bilateral and multilateral debt financing. A supplemental agreement in 1964, added USD 315 million to the IBDF, bringing the total expenditure of USD 1,246.5 mil by 1975. A separate agreement was required for Tarbela project (World Bank, 1976: p3-4). Cf (World Bank, 1975) On the reluctance of donor countries, see (“Tarbela: US still undecided,” 1967)

alternatives – PKR 93 per acre-feet of irrigation compared to PKR 19 per acre-feet through tubewell – was deemed reasonable given the overall significance of Tarbela in the development of the Indus Basin irrigation. New funds were sought under the Tarbela Development Fund Agreement of 1968, and the contract was awarded to the Italian-French consortium (TJV) sponsored by Impregilo of Italy - “the largest single contract in the history of civil engineering construction.”⁴⁶



Figure 3: Tarbela Dam [source: Wapda]

The construction of the Tarbela dam posed challenges, including labor strikes and design failures that threatened the structural integrity of the entire project.⁴⁷ When the dam was built, and

⁴⁶ (Tarar, 1975, p. 13; “Tender for Tarbela dam,” 1968)

⁴⁷ Strike at Tarbela. (1974). Minutes of the Cabinet meeting held on Monday Feb 4th, 1974.

the reservoir was impounded, two of the four tunnels that diverted water to the hydropower turbines were badly damaged.⁴⁸ This required novel solutions and the development of a new type of concrete using locally available material. Shamsul Mulk – a career engineer who rose through the ranks and became the Project Director of the Tarbela project, eventually becoming the Chairman of Wapda and Chief Minister of the Khyber-Pakhtunkhwa legislative assembly, saw the dam as nothing less than a miracle:⁴⁹

“When Tarbela was completed [in 1976], hundreds of visitors came, including consultants and engineers from all over the world. They would say that the dam was a miracle. I used to say to them it wasn’t the construction of the dam that was a miracle, but the repairs of the dam. [...] It was the summer of 1974 when the right abutment was washed away due to floods of June and July. It had to be rebuilt. We had to find new solutions – and we ended up building a new material – rollecrete [rolled-compacted concrete, a cheap form of concrete] which solved the problem and did not incur high costs. And this work had to be done before the next season’s floods – we did this in 43 days. That was the real miracle.”

Overcoming the technical, financial, and political challenges of building Tarbela Dam gave the Pakistani state and Wapda a sense of pride and confidence. The Dam became the crown jewel of the Indus Basin Project. The government organized visits for international dignitaries and heads of state to the newly constructed dam site, to demonstrate Pakistan’s technical prowess and the signs of the prosperous future of the nation. On a visit soon after the dam’s inauguration, the Shah of Iran observed that the dam was “a big success” and a remarkable example of the use of natural

⁴⁸ Tarbela Dam Situation. (1976). Decision to setup a Commission to enquire into the mishaps at Tarbela by Sept 1976; Dawn 3/10/1976

⁴⁹ Interview, Shamsul Mulk, Islamabad, October 2017. Shamsul Mulk graduated in 1951 and joined the NWFP (now KPK) Public Works Department and worked on rainwater storage dams. When Wapda was formed in 1958, they requested Shamsul Mulk on loan since he was one of the few Pakistani engineers with experience of working on dams. He made his way through the ranks and became the Chief Engineer Construction of Tarbela Dam Project, eventually promoted as the General Manager and Project Director of the project. After a six-year stint in Nigeria as a consultant, he returned to Wapda as the Project Director of the Kalabagh dam in 1987, eventually promoted to Member Water, and then the Chairman Wapda, retiring in 1996, and called back for a second term. He was later to become the Chief Minister of the NWFP province during the government of the military dictator General Pervaiz Musharraf.

resources by humanity for building civilization. The World Bank remarked on the ‘truly staggering’ nature of the dam as it “dwarf[ed] all comparable structures around the world.”⁵⁰ The Bank’s President at the time, Robert McNamara, boasted of the Bank’s experience in financing and executing as complex a project as Tarbela dam to the Prime Minister of Nepal on a visit to discuss the Karnali Dam Project in the Himalayas.⁵¹ The Tarbela Dam was lauded all across the board for lifting Pakistan’s economy and solving the issue of water shortages due to the partition of the Indus Basin.

Shamsul Mulk saw the conquest over Indus as the response to the calls of freedom by the country’s founders. The dream of an independent homeland for the Muslims of South Asia was tied to notions of a good life, and for Mr. Mulk and Pakistani rulers, the dream was realized by exploiting the natural resources of Pakistan and develop the country, to modernize its economy. The dam on the Indus presented the solution to Pakistan’s problems of water shortages and low yields, the need for cheap electricity and flood control.

“You build a dam. You store water. By storing water, you reduce flood damages during summer months and use the surplus water during winter for irrigation. Dams are the solution to Pakistan’s ailment.” (interview, Mulk).

For the builders, the Tarbela dam was a symbol of man’s conquest over the powerful forces of nature, taming the river flows and bending it to human will. S.K. Baloch’s poem Taming of the Indus at Tarbela, published in Wapda’s public relations magazine *Indus*, captured these sentiments. Baloch refers to the Indus as a “Himalayan god” that is worshipped by “cringing mortals” who

⁵⁰ Address on the Groundbreaking Ceremony of Tarbela Dam. 2nd draft - Address by Mr. Cargill. (1968, October 24). Cargill, I. P. M. -Articles and Speeches (1955 -1968). Records of Office of External Affairs (WB IBRD/IDA EXT). Folder 1651471

⁵¹ NEPAL: Mr. McNamara’s Discussion with the Prime Minister. (1972, February 8). . Office Memorandum, . Retrieved October 9, 2018, from <http://pubdocs.worldbank.org/en/764131391013583995/wbg-archives-1771132-o.pdf>.

beg for mercy from its raging waters, but the dam chained the mighty river and protected the fields and farms from floods, provided water to thirsty land, and lit up the country with golden fields of wheat and corn and the ‘bright and gold rays’ of hydel power.⁵²

Dam gigantic that had risen
Damming up its downward course
Now trammelled it as if in chains
It couldn't pillage farm and field
Chasing men and drowning cattle
Flooding fields of golden corn
But held in harness meekly flowed
Through spillways over to thirsty lands
That yearned for water as of yore

2.3 River Overflows as a Land Problem

Overcoming the technical and financial challenges was only half of the problem for the builders of the Tarbela dam, as the social overflows of the displaced posed another significant challenge to the state. Large dams are now synonymous with problems of development-induced displacement, and the Tarbela dam was no exception. The reservoir engulfed over 250 square km of land, most of the prime agricultural land in the riverine valley of Hazara district of Khyber Pakhtunkhwa province.⁵³ Official count around the number of displaced started at about 30,000 in 1960, went up to estimated 80,000 during the early 1990s, and today stands at 96,000 people.

⁵² First published in the Jan 1966 issue of the journal *Indus*, published by the Public Relations wing of Wapda, reproduced here from (Akhter, 2013, p. 114)

⁵³ The Khyber Pakhtunkhwa province was formerly known as North-West Frontier Province. At the time of planning the dam, the land under Tarbela reservoir was split between NWFP, the State of Amb, and the Frontier Region Kala Dhaka, part of Pakistan's tribal areas. During the 1960s, the military government of Ayub Khan had abolished the provincial governments, consolidated the provinces of Western Pakistan into a single unit to counter the majority of East Pakistan. The country's split in 1971 led to administrative reshuffling, with the NWFP reinstated as a province and the State of Amb became part of the province.

The resettlement plan was an exercise in the redistribution of Indus lands. It had two major components: land acquisition with payment for immovable assets; and resettlement through the option to purchase residential, commercial, and agricultural land elsewhere. The state approach to resettlement reflected the tension between economic and moral concerns. Wapda was concerned with reducing the cost of the project, while the executive branch treated the issue as a humanitarian one. Wapda viewed resettlement as a ‘technical’ problem and displacement as an acceptable consequence of large public sector projects. The government, including the Cabinet and the President, showed a strong sense of moral responsibility towards the displaced people who had made great sacrifices in the interest of the nation. I describe how the government went about resettling the displaced at a time when new environmental or social regulations were not in place.

Land Acquisition Policy:

The dam site required the acquisition of 82,100 acres of land, with 70% of this land submerged along with 120 villages, plus additional 15 villages that were affected due to land required for the construction area, residential colonies, roads, and associated infrastructure. The government acquired land using the Land Acquisition Act of 1894.

The primary policy instrument, the Land Acquisition Act of 1894 (LAA), codifies the state’s power of eminent domain, i.e., the power to take private property for public use, after paying ‘fair compensation.’⁵⁴ These powers are vested in the Provincial governments, and once the

⁵⁴ Article 2 of the 1973 Constitution of Pakistan gives the LAA its sanctity – section (2) states: “Article 24 of the Constitution of Pakistan states that “no property shall be compulsorily acquired or taken possession of save for a *public purpose* and save by the authority of law, which provides for compensation therefore and either fixes the amount of compensation or specifies the principles, on, and the manner in which, compensation is to be determined and given.” Articles 152 and 173 also pertain to land acquisition: 152 (provides for land acquisition by Federal govt for any purpose for which the Parliament can make laws, and allows for transfer of land owned by Provinces to Federal government by agreement.

required land is identified for acquisition by the Land Acquisition Collector, usually the District Collector of the revenue department identifies the landowners, measures land, and calculates what constitutes fair compensation. If the government finds the award satisfactory, it publishes a notification with the date of land acquisition, compensation, and list of those to be compensated. The government can then take control of the land on the said date, even if owners are not satisfied with any aspect of the process. However, the landowners can file an appeal in the civil courts if they are not satisfied with any other aspect of the process.

The LAA is a draconian law designed for forcible evictions with limited concerns for those who don't have formal rights.⁵⁵ The LAA has no provisions for locals to prevent land acquisition – once the government has decided on a project site, no legal recourse is available to the land users to prevent this land from being taken. The law only considers title holders, tenants with a formal lease agreement, or tenants registered with the land revenue department as the affected people. Landowners are compensated for the loss of land and immovable property, while tenants and leaseholders might be compensated for lost rent on the property or price for standing crops. Informal settlers, tenants, or other landless groups aren't deemed eligible for compensation, and thus not recognized as affected peoples under the LAA.⁵⁶ This might have worked for the colonial state, but doesn't fit with the democratic imperative that legitimizes postcolonial states in South Asia (Asif 1999).

For those deemed eligible, the biggest problem is what constitutes 'just compensation.' The LAA offers 'replacement cost' or market values, usually determined as the median of

⁵⁵ Recent use of LAA acts for 'housing schemes' has been criticized as many of these schemes consist of gated posh housing societies for upper-middle and high-income groups, and the term 'public use' has been used fairly loosely in this case. Dams and river infrastructure projects tend to fit the criteria of 'public use' projects.

⁵⁶ In urban areas, the laws dealing with Katchi Abadis, or informal settlements, provide some measure of protection to the landless.

registered transfer rate over the year before notifications are issued. Several problems emerge with this formula: the registered land prices in rural area tend to under-represent the land value to avoid higher taxes; transfers are often done without registered sales informally among family or kin; the law doesn't specify a time period between acquisition, award, and payment of awards which leads to delays and loss of land value; land valuations are done on the issuance of first notification, rather than at the time of taking possession; checks and balances for protecting the rights of person interested are loosely interpreted.⁵⁷

During the early stages of Tarbela's planning, Wapda and the state officials were quite confident in their ability to acquire land given all the powers of the LAA of 1894. Eventually, this confidence waned as the complexity and the cost of land acquisition became obvious. There were political and administrative concerns as well. The would-be affected areas included both settled and tribal areas – which meant that the Land Acquisition Act did not apply to the Tribal areas and the State of Amb.⁵⁸ Furthermore, Wapda as primarily concerned with cutting costs and suggested even stricter measures than the colonial-era law allowed.

The original notifications for Tarbela land acquisition was issued in 1960 under section 4 of the Land Acquisition Act, but most of the land was not acquired. Since the LAA notification didn't prohibit sales, a concern was raised regarding speculative sales to inflate land prices. Some were of the view that land prices must be calculated at the average market prices from 1955 to 1960, five years prior to the original notification, and some interest could be paid to the affected people on this price. However, others were of the view that new notifications must be issued, and the prices must be based on the 12-month average of prior year (1966-7), as per the Land

⁵⁷ Cf an analysis by the advocate of Supreme Court of Pakistan, (Kalanauri, n.d.) a

⁵⁸ The term settled areas, refers to the land settlement process through which the British introduce private property laws to determine taxation and revenue demands on agricultural land; [describe this??]

Acquisition Law. The LAA also gave local collectors the power to discount speculative prices, and prices could be based on registered sale prices rather than the informal exchange of land through *intiqal*, or the land transfer procedure. Neighboring market prices could be considered for areas where market prices weren't available -- this could be applied to the tribal areas and the land possessed by the Nawab of Amb, who could be paid prices of similar quality land in settled areas of the district.

Wapda demanded a central role in the land acquisition process, asked the government to pass special laws that would deny affectees the right to appeal in Civil Courts. Citing the precedence of the Mangla Dam, built a few years before Tarbela, Wapda noted that a "too liberal policy of compensation and resettlement was adopted at Mangla, which increased costs abnormally." Instead, Wapda suggested the policy adopted for the acquisition of land for building the capital city of Islamabad. land valuations should be based on average prices of past five years to cut costs. Wapda also warned against "certain unscrupulous elements in the area... [who were] trying to step up agitation among landowners for the purpose of extracting exorbitant compensation." Wapda advised the government to devise a clear policy, publicize it widely and then follow it strictly so that the "agitation and the trouble in the area is controlled."⁵⁹

Considering Wapda's concern regarding the local district administration, who were deemed "too favorable to the locals" in determining prices, it was decided that "good officers" would be appointed as land acquisition collectors and the provincial government and Wapda officials will form local Committee to oversee their work and act in an advisory capacity. This check and balance would take care of the "too favorable" approach by local revenue administration,

⁵⁹ "Policy and Procedure for the Land Acquisition of Tarbela Dam," February 14, 1967. 158/CF/67, NDC.

undoubtedly a euphemism for rent-seeking behavior where revenue officers could alter records to hike up the valuation and receive a cut from the compensation money.

Overall, Wapda's cynical views were not shared by the President and the Cabinet, who noted that the government had the responsibility of compensating all the affected peoples. It would be unfair to give compensation on rates during the past five years -- prices had risen during these years, and compensation must be paid with some interest. However, the committee suggested that since the people were still in possession of the land, and were reaping benefits from it, the interest could be halved. The Finance minister asked for a comparison of the land acquisition cost of Mangla with the expected cost on Tarbela to ensure that Tarbela affectees did not receive any less generous treatment.⁶⁰

Land Distribution Policy:

To overcome the shortcomings of Land Acquisition Policies, the government devised plans to provide alternate land and build resettlement schemes for the Tarbela displaced. Drawing from the British playbook, the Pakistani state wanted to "produce" new land by building perennial irrigation canals and settle the Tarbela displaced, just as the British did in the early 20th century to then given that land to reward soldiers and bring in 'non-local' primarily Punjabi farmers.⁶¹ Wapda was asked in 1960 to fulfill its mandate of devising a plan for the "resettlement or re-housing" of

⁶⁰ "Meeting of the Cabinet Held on Wednesday, 26th of April 1967 at 9:00 Am at Islamabad," April 26, 1967. 158/CF/67, NDC.

⁶¹ A sign of this confidence is evident in the belief that people would have so much money that the government would need to come up with investment schemes, lest the money goes to waste. The President asked for the compensation to be paid in bonds and securities rather than cash [Meeting May 31, 1961], and National Savings Department was told in summer 1962 to make good use of the delay caused by lack of financing for Tarbela dam and figure out plans for savings and investment opportunities for those by the time compensation would be paid. [cite]

the people likely to be displaced by Tarbela and Mangla dam.⁶² While estimates on the expected number of displaced were not available at this stage, the government asked the provincial revenue department to set aside alternate land in “in the colony districts of the former province of Punjab and Bahawalpur State.”⁶³

Resettling a large number of the displaced was done using a two-pronged approach of building resettlement towns and providing alternate land for agriculture. Five resettlement towns were built near the lake reservoir, with a total of 13,489 residential and commercial plots, available for purchase by first-come-first-serve, one plot one affected family basis. According to official figures, about 42,080 of the 96,000 affectees (43.8%) are settled in these five towns, another 30,000 (31%) settled on their own near the reservoir, while about a quarter of the affectees migrated to other parts of the country.⁶⁴ The provision of alternate agricultural land was arguably the most challenging of these tasks. Eligible families, those with a minimum of half an acre of irrigated or two acres of unirrigated land, were given the option of purchasing land in other parts

⁶² The Pakistan Water and Power Development Authority Act, 1958, Pub. L. No. (W.P. Act XXXI of 1958) (1958). Section 8.3.iii requires Wapda to submit a resettlement plan for its projects "for the resettlement or re-housing of persons likely to be displaced by the execution of the scheme." Archival sources show that on July 17, 1960, the finance minister at the time, Zulfikar Ali Bhutto requested the Joint Secretary of Kashmir to submit a plan for rehabilitating the Mangla displaced. The President Ayub Khan asked for a similar report for the resettlement of Tarbela Dam affectees in a high-level cabinet meeting on Sept 26, 1960. (“Settlement of people displaced from Tarbela and Mangla,” 1960)

⁶³ Ibid. Correspondence between the Cabinet Secretary M.A Faruqi to the Secretary Revenue Department, West Pakistan Province, Mr. Khuda Baksh, dated 18/2/1961; 27/2/1961, 24/3/1961. In the letter by Khuda Baksh (sec revenue) to Faruqi (cabinet secretary) on March 24, 1961, he relays the information by WAPDA chairman and adds a note about allocation of land in Punjab and Bahawalpur states, "Information received from them [Board of Revenue] indicates that the position regarding availability of States land in old colonies of the former Punjab is not bright. It was suggested by them that the area may be reserved in the district of D.G. Khan and Thal.

⁶⁴ WCD, 2000, p77, table 3.47

of the country. A total of 60,000 acres of agricultural land was set aside for the Tarbela displaced, spread across the rural and canal irrigated areas of Sindh and Punjab provinces.⁶⁵

In a cabinet meeting on Sept 26, 1960, the President asked for a report on the resettlement arrangements for the people that would be displaced by Tarbela Dam.⁶⁶ WAPDA Chairman Ghulam Ishaq prepared preliminary land acquisition, compensation, and resettlement plan for Tarbela displaced to the President on March 14, 1961. "I assure you," writes Ghulam Ishaq, "rehabilitation is very much on my mind." At this stage, Ishaq warns the government not to repeat the formula used for Mangla, asking that the demands of land for Mangla resettlement must be lowered and be more reasonable so that "we do not allot all the good lands now available to the one project." ⁶⁷

Early estimates put the expected displaced at 30,000 – less than a third of the eventual 96,000 displaced. At the time, even Wapda was feeling rather generous, and was willing to set aside 50,000 acres of land for resettlement – this was expected to be a significant percentage of

⁶⁵ On NWFP/KPK's refusal to provide land, reasoning that all state land was already allocated for military grant and other purposes.

⁶⁶ The issue was taken up by the Land Utilisation Committee of West Pakistan province (under the One Unit scheme) on Nov 26, 1960, which deems it "pre-mature" to reserve land without final site selection of the dam, the principle of land-for-land compensation is agreed upon and Wapda is asked to provide details of: "1) the total area required for construction of Tarbela, 2) Area privately owned, 3) total cultivated area owned privately, 4) Number of displaced persons, 5) total area required for the resettlement of displaced persons and the basis on which this has been calculated."

⁶⁷ For Mangla, 90,000 acres was earmarked in Oct 1959, subsequently raised to a round figure of 100,00 acres, with the minimum allotment fixed at half the subsistence holding, i.e. 6.5 acres of irrigated land in Punjab for all families that owned more than one acre of land. As per these criteria, land requirement was revised down to 81,000 acres. In January 1961, the President of Azad Kashmir met with the President of Pakistan and Chairman Wapda at Mangla and requested changes in the eligibility and minimum allotment area: all persons owning more than half an acre of land instead of one acre were to be deemed eligible, and the minimum allotted plots were to be brought up to the subsistence levels of 12.5 acres instead of 6.5 acres. These demands caused serious concerns about the availability of land -- Chairman Wapda observed that the new criteria would increase the number of families to be resettled, and raise the land required from 81,000 acres to 175,000 acres. While the decision on this issue was pending at the time, Chairman Wapda expressed early concerns that not only will the new criteria use up "the entire available state land in the former Punjab districts", leaving no land for Tarbela affectees, and it would also set a dangerous precedent for Tarbela resettlement. Ishaq, Ghulam. "D.O.No. 715/PS/C-61," March 14, 1961. 494/CF/60, NDC.

the total expected newly irrigated land, about 16.7% of 300,000 acres. Wapda also believed that many locals would prefer to resettle in the same district, to maintain cultural and social ties, and therefore emphasized the need for building resettlement townships that could serve as housing and new commercial hubs, as the displacement would create opportunities for new ventures like tourism, industrial fishing, small industries relying on cheap power, and commercial enterprises.

The desire to provide alternate land for the landowners of the Tarbela reservoir led to a crisis of land in the Indus basin. The Provincial revenue department pointed out to the Federal cabinet that "the position regarding availability of States land in old colonies of the former Punjab is not bright," and land may be reserved in new barrages area of Punjab near Taunsa and Jhelum barrages built in 1958 and 1949 respectively. This 'new productive' land was sufficient, given that only 50,000 acres were reserved for Mangla displaced.⁶⁸ Over the next year, conversations between Wapda, the Revenue department, and federal ministries continued, and the amount of land required for the rehabilitation of the Tarbela and Mangla affectees kept fluctuating. By early 1962, the Secretary Board of Revenue, West Pakistan informed Chairman Wapda that 150,000 acres of state land were "required for persons likely to be affected by construction of the Turbela [sic] Dam." A third of this had "already been reserved" in the old colony districts of Punjab, and 100,000 acres were required in new barrages areas. An additional 125,000 acres were still required for Mangla affectees. The land would be required over a long period of time, with about 38,000 required after the completion of first phase of construction in Dec 1964, 16,000 acres in 1965, 8,000 in 1966, and 34,500 acres in the subsequent four years of the third phase of construction (1967-70).⁶⁹

⁶⁸ The Secretary Revenue Department, Khuda Baksh, Correspondence with the President's Secretariat in June 1961,

⁶⁹ Construction on Tarbela was delayed, since Pakistan failed to convince the World Bank that the 'dam on the Indus', mentioned in the Indus Water Treaty of 1960, meant Tarbela. As I have outlined above, the Bank had insisted on a

The state, therefore, decided to shift its policy so that it can limit the amount of land needed to resettle the displaced. Wapda and IBDB advised that those who own a minimum of 4 acres of irrigated land be deemed eligible for alternate agricultural land -- this would raise the minimum ownership criteria used for Mangla at half an acre of irrigated land. Concerns were raised that, as per this limit, 90 percent of the population will be deemed ineligible. After some debate and suggestion of 2 acres of irrigated and 6 acres of *barani* (rain-fed) land, ultimately the Mangla criteria were to be adopted. The allotment sizes were fixed at minimum subsistence level, with the eligible given the option to purchase 12.5 acres of agricultural land in the old canal colonies of Punjab, and 16-34 acres in the new barrages area, depending on land quality. There was no upper limit fixed for the barrages area, but for the prized land of canal colonies 50 acres was held as the maximum limit. Furthermore, no restrictions were imposed on securing land in both the colony and project areas. It was suggested that the land must be offered on the one-year average prices prior to May 1967, to be fair to the affectees, and in the Barrage area the price can be fixed by the Revenue department, and concessions of PKR 100 per acre should be made. The issue of how much land to allocate remained contentious for decades to come. At the time, however, the state was optimistic that 30,000 acres of land could be offered in the old canal colonies, though this might be rejected as it was of marginal quality. A lot of land, almost 61,000 acres could be offered in the G.M (Kotri) Barrage area in Sindh, but it was deemed unlikely that the displaced person would move that far south of the country.

cheaper dam, possibly at Kalabagh, but Pakistani dam builders wanted to go big, and secure funding and technical support for a dam like Tarbela which they could not build on their own (Shamsul Mulk, interview) -- Kalabagh was deemed to be less technical. It would take another half a decade, and the large Indus Special Study overseen by Lieftinck, before World Bank got on board.

Resettlement as Land Redistribution

The Tarbela resettlement policy, announced in a high-level meeting on May 4, 1967, by the President Field Marshal Ayub Khan, drew upon existing laws, the experience of settling the partition refugees, and the experience of Mangla Dam resettlement planning. Following the meeting, Wapda set up a separate organization for the land acquisition and resettlement, the Tarbela Dam Resettlement Organization (TDRO), headed by the Project Director of Tarbela Dam. The Province deputed revenue officers to Wapda to serve as land collectors, but issues began to emerge due to differences of opinions about the price of land between Wapda and the local administration. An advisory committee was put in place to resolve such internal conflicts.

The overview of the planning of the Tarbela dam highlights certain features of the Indus enclosure, as the post-colonial state took on this task from the British colonizers with support from and significant influence of the World Bank. While the State and the Bank saw Tarbela as their most significant accomplishment, tied to narratives of nation-building and economic growth, the financial and technical challenges influenced plans for resettling the displaced. Wapda, in particular, tasked with overseeing the project, opposed generous land allotment that used in the case of resettling the displaced of the Mangla Dam. Instead, Wapda suggested a strict application of the colonial-era land acquisition act and advised the government to ignore provisions for resettling allowances, temporary housing, and rights of appeal to save costs and avoid delays. However, the high-level officials of the state, including the military dictator presiding over the country, saw the issue of the displaced from a 'humanitarian lens' viewing it as a problem similar to the resettlement of the partition refugees.

Resettlement woes were viewed as a political problems. Shamsul Mulk notes that the Ayub government gave power to technical experts and shielded them from 'political' interference – he

further points to the inefficiencies of the Provincial revenue department as the major cause of the problems faced by the Tarbela affected people. While Wapda played a central role in the land acquisition and resettlement process, its legal powers were limited to an advisory role. Land Acquisition and allocation of alternate land fell under the purview of provincial authority.⁷⁰

In effect, the state tried to assume total control over the waters and land of the Indus river basin. The Tarbela dam as a project was designed to redistribute Indus water flows to meet the need for the ‘hydraulic loss’ to India. Stocking the river flows meant generating new social overflows, and conflicts around the distribution and allocation of land as a replacement for the land used up in the dam reservoir construction. In other words, those excluded in the upstream areas due to stocking of Indus flows were to be given land in the downstream areas irrigated by new river flows. This entire project of building the dam and resettling the displaced, or dealing with the flows and overflows of Indus, was a central part of the state’s attempt to establish sovereign control over the Pakistan part of the Indus basin and legitimize these claims by addressing the economic and moral/political challenges.

The resettlement policy created a crisis of land in the Indus Valley and unveiled the limits of state power over the land. The reliance on legacy colonial-era law and the political-administrative structures established by colonialism had to be balanced with new concerns for the development and welfare of the people of the Pakistani nation. The inadequacy to deal with the

⁷⁰ At the time of Ayub’s rule, the four provinces of West Pakistan – Balochistan, North West Frontier Province (later Khyber Pakhtunkhwa), Punjab, and Sind, were consolidated under a single province of “West Pakistan”, as to centralize control over resources in the hands of the Punjab and Muhajir dominated military-bureaucratic administration. During the early 1970s, the country went through several changes: another Martial Law to overthrow Ayub’s government, the first democratic elections of the country’s history, separation of the East Pakistan that became the independent country of Bangladesh, and new constitution that altered the center-province relationships. The political and administrative reorganization of the country had a drastic impact on both land acquisition and alternate land allocations regarding Tarbela dam.

landless, tribal groups, and the to resolve the issue of agricultural land allotment inadvertently shaped the form of protests in the aftermath of the construction of the Tarbela dam.

2.4 Protests Against Land Redistribution

The Tarbela reservoir was impounded in July 1974. A large number of people were still living in their ancestral lands. Wapda was aware that without compensation or alternate living and livelihood arrangements, folks were "naturally reluctant to leave the area." Yet this didn't stop them from filling the reservoir with hopes that the Dam on the Indus could be up and running and bring economic prosperity to the nation. In August 1974, a design failure led to the collapse of two tunnels and put the entire dam at risk. The "Tarbela Mishap," as this incident was known, shook the confidence of the dam builders, but proved a life-saver for thousands of people who remained in the valley. This resulted in an increase in protests by various groups. Landowners had been protested against delays, low valuation of land, and the unavailability of alternate land. Land users who did not have private property-based ownership arrangements-- the tenants, tribals, fishers, artisans, and other landless, did not have any recourse to courts and engaged in direct action. The early protests by different groups are described below.

Protests by Settled area landowners:

Land acquisition procedures led to serious conflicts amongst government ranks and protests and litigation by the affected people. The process began as notifications were issues on

May 3, 1967, for a total of 136,000 acres of land.⁷¹ As per new notifications, the land was valued on the market prices based on registered sales over the 12 months preceding the date of notification. However, revenue officials noted that there was almost no record of registered sales, and the matter was left to the discretion of the Land Acquisition Collectors, who considered the Inteqal prices—which some considered as leaving more room for corruption and exaggerated claim.⁷² Wapda was not happy with the award amounts, which led to tensions and conflicts, and a high-level Advisory Committee had to be constituted to review award amounts.⁷³

Legal action against the awards soon ensued. As per the LAA, both the government and the affected people had to right to appeal against an award. However, locals note that most of the people neither had the means nor the know-how to pursue court cases.

Nonetheless, records show that by the mid-1970s, the affected people filed nearly 2,000 cases in the lower courts. Wapda was also eager to challenge the awards by Land Collectors but lacked the legal capacity to do so as only the provincial government could challenge the appeals. Till 1972, Wapda was able to challenge some awards, exercising its influence over the provincial

⁷¹ Compiled from various notifications issued under section 4, Land Acquisition Act on May 3, 1967. Cabinet Files, NDC archives, 158/CF/67, NDC.

⁷² The Patwari, as the lowest land revenue officer, enters a mutation in the Inteqal Mutation Register when a seller shows intention of transferring land, either verbally or in-writing. The seller and purchaser then appear before the tehsildar, naib-tehsildar along with two witnesses, and submit transfer fees in the Bank, and the mutation is sanctioned and a copy of proof of ownership Fard/Mutation can be collected from the Patwari in a week.

⁷³ “Review of the Policies Regarding Land Acquisition for Tarbela Dam Project,” February 10, 1968. 158/CF/67, NDC. Assessment of built property also proved to be a costly exercise, and to avoid detailed measurements and a large staff, a proxy measure of 'pinth area' was used, following Islamabad rather than Mangla. But this approach was changed since it was "prone to endless objections and complications" (p6). Assessments were also done for trees, fruit farms, bushes, and wells. Cash compensations was to be offered by the Land Acquisition Collector/Political Agent, but if the owner refused or failed to receive compensation within the prescribe period [??] under LAA, this would be put in District or Tehsil Treasury as revenue deposits, and the amount would be treated as paid-up compensation. Families eligible for alternate land may not be paid in cash and might be able to utilise this for buying the allotted land. In Amb state and some property of the Nawab, tenants have been tilling the land for 2 or 3 decades, and Wapda identifies that if they are not provided alternative land this might create a big settlement problem, so they must be given land out of the Tenancy Grants in the Barrage area, but a decision is required by the Board of Revenue (p11).

authorities. However, on May 30 1972, the provincial government passed an amendment to the NWFP Land Acquisition Act that did away with the right of the government to appeal against collector's awards, reasoning that since the government itself was involved in the process, this step was rather unnecessary. Losing the right to appeal against the collectors' awards, Wapda could still appeal against any decision taken by the lower courts if the affectees themselves took the matter to court. By 1975, Wapda had made nearly 600 appeals against Lower Court decisions where the courts had increased the amount initially decided by the Land Collectors – the average increase was about 225%. The delays in surveys, compensation awards and court proceedings caused significant problems for the affected people who weren't able to move out of the affected areas. By summer of 1974, only a tiny fraction of compensation had been awarded.

The delays in compensation award and long drawn out legal processes prompted some influential local landowners to rally together as they formed a social movement group, the Awami Anjuman-e-Mutasareen Tarbela Dam Project (AAMT).⁷⁴ AAMT held protests and lobbied with local, provincial, and federal authorities. In the fall of 1974, after the reservoir was briefly filled, the AAMT upped its protests and managed to hold high-level meetings with the new Prime Minister of Pakistan, Zulfikar Ali Bhutto, in Peshawar. The delegation explained to the PM the problems with land valuation and payments, their recourse to the lower courts to get fair prices for their land, which was subsequently challenged by Wapda in the higher courts. This process was causing long delays and severe difficulties for the affectees. The PM subsequently issues an order asking Wapda and the government not to file any appeals if the civil courts increased the award amounts in favor of the affectees. But the practice continued by Wapda, and the AAMT delegates

⁷⁴ I wasn't able to find a great deal of evidence on the composition and workings of the AAMT, outside of some references in the Dawn newspaper and Cabinet archives. C.f. Summary for Cabinet Meeting, Jan 12, 1977 from 29/Prog/77, NDC.

continued their protests, eventually meeting with the PM once again in Abbottabad on Nov 8, 1976. After the meeting, the PM directed the NWFP government and Wapda, in a letter on Nov 11, 1976, noting that "the non-implementation of my instructions [...] has been a cause of resentment and hardship to the affectees," and the PM "would like to know as to who were responsible for not carrying out my instructions." He further asserted that if lower courts gave a decision in favor of the affectees, no appeal should be filed in the High Court.

Wapda submitted that withdrawing appeals would put the project over budget,⁷⁵ and asked for a committee to look into cases that Wapda may want to take to appeal in higher courts, limited to cases where the decisions by lower courts are "far beyond reasonable compensation taking into account the prevalent prices of the property." Wapda also noted that the Tarbela mishap, the destruction of two tunnels due to design failures, had already "put a considerable financial burden on the public exchequer and we should avoid or reduce any additional burden if we possibly can." The proposal for a Committee review would eliminate both "unnecessary litigation and genuine difficulties of the affectees" while protecting WAPDA against inflated claims that were sometimes accepted by lower courts based on dubious evidence.⁷⁶ A summary was submitted to the Prime Minister and his Cabinet, which showed that withdrawal of appeals pending in HC and SC would add expenses of PKR 100 million, and an additional expenditure of PKR 300 million could be incurred by not filing further appeals.⁷⁷

⁷⁵ Land acquisition in Tarbela was proving to be more expensive than concurrent projects. Chashma barrage, also being built under IBDP, required 107,400 acres, compared to 100,000 acres at Tarbela, with a displacement of 40,000 people against 80,000 at Tarbela. The price at Tarbela averaged at PKR 1,738 per acre against PKR 492 per acre at Chashma, and the expenditure on resettlement per person was PKR 610 for Tarbela and PKR 318 at Chashma. "PC-I Proforma of Land Acquisition of Chashma Barrage," 1973. 508/CF/73, NDC.

⁷⁶ Summary for Cabinet Meeting, Jan 12, 1977 in PM's House RWP; Case No. 13/1/77. "Land Acquisition for Tarbela Dam," 1977. 29/Prog/77, NDC.

⁷⁷ At the time Wapda had pending appeals against 499 cases, 431 in the High Court and 68 in the Supreme Court, even though legally only the Provincial Government had the right to file appeals against lower court awards, as technically they were the party legally acquiring land and paying compensation. The lower courts on averaged increased the award

The Prime Minister maintained that the demands of the people seemed reasonable to him, and noted that the right to appeal must not be exercised. Conflicts around land acquisition prices continued, even after the dam had been operating for years. By Jan 1977, Wapda had disbursed compensation of about PKR 541.4 million against the approved estimates of PKR 441.5 million and warned that the figure would be much higher if people knew that the awards wouldn't be challenged. Wapda notes that the PM's orders are likely to cost about PKR 104.1 million. The details were submitted to the Prime Minister on Jan 26, 1977, but weren't discussed till March when the status quo was maintained. The matter was resubmitted to the PM on March 30, 1977. The first half of 1977 saw a rising opposition against the Bhutto government, with an eventual military coup on July 3, 1977.

The lingering issue was resolved by the military government, favorably for Wapda, when the PM Bhutto was deposed by the coup of General Zia ul Haq. Wapda had a new Chairman, a serving military general, and the matter of Tarbela affectees was brought before the military regime. It was reported that a total of 100,000 acres were acquired, 80,000 people displaced, and PKR 652.3 million spent on resettlement. Examples of "manifestly excessive award" were given: for instance, in the Thapla where the land collector awarded PKR 2,222 per kanal that was raised to PKR 16,531 per kanal by the lower courts, even though the collectors' awards were often seen excessive by Wapda. Chairman Wapda submitted a note pointing out that appeals that were not

amount by 225%. With 499 pending cases in the higher courts, and 1301 in the lower courts, a total of 1800 cases, plus another 84 already decided cases -- Wapda estimated that an additional PKR 410 million would have to be paid to less than 2,000 cases where affectees took the matter to courts, and Wapda could not contest the cases as per the Prime Minister's orders. Out of the 84 appeals already decided in the High Courts, WAPDA won 60 cases, and with legal expenditures for these were PKR 1.38 lacks only, and the lower courts awards reduced by PKR 3.6 million, about PKR 42,857 were saved per case on average. In 1301 pending appeals filed by the affectees in the lower courts they had demanded an increase in compensation from PKR 100 million to PKR 500 million. Wapda expected the courts to award PKR 400 million, with an additional burden of PKR 300 million for ongoing cases, if they weren't given the right to appeal. Another 500 cases were expected to go to appeal. "Land Acquisition for Tarbela Dam," 1977. 29/Prog/77, NDC.

filed by Wapda in compliance with the PM's directive had become time-barred, but urged the Military regime to use a suitable Martial Law Regulation or Order to null the orders of withdrawal passed by the High Court and the Supreme Court and allow WAPDA to restart cases when these orders were passed. But even the Ministry of Water and Power deemed the use of a Martial Law Regulation an extra-ordinary step and noted that revocation of the decision to review withdrawn or time-barred appeals, which would cause resentment amongst the Tarbela affectees in particular and the legal community in general. It instead suggested that the general directive of the former Prime Minister be withdrawn as "it would only be fair that both the parties namely [Wapda] and Tarbela affectees should have the same right of having recourse to appellate courts in such cases."

The National Archives don't provide any further details, and it was beyond the scope of this study to chase the court proceedings for independent cases. However, it's clear that the early mobilization around the issue of land acquisition resulted in the emergence of the first social movement organization that represented landowners. There's no evidence of continuity of this organization with Samat, neither of how this group worked with the landless and tribal groups whose issues are discussed next.

The Protests by the Landless, Tribals, and Tenants:

The Land Acquisition Law didn't apply in the tribal areas, and the government planned to pay compensation through negotiations with the tribesman and the Political Agent – the administrator who under the British colonial law ruled the tribal areas indirectly. However, Wapda claimed that it had trouble gaining access to the area as the tribesmen did not allow land valuation staff to enter their territory. Most of the tribal communities were averse to the idea of leaving their homelands, and some who even considered moving because of the seeming inevitability of

displacement were wary of being separated from their tribe and clan, as the compensation and alternate land scheme were catering to individual and family-based land and house ownership.

The tenants and the tribals put up resistance as Wapda attempted to evict them, and those who had agreed to accept compensation even went to the capital city to protests against the delays and problems of compensation. But despite these delays, Wapda went ahead and filled up the reservoir. It reported that the difficult tribals who did not even allow access to the survey teams had a change of heart: "as the stored water flooded the area, there was a change in the attitudes of some of the tribesmen, like the Naddakhels and Hasanzais." Wapda lamented that other tribes, like the Akazai, Basikhel, and Nusratkhel continued to deny their teams access, even though their lands would have been submerged had the Tarbela Mishap not happened. Wapda notes that since these areas would be impounded next year, assessments for other tribal areas can be used to determine and pay compensation to these tribals.⁷⁸ But the land valuation staff had limited time, and the task immense -- submergence was an inevitability, and Wapda put the blame on the 'adamant' tribals.

About half of the Tarbela affectees were classified as 'landless and homeless affectees' of the Tarbela dam.⁷⁹ Unlike the tribals and the registered tenants, the artisans and unregistered tenants or agricultural laborers were not eligible for any compensation. Resettlement planners noted that these families would only move when the area was flooded, would become 'sheer

⁷⁸ "The other tribes, like the Akazai, Basikhel, and Nusratkhel, continue to be adamant and have not yet allowed the assessment of the area, although their area would have also been flooded, if further filling of the Reservoir had not been stopped due to the damage to the tunnels. This year the stored water would enter their area also."

⁷⁹ No official figures were available to me, though sources put the number of landless at 6,000 families. At the time of these reports, the government expected about 10,000 families in total to be displaced, with expected number of the displaced to be around 80,000. This gives us an average of about 8 person per family on average, which seems reasonably given that 'families' refer to extended households. With these estimates at least 48,000 of the 96,000 were deemed landless and homeless

destitute without any means of subsistence,' and possibly put up informal camps and slums in the surrounding areas.

Wapda had proposed a plan for resettling the landless by paying them compensation, but the Finance division rejected it. The proposal suggested paying PKR 3000 to each family, with the total cost to be PKR 18,000,000. While deeming the proposal "humanitarian," the Finance Ministry nevertheless rejected it for not solving the problem and potentially inviting false claims. The payment of PKR 3,000 per family was seen as insufficient for procuring both lands and building a small house. These families would remain homeless unless the procurement of land was assured. Furthermore, there were no employment opportunities so it was likely that the compensation payment would be quickly consumed, and the homeless would "become a problem again." It was also feared that the policy would lead to irregularities in disbursement, with "outsiders or other categories of affectees claiming and getting ex-gratia payment."

When the dam reservoir was impounded, most of the landless were forced to migrate to different parts of the country, settling in the major cities like Islamabad, Peshawar, and even Karachi. Only 500 families were accommodated in a "refugee camp" established in Haripur town. Local authorities were concerned that "the people were now becoming violent," and something had to be done, but higher-ups were of the view that if these few families were paid compensation, others would also come and demand compensation on the same grounds. However, payment to a small number of landless was seen as a viable solution to solve the problem of "law and order" and to avoid the ongoing burden of feeding and lodging those living in the camps.

The Prime Minister, when submitted this proposal, directs it to his Cabinet and urges that payment to tribals be expedited. The issue of landless was left pending by the cabinet, to be decided

later. Decision: "Payment should be made only to the affectees of Amb, Hasanzai and Maddakhel tribes. The question of payment to destitute may be considered later."

An article published in the New York Times that praised the construction of the world's largest dam, built in a "brown, dusty ravine here at the southwestern edge of the Himalayas," carrying "important hopes for the future of country's agriculture." The article features a picture of a "Pathan tribesman" standing in front of the built dam.

Pakistanis Finish 2-Mile-Wide Dam and See It as Boon for Farming



The New York Times/William Borders
A Pathan tribesman stands in front of the Tarbela Dam, the world's largest, which traverses the Indus River in Pakistan

Figure 4: A tribesman in front of Tarbela Dam (source: NYT)

The problems of land acquisition and the displacement of landless and tribal groups generated protests against the Tarbela dam soon after the land acquisition policy was first announced in 1967. For the landowners, the primary mode of engagement was through court cases and litigations against the low compensation amounts and delays in compensation. These directly stemmed from efforts by Wapda to cut costs, and the legal route led to significant increases in award amounts. Local landowners organized with AAMT and approached the Prime Minister over the appeals process. The archival sources don't offer many details about this organization, and more exhaustive research of local newspapers could shed more light on this early SMO. A large

number of tenants and landless people, possibly up to 50,000 of the total 96,000 were offered little to nothing in terms of resettlement. The tribals also resisted eviction and were hesitant both to leave their homeland and to resettle in areas as fragmented families rather than the clan or sub-tribe. Reports suggest that many of these had to migrate to major cities, and around 300 families were reported to be living in slums in Karachi by the mid-1980s.⁸⁰ Wapda's approach to resettling the landless was primarily geared towards settling those who stayed put in the area or were living in refugee camps, offering them some employment opportunities in new resettlement towns. However, those without land titles but houses – tenants, tribals, and landless labor were given housing compensation and were expected to purchase land in the new resettlement towns and find other employment. Official records show that many of these were paid the minimum amount, which was not enough to purchase a residential plot and build a house. Consequently, many of these folks sold their allotted plots to those with means and migrated out to other areas in search of livelihood and work.

The early protestors resisted the construction of the Tarbela Dam defending the tribal territory or using litigation when possible. These were primarily driven by the interests of those directly impacted by the dam reservoir. The movement did not expand beyond the local region, and as per the limited historical evidence that I had been able to find, it was not tied to any broader strands of political contention around water or the River Indus. The dam was built in the Hazara ethnic majority area. Unlike other regions of the country where Sindhi, Pukhtun or Baloch ethnic groups were contesting the ideological claims of the Pakistani nation-state and the centralized control over the resources, the Hazara majority areas of Khyber Pakhtunkhwa province (at the time

⁸⁰ Pakistan, The National Assembly. (1995, June 17). Debates. The Manager of Publications, Karachi. Retrieved June 9, 2018, from http://www.deviums.com/sites/default/files/debate/1459513052_391.pdf.

North West Frontier Province) were not involved in challenging the state. The landowning elites of the area and the Nawab of the state of Amb were largely aligned with President Ayub Khan's government, who himself hailed from the Hazara region. Localized resistance by tribals and landless groups eventually petered out as the groups were displaced, many without proper compensation.

When new forms of resistance emerge in the mid-1990s, new concerns with the broader impact of Tarbela Dam and the Indus Basin project also emerged. Without any riverine or subaltern groups in the proximate project areas, the only active riverine communities left in the struggle were the downstream affected people. Alliances between the downstream affected people and the upstream landed groups were mediated through historical conflicts around water distribution between upper and lower riparian provinces of Pakistan.

2.5 New Riverine Movement

In 1995, Naeem Iqbal was finishing his master's degree when he found a short-term job with an international NGO, Action Aid. He was asked to survey in a "far off remote area" about a four-hour drive from Islamabad via Haripur. Driving on a winding road next to the Tarbela lake reservoir, Iqbal landed in the 'remote village' and started going from house to house to collect data on the socio-economic needs of the villagers. He soon realized that he was interviewing the riverine affectees of Tarbela, who used to live along the river and were displaced when the lake was impounded. The conditions were pretty bad in the area. A single-lane broken metaled road led to the village, there were no teachers in the public school, and the government dispensary had no medicines nor any staff. The villagers received electricity in 1992 but faced power outages. This was one of the first villages on a long stretch along the reservoir. "People told me that they used

to live happily next to the village, only half an hour drive from Haripur Town,” Iqbal told me. “And they had electricity back in the 1960s – these people who sacrificed everything for the dam kept living in darkness for *Twenty Years*.”

About two decades after Tarbela was built, the displaced peoples of Tarbela Dam were contesting three main aspects of the resettlement policy: land acquisition, the conditions in resettlement towns, and alternate land provision. Those with means were still pursuing legal cases in lower and higher courts by challenging the land collectors’ awards – it’s not unusual for such cases to take several decades before concluding. Most of the planned and unplanned resettlement towns faced the problems that Iqbal mentioned: issues of power supply, accessibility, bad schools, and health units, and overall lack of municipal care.

The issue of alternate land continued to be prominent in the national consciousness, regularly discussed in the provincial and national parliamentary debates. The Sindh government had refused to provide 11,000 acres of the land that the Federal government had asked for. The political representatives from the Tarbela area continued to bring up the issue of land allocation. The landless, tribals, and other riverine communities were already displaced, living either in these hamlets, or slums in major cities – dispersed and without any legal recourse.

A new stage of the movement by Tarbela affected people began in the mid-1990s, influenced by NGOs and advocacy groups, who brought resources, new ideas, and helped connect the displaced with similar groups across Pakistan and beyond. The rise of non-profit advocacy during the 1990s was a global trend, and international NGO’s started making it to these remote areas of Pakistan. Action Aid started working in Pakistan in 1991 and was partnering with national NGOs that were often founded by left-leaning, foreign-educated, urban activists belonging to upper-class sections of the Pakistani society (Akhtar, 2006; Bano, 2012; Zaidi, 2005). Omar

Asghar Khan, the son of an ex-Chief of the Airforce who studied economics at Cambridge University, founded the Sungi Development Foundation in 1989. Sungi's early work focused on community development and environmental issues, which brought it in contact with the displaced peoples of the Tarbela dam. Sungi worked with folks like Ejaz Khan to found Samat in 1996. The displaced of the Tarbela started to find new ways of organizing.

New Opportunities for Tarbela's Displaced

The displaced people of Tarbela, already waiting to be properly resettled. They faced another round of displacement during the 1990s when the Wapda and the World Bank decided to build a 'run-of-the-river' power generating facility near Tarbela Dam. The Ghazi-Barotha Hydropower Project (GBHP) would generate 1450 MW by diverting a canal on the Indus River at Ghazi, 7 km downstream of Tarbela's spillway. The canal ran 52 km southwest to reach a power plant at Barotha in district Attock. While the project required a much smaller piece of land than Tarbela, around 4,770 ha, it affected about 20,000 people, some of whom were the resettled affectees of the Tarbela dam.⁸¹ With the usual issues of land acquisition, locals started protesting and demanded compensation for loss of land, crops, and trees.

Unlike the early decades when Tarbela's resettlement plans relied on colonial laws, Samat operated in a context when the World Bank and Wapda were required to prepare environmental and social impact assessments for the Ghazi Barotha Project. These assessments provided an

⁸¹ As per the Resettlement Plan, the project would result in the loss of 4,770 ha, 3,130 ha permanently acquired and 1,640 ha temporarily acquired for spoiled banks along the power channel. 1,313 ha to be acquired is state-owned, and net loss of privately owned is 1,817 ha with 81.9% is rain-fed (*barani*), 14.7% uncultivable, and 3.4% irrigated. Cf: Pakistan Hydro Consultants. "Pakistan - Ghazi-Barotha Hydropower Project - Environmental Assessment (Vol. 7): Resettlement Action Plan (English)." Environmental Assessment. PK-Ghazi Barotha Hydropower Project -- P039281. The World Bank, September 30, 1994

opportunity for a dialogue between the affected people and the Bank officials. Samat rallied the Tarbela affectees and with Sungi's support, launched a letter-writing campaign that directly targeted the World Bank. The protests and lobbying paid divided as the Bank agreed to send an investigative team to the affected areas, and subsequently requested the Government of Pakistan and Wapda to address the pending claims by those displaced by the Tarbela dam. The Bank also placed a condition in its GBHP loan agreement with the Government of Pakistan, asking for investigation of outstanding claims.

The government of Pakistan asked Wapda to set up a review committee, which subsequently reported in May 1996 that 2,197 claims of alternate land and 1,282 claims of residential plots had not been provided to the people. (Asianics Agro-Dev. International (Pvt) Ltd. & WCD, 2000) Noting Sindh's refusal to provide alternate land, the Government announced in June 1996 that it would pay PKR 1.688 billion in lieu of alternate land promised to the Tarbela affected people. But by January 1997, the government had a change of heart as the Ministry of Water and Power told the cabinet that the Tarbela Resettlement Organization by 1984 addressed all legitimate claims of Tarbela Mutasareen, and further grievances could be addressed through appeals to Wapda's Nuclear Clearing Cell (NCC) at Tarbela or through appeals to courts.

This about-turn by the government became a catalyst for Samat and its allies to increase their protest, lobbying, and outreach efforts. The Bank seemed unhappy with Wapda's position, fearing that protests would delay the work on the Ghazi-Barotha project and embarrass the Bank. The pressure was already mounting, as the Bank had set up a global investigative commission, the World Commission on Dams (WCD), which had selected the Tarbela dam as one of its case studies of analysis. The government established the Independent Tarbela Commission in 1998.

Ejaz Khan of Samat recalls the work of this team, particularly around the issue of land allotment as people gave them copies of their allotment certificates:

“I remember, Mr. Iftikhar, who came here and brought other people. He asked me to bring people, and we will have a conversation with them about who got allotment [for alternative land]. We said, okay. The allotment is a piece of paper (receipt/parchi), which shows that you are entitled to agricultural land or housing land, so WAPDA folks the Collector’s department gives a receipt that you are eligible for agricultural land or land for your house. ... So, this team got photocopies of the slips that they had. This was done within the span of a day or two, so it missed many folks who weren’t here.

Within a couple of days, about 12,000 applications were filed with the Independent Commission, and this excludes any of the folks that had migrated out of the area to other parts of the country or abroad. About 6,000 of the applicants demanded agricultural land, and 6,800 wanted plots in resettlement towns. Ejaz Khan claimed that the World Bank tallied these applications against Wapda’s record and found these valid. However, Wapda unilaterally decided that only 1,954 of 6,000 claims for alternate land and 3,279 of 6,800 claims for residential plots were valid.⁸² The Tarbela Commission suggested that the Provincial government build an extension to the existing resettlement towns and resettle these affectees.⁸³

⁸² Interview; also, cf “Tarbela-Affected People Still Await Resettlement.” *Dawn*. March 16, 2002. There are different figures in official documents, which state that the Commission received 12,000 applications including 112 applications that were already pending with WAPDA and 385 applications from tribal areas. The review committee determined that 2,197 farms and 1,282 residential plots had not been compensated despite entitlement as per the resettlement plan. In addition, the Commission found that 4,089 additional claims for farms and 7,469 for residential plots were justified. The consultancy document by WAPDA here simply state that the recommendations were accepted and adopted, and the issue was tied to GBHP, but the issue remains unresolved. [Cf WAPDA 2011]. Newspaper reports suggest that the Commission declared that only 250 claims for residential plots out of 5,000 and 1,704 claims for agricultural land against 6,000 were valid. This was rejected by the affectees, who were asked to contact the Legal & Litigation/Nucleus Cell Tarbela [source: “Allotment issue hits Ghazi Barotha project,” *DAWN*, Oct 03 2001].

⁸³ *Ibid*. “From tribal area of Kala Dhaka out of 1,280 affectees, 173 have already been settled in New Darband township, Kangra Colony etc. Out of the remaining number only 666 affectees have been found eligible by the provincial authorities. Already, there are 441 developed plots in New Darband Township Extension Scheme. Hence a shortage of 225 plots has to be made up. The Chief Minister of NWFP, on 26th February, 1996, approved development of a housing scheme in the vicinity of New Darband Township Extension Scheme at a meager cost of Rs 4 million. The Commission recommends that an amount of Rs 10 million be provided to the Government of NWFP for executing the proposed scheme. The sale proceeds from the existing 441 plots in New Darband Township Extension Scheme may be retained by the Government of NWFP and utilized for creation of new plots.”

In 1998, a military coup brought General Pervez Musharraf to power, and the General promised to build dams and bring hydropower, starting with the Ghazi-Barotha Hydropower Project. The military regime started putting pressure on the Tarbela's affectees to accept cash compensation, instead of demanding land. One Samat activists recalled:

“We were under a lot of pressure to accept the small amount of compensation being offered. Now Musharraf took strong action because he wanted GB to be completed. AT that time Aminullah Gandapur was in the Revenue department, he came here and said that we'd give 1 lac per person. Now consider, 1 lac is not enough to build even a bathroom, and you are paying 1 lac instead of 100 Kanals. We rejected this, we the Samat. But the bribed some other people, the district Nazim (Mayor), etc., gave them 2-3 crore for development projects and persuaded some folks to accept 1 lac and get some signatures so that we can show that the money has been disbursed so that the second tranche can be released. Some needy folks, elderly, widows, they got some money, even they got 80% of 1 lac from the revenue department, rest ... These folks accepted the money in protest – that this is not what we were promised and is our right, but we will take it.”

Despite these problems, the Bank released the loan tranche, and the construction work on Ghazi-Barotha proceeded. The Musharraf Government tried to convince the provincial governments to allocate some land for the Tarbela affectees. But the land was in short supply. The KP government informed the General that the province couldn't provide the required 2,607 acres of land since “the army authorities had requested the provincial government for allotment of some 20,000 acres of state land in Dera Ismail Khan for distribution among the families of the martyred army personnel and deserving servicemen.”⁸⁴

Alliances for Resettlement Policy

The Curitiba moment had reinvigorated and broadened the scope of the movement by the Tarbela's displace. Samat and Sungi formed alliances with other similarly affected peoples and

⁸⁴ “Provinces Asked to Provide Land: Tarbela Dam Displaced People.” *DAWN.COM*, December 16, 2001.

movements. The Pakistan Network for Rivers, Dams, and People (PNRDP) was founded in September 1998. The founding members of PNRDP included national and international NGOs like Sungi and Action Aid, SMOs like Samat and the Pakistan Fisherfolk Forum, various ‘action committees’ comprising of riverine communities, as well as academics and independent activists based in large urban centers.

The Tarbela Dam and Ghazi-Barotha project became key sites of struggle for Samat, and PNRDP helped them expand to other parts of the country and along the Indus River. Naeem Iqbal, who had joined Sungi just a few months after PNRDP was founded, recalled the early days for PNRDP’s work, the key projects, and the subsequent expansion of the scope of their work.

Sungi was the central secretariat with four or five provincial chapters. Our goal was to highlight issues related to water management across the country, whether these were from the glaciers [in the Himalayas] or across the Delta. Our early major campaign included Tarbela, Ghazi Barotha, and Chotiari dam in Sanghar [Sindh] – these three were the important campaigns at the time, and Chashma Irrigation Project also became our focus later. PNRDP also sent a mission to Diamer-Bhasha that was being planned, a mission to do an early assessment.

Wapda had prepared a plan, called the “Water Vision 2025”, that envisioned expanding the Indus Basin Irrigation System by remodeling existing infrastructure, building new canals and dams, and building a comprehensive basin-wide drainage system to deal with the issues of waterlogging and salinity. PNRDP started to mobilize against a variety of these projects. Samat, as a member of PNRDP, took the lead on campaigning for an improved resettlement policy. Through their work, Samat collaborated with the dam affected people in the mountains and the Indus Delta.

In the southern parts of Sindh, the Pakistan Fisherfolk Forum (PFF), which is a subject of analysis in chapter 5, had been organizing the fishers of the Indus Delta. One of the key sites of struggle was in Phuleli, eastern Sindh province, at Chotiari Dam. The Chotiari dam was part of a

larger National Drainage Project as an irrigation reservoir dam covering 65,000 acres of existing wetlands and expected to irrigate 150,000 acres of land. The official survey on resettlement needs put the number of impacted households at 594, which was challenged by the local communities and activists. Studies conducted by PNRDP affiliates showed that the total number of affected households stood at 913 households, with 387 relying primarily on cattle grazing, 221 fishers, 242 landless peasants, and only 147 landowners. The range of local grievances were also similar to problems at Tarbela: concerns with less-than market rates in the Land acquisition awards of July 1995, rent-seeking practices of officials and distribution of funds to ineligible influential, along with the exclusion of the landless tenants, fishers, herders. The Chotiari movement then demanded comprehensive and effective resettlement of all land users, including landless tenants (hari), provision of pasture-land for livestock herders, rehabilitation of fishers on the Chotiari reservoir, and an assessment of the impact of the reservoir on the ecological health of the naturally existing wetlands.

The turn of the century was a dynamic period of engaging on the issue of resettlement at multiple sites --Tarbela, Mangla, Ghazi-Barotha, and Chotiari, as well as outreach efforts to connect with communities around future dam sites, such as the Diamer-Bhasha dam. Ejaz Khan of Samat recalls this period of heightened activity and the opportunities it provided.

A lot of things were happening back then, in 1998 – Tarbela, Ghazi-Barotha [and other projects] with PNRDP. We did a lot of activities, organizing seminars, research studies, and media campaigns. And most of the time, we used to raise the issue of Pakistan’s lack of resettlement policy. So, the Ministry of Environment and Local Government started an initiative in 1998 on the resettlement policy. I am a member of this initiative. They got people from all four provinces, zamindar [landlords], civil society members, from the parliament, a total of 40-45 people formed a committee.

Riverine Allies of Samat

The inclusion of dam affected people and civil society representatives in high-level policy meetings was a new trend, undoubtedly an effect of the broader acceptance in the international development sector regarding the need for local participation and local-self-government. The WCD was looking particularly into the issue of the Tarbela Dam, which provided another opportunity for Samat and PNRDP to influence decisions regarding broader policy measures. Ejaz Khan emphasizes this point by pointing out that when the consultants hired by WCD interviewed him about Tarbela, he raised the broader issue of Resettlement Policy as well.

There was another development in 1998, when the World Commission of Dams, who has its office in Cape Town [South Africa], selected ten dams across the world to survey, out of which the first one they selected was Tarbela dam and the first thing they [their team] did was to come here and interview me. Through the process, I cooperated with them until the final draft of the report. My points regarding Resettlement Policy, in the light of Tarbela dam experience, I shared with them.

Through the PNRDP platform, the activists and communities facilitated the WCD by organizing field trips in Khalabat township near Tarbela, as well as the Keti Bandar coastal town in the Indus Delta. They attended the open and invited sessions held by the WCD and Asianics Consultants. And they also found ‘insider’ allies in the WCD, just as in the case of the Government of Pakistan. Naeem Iqbal recalls how the civil society and representatives of the affected people used to hover around the venues of WCD meetings, hiding in coffee shops and ready to assist some of the commissioners.

“bari political game hoti thee [this was like a political game]. What used to happen is if there were some critical discussion going on behind closed doors, our allies would come out, and we would be sitting somewhere, hiding, drinking coffee, they’d ask us that this debate is going on inside so give us some pointers; so some of these allies won’t make themselves visible. For instance, Medha Patkar [Indian activists] was very open about her position, some others as well, but some allies used to support us secretly. Our contribution to the WCD would have been so

significant nor our voice so potent, had we not been part of this community through ICDR, which gave us a sense of bonding and a collective voice, at the regional and global level.

Similarly speaking of their influence on the WCD and resettlement policy work, Ejaz Khan listed the specific points that were included in the WCD recommendations, to make a people's friendly policy that avoids forced displacement, provides alternate land to those willing to relocate, give land close to ancestral homes, and pay fair compensation:

The final report [release] was done in the Sheraton Hotel [a five-star hotel], Karachi. Folks participated in the USA and other parts of the world. That was our final meeting. After that meeting, whenever they [WCD] talked about the issue of resettlement policy, they had my points in there. For instance, my first point that if someone doesn't wish to give their land for building a dam, they shouldn't be forcedly displaced. We wanted to make a people's friendly [resettlement] policy. Secondly, if someone is willing to make sacrifice [جزبہ قربانی] then they should be paid what they ask for. The next point is that they should be resettled closed to the site of the project so that their attachment to the land, their ancestral graves, everything remains near them. Fourth, they should be paid a share from the income of the dam so that people have a sense of ownership and think that the dam is not a government project, but it is mine. All these things, I put in the resettlement policy. So, the draft of the World Commission on Dams had the draft, which included my points on the resettlement policy.

The World Commission on Dam presented its final reports and findings in 2001 and set the tone for the resettlement policy framework.⁸⁵ There was a lot of hope that the new policy work would be adopted – but this did not happen:

We used to have several meetings. At times we used to have two meetings each month. From 1998 to 2002, meetings continued Ministry of Environment. When the final draft was prepared in 2002, after four years, to make this Resettlement Policy. We were told that this draft would go in the Law Department, which will

⁸⁵ The draft of the National Resettlement Policy, 2002 for the first time included 'vulnerable and affected persons', such as "women, destitute, artisans, tribal communities, squatters, and those with usufruct rights", in the category of the project affected persons (PAPs). It distinguished between resettlement from rehabilitation aimed at 'full restoration of living standards and quality of life'; and observes that the process adopted thus far by the government does not "aggregate to a resettlement policy." PEPA. "National Resettlement Policy (Draft)." Pakistan Environmental Protection Agency, Ministry of Environment, Local Government & Rural Development, March 2002.

rectify it, and from there to the Assembly, and it will eventually be implemented in Pakistan, so when some airport is made, a road, or a dam. So, we did our work. But after this they put this policy on cold storage. To date there's no policy.

Nevertheless, this work fostered and sustained alliances of different groups and communities that are impacted by the lack of Pakistan's resettlement policy. PNRDP organized a conference, the National Dams' Affectees Conference, on June 10, 2003, in Karachi, and demanded a stop to all mega projects on the Indus river, including those identified in Wapda's Vision 2025 document. Before moving ahead with these projects, the Government must address all pending social, environmental, and resettlement issues of earlier projects. Good resettlement plans and compensation are usually announced, but mismanagement or corruption results in unfair or lack of compensation for the affectees. The meeting had representatives from Tarbela, Mangla, CRBC, Ghazi-Barotha, Chotiari, and various other projects.⁸⁶

Samat and PNRDP continued to present the case of the affected peoples of the riverine infrastructure projects, targeting the World Bank. In 2007, Ejaz Khan, as the PNRDP coordinator held a seminar when World Bank's President Robert B. Zoellick visited Pakistan and raised the issue of Tarbela and Ghazi-Barotha, pointing to the failure to resettle and rehabilitate the victims.⁸⁷ It also became a tradition for Samat and PNRDP to organize an event on the Day of the River on March 14 each year. In 2010, PNRDP organized a conference in Islamabad with the title "Draft National Resettlement Policy, Affected communities and the Way Forward." Bringing together affectees of Mangla, Tarbela, Ghazi Barotha, Bhasha, and other areas.⁸⁸ A session was organized on social and resettlement policies and practices, which demanded that the government

⁸⁶ "Experts Seek Suspension of Indus River Projects." *Dawn*. June 11, 2003.

⁸⁷ "WB Urged to Avoid Funding Incapable Agencies." *Dawn*, November 1, 2007.

⁸⁸ Halepoto, Zulfiqar. "Water Sector Projects sans Resettlement Policy." *DAWN*, June 14, 2010.

institutionalize public hearing on issues of land acquisition, resettlement policies, and implementation problems. The most recent event, organized in Khalabat township was the Eighteenth Tarbela Dam Conference in March 2018. Referring to the current plans for extending the power generating capacity of Tarbela dam, Ejaz Khan noted: “Seventy percent of the land promised to us in 1967 has still not been handed over to us, and they are investing billions of rupees on the new Tarbela Ext 4 and Ext 5 projects.”⁸⁹ A resolution was passed that demanded allocation of agricultural and residential land for Tarbela affectees, shifting from hydropower to nuclear and solar power, and adoption of the Draft Pakistan Resettlement Policy in consultation with Samat and other Civil Society Organizations (CSOs).⁹⁰ The slogan for the day was: *No dams without a new resettlement policy!*

Samat’s focus on the issue of resettlement addressed some of the concerns of the downstream allies as well. But it also limited the scope of the broader river wide alliances. In particular, it excluded the concerns of the deltaic communities from the Sindhi ethnic majority areas of southern Pakistan. Chapter 5 provides a detailed account of the impact of Tarbela and other projects on the Indus delta and the subsequent political responses, in particular by the fishers of the Sindh province. Here, I discuss the interaction and conversation between Samat and the downstream affectees, to demonstrate how it foreclosed the possibility of sustained river-wide alliances.

⁸⁹ Interview, Ejaz Akram, March 20, 2014.

⁹⁰ Conference opposes dams sans new resettlement policy. (2018, March 15). *The News*.

2.6 Conflicts of the Indus Lands

As a young woman growing up in the coastal fishing town of Ibrahim Hyderi near Karachi, Zubeida Birwani spoke of her close association with the Indus River or Sindhu Darya, her political training, and her work for human and non-human communities of the Indus delta. She was one of the first students to matriculate from her village and encouraged by her father went to Karachi University, where she got involved in student politics. This opened up the world to her – she became part of the *Sindhiani Tehreek* founded by the noted Sindhi nationalist Rasul Baksh Palijo.⁹¹ After graduating, Birwani worked as a volunteer with the International Union for the Conservation of Nature (IUCN) and conducted surveys with the fishing communities, eventually joining Shirkat Gah, a national NGO working at the intersection of Gender and Environment. Birwani led several campaigns over the years for the rights of the human and non-human communities of the delta and coastal regions. This increased her awareness of the broader ecology of the region with the problems of the fishing communities. As Birwani continued working among the coastal fishing communities, she realized the need for an organization of the fishers that could fuse political activism and self-representation with environmental and rights-based advocacy. She joined hands with her teachers and other political activists from Ibrahim Hyderi, most notably Muhammad Ali Shah, Majeed Motwani, Ayub Shaan, and Saeed Baloch, to found the Pakistan Fisherfolk Forum (PFF) in 1998.⁹² PFF became one of the first groups to join PNRDP, and the only organization representing coastal and deltaic fishing communities in PNRDP.

⁹¹ Palijo was a vocal critic of the Indus Water Treaty, Kalabagh Dam, and the water scarcity in the Sindh province due to upstream withdrawals

⁹² Muhammad Ali Shah, who has led PFF as its Chairman for most of its time, had been a political activist and worked on social issues of the fishing communities since the early 1980s. He had previously formed a Social Welfare organization [check names etc], which can be seen as a precursor of the Pakistan Fisherfolk Forum. I discuss PFF's work in detail in chapter 5.

Ethnic Identities and Riverine Interests

PNRDP helped Samat connect with the PFF and other groups who considered themselves as the affectees of the Tarbela dam and the Indus enclosure as a whole. Thus, apart from highlighting the project-proximate demands of the Tarbela affectees, and fostering ‘issue-alliances’ for Resettlement Policy work, PNRDP also helped Samat build ‘riverine-alliances.’ The network had a central secretariat in Islamabad helmed by Sungi, three provincial chapters in KPK, Punjab, and Sindh, and member groups in Kashmir and the Northern Areas of the country.⁹³

The Sindh chapter pushed for the inclusion of the ‘downstream’ affectees in the WCD process, facilitating meetings and participatory sessions in the coastal/deltaic villages of Ibrahim Hyderi, Keti Bandar, and in other parts of Sindh. In June 1999, during the introductory meeting of WCD for the Tarbela case study, PNRDP’s Sindh affiliates questioned the scope and methodology of the study, noting that the group remains "cautiously optimistic about the Tarbela study and welcome the opportunity it provides. [And]...would like to assist” in the process.⁹⁴ The international movement against dams had already emphasized the need for evaluating dams based on river-wide impacts, particularly in downstream areas.⁹⁵

However, PNRDP’s activist recall that the consultants for the WCD study were merely interested in doing a cost-benefit analysis based on crop yield differences in the downstream areas. They had selected areas in Punjab that were benefiting from the irrigation enabled by Tarbela, and

⁹³ PNRDP never made inroads into Baluchistan province, which does not lie in the Indus Basin. While the group never claimed to limit itself to the Indus Basin, and in fact sought to forge alliances among the affected people of water projects all across the country, its de facto focus remained limited to the Indus basin. Given the centrality of IBIS for Pakistan, this is not surprising.

⁹⁴ “World Commission on Dams Meeting at Tarbela, Pakistan.” *Dawn*. June 22, 1999.

⁹⁵ Cite from Curitiba declaration, or the mission statement of WCD.

only considered a limited set of ‘ecological impacts’ – such as the reduction in forest cover, or the contribution of increased irrigation to the problem of waterlogging and salinity.

The work by PNRDP ensured that the issue of water shortages in Sindh became a part of the WCD investigation.⁹⁶ However, when the final report came, it suggested that while the Tarbela dam was a contributor to water shortages in Sindh, especially below Kotri barrage in Hyderabad, it was “almost impossible” to isolate the Tarbela effect from the impact of other projects.⁹⁷ Furthermore, the report excluded the adversely affected communities from the Indus delta in its recommendation for payment of compensation or other measures for the rehabilitation of the Tarbela affected peoples.⁹⁸

For the members of the PNRDP Sindh chapter, this was an egregious exclusion. Zubeida Birwani points to the more abundant and diverse fish stock in Sindh’s coastal areas when compared to the adjacent province of Baluchistan, although Sindh’s coastline is half of Baluchistan’s. The difference is that Indus River feeds the 90% of Pakistan’s mangrove forests by bringing freshwater and depositing fertile silt on the coasts. “The mangroves are a gift of the Indus river system, when the barrages and dams weren’t built, the river flow in the delta used to nurture an active mangrove ecology.”

While the WCD process failed to include the displaced and excluded peoples of the Indus delta, the work of PNRDP had left a mark on the Samat movement. Naeem Iqbal, who took on the

⁹⁶ Activists with Sungi and PNRDP wrote a dissenting note that was supposed to be part of the WCD final report, but wasn’t included. Interview, Naeem Iqbal, 2018.

⁹⁷ Asianics Agro-Dev. International (Pvt) Ltd., and WCD. “Tarbela Dam and Related Aspects of the Indus River Basin Pakistan.” A WCD Case Study Prepared as an Input to the World Commission on Dams. Cape Town, South Africa: World Commission on Dams, November 2000. Page 91

⁹⁸ This is in line with Michael Cernea’s observation about the World Bank prioritizing economic over environment/social, and the central issue of ‘scoping’ of a project—discussion from the 2017 World Bank panel on Emerging Lessons from the Inspection Panel series

role of PNRDP's national convener in the early 2000s, a role is later taken up by Zubeida Birwani, speaks about the impact of these riverine alliances. For the Sindhi's and Siraiki region activists, which he termed as 'lower riparian,' it was important to tell the upper riparian, including Tarbela affectees of the problems caused by water scarcity in Sindh and the delta. For upper riparian, like Tarbela affectees, it introduced them to the idea of minimum flows necessary to maintain the delta ecology, countering the popular idea promoted by Wapda and dam builders that water that is not used is merely going to 'waste.'

PNRDP was an excellent forum which taught the lower riparian [Sindh and Siraiki regions] about the problems of the upper riparian [Punjab and Hazara division of KPK] that they are not just dacoits and oppressors (ڈاکو غاصب نہیں کہ آب کا پانی چوری کر رہے ہیں) stealing water. And it convinced the upper riparian that the water that flows from under our feet goes to waste in the ocean (جو پانی ہمارے پیروں کے نیچے سے نکل کر (جاتا ہے وہ جا کر ضائع نہیں ہوتا) that water goes to the floodplains and the delta and these people live there. The images that they see of people living in shacks (jhonprian) or boats, these are humans, the boats are their livelihood. So, I think that PNRDP was an excellent forum which from the upper reaches [of Indus] to the delta taught the people what the issues were. To hear from Sindh experts that Punjab used up all of Sindh's water, and they didn't even use to talk about KP.

The dialogue also brought nuance to the debate on water distribution, as the issue shifted from a mere 'inter-provincial' dispute, i.e., Punjab's dominance and control over the Indus waters at the expense of Sindh, to an awareness of the 'intra-provincial' issues of water distribution in Sindh. The fact that a lot of water did reach Sindh and was diverted at Sukkur, Guddu, and Kotri barrages, all lying within Sindh, further helped the delta communities to make their points regarding the harms of dams and barrages. Naeem pointed to this as well.

PNRDP was a good platform because it generated conversation among the upstream and downstream groups, particularly folks from KPK and Punjab, sat with the Sindhi groups. We talked about the inter-provincial challenges of water distribution, but also considered the intra-provincial distribution. For instance, Sindhi activists spoke about the unequal distribution of water between southern and northern parts of the province [between the delta and irrigated fields]. Folks in the upstream area also realized that the irrigation system was devastating the delta communities – the drainage canals [LBOD and RBOD] – these aren't dams or

irrigation channels but had adverse harmful effects and displaced many peoples... in fact, these [drainage canals] might be the worst-case examples [of river infrastructure projects].

So, when all of these different people use to come on the same forum, there were conflicts, especially early on, tensions, but people started respecting each other's diverse perspectives. Started supporting each other – they understood that their sorrows were similar, problems were similar, and until they join their hands, they can't achieve their objectives.

Zubeida Birwani also referred to her conversations with Ejaz Khan and other representatives of the same affected people, recognized as the Project Affected Peoples, but the deltaic community is not.

When I used to speak to the Tarbela affectees, I used to tell them, look you are displaced, and you are recognized as an affectee, but people from the delta are not recognized as such. You are not even looking at this disaster since we [people of delta] are isolated.

The exclusion of downstream users from WCD recommendation and the resettlement policy dialogue notwithstanding, PNRDP continued to organize seminars that brought together the upper and lower riparian, or upstream and downstream affectees of the Indus basin development projects. The group organized a yearly meeting in Multan, and a six-monthly meeting in Islamabad. Birwani and Iqbal, along with other members of PNRDP, organized the National Dam's Affectees Conference in Karachi in 2003, where representatives from Tarbela, Mangla, Chashma, Taunsa, Ghazi-Barotha, and Chotiari participated. Once again they demanded that the government stop all mega projects on the Indus River, including those identified in the Vision 2025 document, and allow adequate flows downstream of the Kotri Barrage. The conference emphasized the water allocation between provinces must be 'judiciously fixed' before new projects are announced. The government should address all pending social, environmental and resettlement issues of earlier projects.

If the dialogues between upstream and downstream users of the Indus river system helped PNRDP formulate joint-positions on river infrastructure development, water distribution, and resettlement policies, there were some obvious sources of tensions. The biggest issue was the allotment of land for Tarbela affectees in Sindh and the refusal of the Sindh government to give this land. As outlined above, GoP had decided to give eligible Tarbela affectees the option of purchasing alternative agricultural land in the canal irrigated areas of Punjab and Sindh provinces, but struggled with the allocation of land – first reducing the promised allotment of 100,000 acres to 60,000 acres, and Punjab’s share from 50,000 acres down to 30,000 acres with the remaining 30,000 acres in the ‘new’ barrages land of Sindh. But the promise was made by the Federal government under the One Unit scheme where Sindh and Punjab had been subsumed under the single province of West Pakistan by the military-president Ayub Khan. After the dissolution of the one-unit policy, the provincial government of Sindh refused to allocate additional 10,677 acres to the Tarbela affectees.⁹⁹

For Samat and Tarbela affectees, the provision of alternate land had become a long-standing demand, possibly the most significant one. After the WCD, the World Bank suggested Wapda makes cash payments instead of the land-for-land grants. But only a smaller amount was offered to the affectees much less than the value of the alternate land promised. Wapda and GoP saw Sindh’s refusal to deliver on its promise as the major problem. The Sindhi and Siraiki members of the PNRDP, and the broader Sindhi and Siraiki nationalist movement, viewed the Tarbela resettlement policy a continuation of the colonization of their lands by ‘outsiders’ – particularly given the history of given land grants to Punjabi and military soldiers in Sindh and Siraiki majority areas. The term ‘abadkar’ or settler is commonly used in these circles to refer to, mostly Punjabi

⁹⁹ Pakistan, The National Assembly. “Debates.” The Manager of Publications, Karachi, June 17, 1995.

speaking migrants that were allotted agricultural land in southern Punjab and Sindh. Apart from the Sindh government refusing to give the land, Member of Parliament from Multan, Makhdoom Javed Hashmi also represented the sentiments of the Siraiki people of southern Punjab when he noted that the 30,000 acres of land in Punjab was actually allotted in southern Punjab, mostly in Multan division, and inquired that since this is ‘replacement’ land for Tarbela affectees, southern Punjab and Multan must also have a share on the Tarbela waters, which wasn’t the case.¹⁰⁰

The history of land distribution and its links to ethnic identities created tensions in PNRDP meetings. One of the key activists and coordinators of PNRDP campaigns mentioned that there was a reluctance among Sindh members to rally behind the resettlement demands of Tarbela affectees as this could be seen as the approval of the government’s policy of giving Sindh’s land to outsiders.¹⁰¹ Birwani and Naeem also acknowledged that such tensions existed, but both the upstream and downstream affectees focused on the government’s responsibility towards all affectees rather than generating conflicts within the members.

Birwani mentioned the position on the downstream affectees was clear – the Federal government made this promise, not the Sindh Government. The Federal government was responsible for arranging alternative land without asking Sindhi’s to make undue sacrifices, especially since they were direct affectees of Tarbela that were given nothing for their rehabilitation:

Our position was that when Tarbela was made, you tell us that the promise of alternate land in Sindh, was it by the Federal government or by the Sindh government? If the Sindh government did it, so then we can say that this can be honored. But this wasn’t a decision of the Sindh government. So, if the provincial body is not giving land, they were never part of the decision. So, this was our position, and this was accepted by them [Tarbela affectees]. Whatever your

¹⁰⁰ Cf. Pakistan, The National Assembly. “Debates.” The Manager of Publications, Karachi, June 17, 1995.

¹⁰¹ The interviewee requested to remain anonymous.

problems are, these must be taken to the Federal government. This wasn't a promise by Sindh government. And we used to say that you've have been compensated, but Indus Delta has faced such a big disaster – hundreds of thousands of acres of agricultural lands are lost, swallowed by the ocean or lost to waterlogging and salinity, and displacement of tens of thousands – no one has been resettled, no one has been compensated. When we used to put forward this position, it gave weight to arguments. Because in 1998, Sindh government conducted an environmental study and found that the ocean swallowed 1.2 million acres of agricultural land.

Another activist from Sindh mentioned that there was no conflict as such between the Tarbela upstream affectees and the delta affectees, no tensions between the activists.

PNRDP was a forum of the affectees of different projects. Therefore each affectee had their reality, which did not conflict with the others. For instance, the Tarbela displaced, there was no conflict between them and the delta affectees. So, there wasn't any tension between the activists. No one would stand from Tarbela and say that delta must be destroyed. Delta folks didn't say that Tarbela must be displaced. So, there were no conflicting views, there were diverse views, but not conflicting views.

The riverine alliances put the diversely affected groups in contact with each other, facilitating convergences of those excluded by the misregulation of the social and material flows and overflow of Indus. Activists from across the Indus basin represented communities with different interests, often in conflict with each other due to the nature of exclusion caused by the rearrangement of water and land uses that are typical of large river enclosures. But the WCD and government failed to recognize these diverse excluded groups, despite the new understanding of the project-wide and system-wide impacts of river infrastructure projects. Their focus was on project-proximate affected people, particularly landowners who had been promised alternate land in the canal irrigated areas.

The lack of recognition of the downstream groups as affectees of Tarbela, coupled with the dispossession of land from Sindhi and Siraiiki majority areas to resettle the displaced people of Tarbela, created challenges for the riverine allies to continue to mobilize on river-wide scales. The

interests of Samat’s constituents forced a turn towards the resettlement issue, a pragmatic approach since the group was engaging the state on official forums. The break between the upstream landowners and downstream communities, particularly the deltaic communities, resulted in divergent paths that Samat and PFF took – one that led to demands for effective resettlement, and the other, explored fully in chapter 5, towards the idea of river defense.

2.7 Resettlement or River Defense

The resistance to large dams in Pakistan has taken an ethnic outlook in recent years. The ‘second dam on the Indus’ has remained elusive for the dam builders. Candidates like Kalabagh Dam or Bhasha dam are mired in controversy and opposed by Sindhi, Pashtun and Baloch ethno-nationalist parties and the respective provincial governments. Their challenges reflect the historical grievances of ‘smaller provinces’ over the centralization of Pakistan’s natural resources by the state with the historical dominance of the military and Punjabi ethnic groups. Resistance to dams, however, is generally viewed unfavorably. For Shamsul Mulk, the ex-Chairman of Wapda and Chief Minister of KPK under the military government of General Musharraf, those who oppose Kalabagh are traitors and part of the “Indian lobby.” However, the political controversy around the Kalabagh Dam has stalled any progress on it for three decades, and the World Bank and other investors have withdrawn funds for the project.

There’s a new candidate for the second dam on Indus – the USD 14 billion project, a 245-meter high Diamer-Bhasha dam in the disputed territory of Gilgit-Baltistan. In the most comical of the many twists in the saga of dam building in Pakistan, the Chief Justice of the Supreme Court emerged as the biggest champion of mega-dams, ‘ordering’ the government to build dams asap to save the nation. Justice Nisar started a crowdsource funding campaign to raise the USD 14 billion,

with about USD 45 million raised and at this rate would take 87 years to reach the funding goals. The newly elected government of Prime Minister Imran Khan also pledged support to the dam-fund, and a third of the country says that it would donate to the dam fund. Wapda and other water departments bemoan the loss of water worth USD 20 billion that flows into the ocean each year, without being to productive use. The national conversation around large dams has largely remained focused on the economic feasibility, or the seismic viability of these dams, with limited discussion of resettlement, rehabilitation, and almost none on the impact of dams on the river and riverine communities.

Dams have become both the symbol of economic development and sites of riverine resistance and given their known impact on the health of rivers, often linked to ideas of river defense. However, the case of Tarbela Dam shows that the State's approach to resettlement influenced riverine movements. The Indus enclosure was premised on the state's ability to exercise total control over the Indus waters and land. The Pakistani state and the World Bank built Tarbela Dam, as part of the larger project of controlling and distributing the Indus Waters, split between the two new nation-states of India and Pakistan. The state's plans for dealing with the social overflows, of displacement, mirrored the approach to the control riverine flows. If Tarbela Dam was part of the drive for economic growth to build the nation, dealing with the displaced was assumed as a moral responsibility of the state.

Tarbela Dam tested the limits of the state's control over the water and land resources of the Indus Valley. The state used executive decisions to overcome the limitations of the colonial-era laws. Those displaced in the upstream areas of the dam were relocated to the 'productive' lands irrigated by the stock of water made available by Tarbela. The resettlement policy focused on mitigating the adverse impact on the farmers and landowners of Tarbela and devised a scheme of

land acquisition and redistribution. However, the centralization of power and state's control over resources was always contested by democratic forces and the ethno-nationalist movements – particularly from the Sindh province.

The emergence of new riverine movements in the 21st century introduced new opportunities, resources, and frames. Samat was founded and worked with environmental and advocacy groups to challenge both the state and 'new actors,' like the World Bank. These challenges generated responses by the dam builders, who constituted several investigative commissions, including the Tarbela Commission and the World Commission of Dams to address the problems of the Tarbela's displaced. However, the scope of these investigations focused narrowly on the project-proximate impact of Tarbela dam, rather than the cumulative impact of the dam on the deltaic ecosystem. The government response was then limited to the property-based claims of the landowners from the Dam reservoir area.

The state's focus on landowners, both in the 1970s and the 2000s, undermined the potential for lasting riverine alliances among Samat and groups that represented the riverine communities elsewhere along the Indus River. The Pakistan Network for Rivers, Dams, and Peoples (PNRDP) had put Samat in contact with the deltaic communities, including the Pakistan Fisherfolk Forum (PFF), who brought up concerns of Sindhi nationalists and fishers regarding the distribution of Indus waters and lands. These alliances went beyond the issue of resettlement of landowners, emphasizing the integrated nature of river infrastructure development and the cumulative effects visible in the Indus Delta. The dialogue between diversely excluded groups with varied interests and identities created a mutual sense of recognition between the upstream and downstream people displaced by the Tarbela dam. While the varied interest and identity-based claims did not result in conflicts among movement participants, this prevented longer and sustained alliances.

Samat, as a welfare organization representing the landowners from the Hazara ethnic majority areas of KPK province, was influenced by new opportunities and alliances, but the organizational structure and the movement goals did not transform into a broader agenda of river defense. The group did not represent riverine communities of the Tarbela area that were displaced long ago. The group's organizational form wasn't flexible enough to represent the concerns of riverine communities from the delta. The national advocacy networks provided good forums for dialogue, but no space for transcending the conflicts of interests that intersected with ethnic identity-based claims.

Samat and PNRDP, in their present incarnation, can be classified as 'good dam' movements. That is, dams are not inherently bad, and can contribute to development outcomes, but these must come with a good resettlement policy. This position rubs against the anti-dam position of Sindhi activists, Sindh chapter of PNRDP, and PFF, who oppose the construction of large dams and are also calling for 'freeing Indus.' I suggest two reasons that might explain this divergence: displacement of the riverine communities and the emphasis on landowners in resettlement planning; and the lack of an ethno-nationalist opposition to dams in the Hazara division where Tarbela is located.

New regulations provided new opportunities but failed to address the issue of land redistribution. Displacement became an 'intractable' overflow problem from the perspective of an enclosure state that assumed total control over the Indus river flows, to irrigate and "produce" new Indus lands. New riverine movements fostered alliances, but issue-based alliances focused on resettlement policy failed to include the concerns of the deltaic fishers who were spatially and temporally distant from the reservoir. The historical conflict of interests, articulated as ethnic

identity-based claims, hampered the emergence of ideas of river defense, as claims of river defense meant challenging the State's claims over the river, and the land.

3: THE DRY SIDE OF INDUS

3.1 The Most Developed Village

“Let me take you to the most developed village in Pakistan,” Fazal-e Rab Lound quipped. Everyone in the room burst into laughter, and I looked about with a confused grin. Fazal is a central figure in the riverine movements in Siraiki ethnic majority areas along the Indus river in central Pakistan. We were sitting on faux-leather couches at the Benazir Gas Station in Shadan Lund, a town located a few miles to the west of the Taunsa Barrage in district Dera Ghazi Khan. Ghumman and the Benazir Gas Station became the basecamp for my many trips to this region, as I met with local activists and community members to study the impact of dams and irrigation canals in the *daman* region – the narrow strip of land between the right bank of the Indus River and the Koh-e-Suleiman mountains to the west. Fazal is a founding member of Daman Bachao Tarla, A Plea to Save the Daman, which is a predecessor of Sindhu Bachao Tarla (SBT), A Plea to Save the Indus River, that fights against various river infrastructure projects in *daman*. That morning, we were planning to visit the Chashma Right Bank Canal (CRBC) – a perennial canal diverted on the Indus river about 274 km north of Ghumman.

If Tarbela Dam was built as part of the Indus Water Treaty of 1960 to replace the water lost to India, projects like CRBC were designed to expand the Indus irrigation system to new areas. The CRBC was a first of its kind– the first perennial canal to irrigate *daman* on the right bank of Indus, the first irrigation project helmed by Wapda after Tarbela Dam, and the first water-sector investment by the Asian Development Bank (ADB). The Pakistani state and international investors

had high expectations from a project. With the fall of the military rule of Ayub Khan, the first democratically elected Prime Minister, Zulfikar Ali Bhutto, was keen on bringing development to the underdeveloped parts of the central and southern Indus valley. CRBC promised to bring the Green Revolution to an area that the state and development expert view as a barren wasteland. Canal irrigation would support high-yielding water-thirsty cash crops like rice, cotton, wheat, and sugarcane. Local landowners were eager to reap the benefits of canal-based irrigation systems, expecting higher incomes and higher land prices. Investors were keen on the promise of high returns on investment from Pakistan's lucrative agriculture sector.

Fazal's village, "the most developed" one, was a target of this drive for development. When I visited Ghumman, it became evident that Fazal was not referring to development in the sense of schools, hospitals, or even metaled roads. Ghumman was a relatively large village, with a population of about 5,000 but was hardly a model village. It was an exceptional place for a different reason – the village was surrounded by three large canals yet unable to meet its water demands and suffering from the adverse environmental impacts of this irrigation infrastructure.

We left Benazir Gas Station and traveled west facing the Kohe-Suleiman mountains and came to the crumbling banks of the D.G Khan canal--diverted in the 1960s from the Taunsa barrage on the Indus river. Crossing the first canal, we landed on a twenty-meter-wide strip with a narrow unmetalled road next to yet another large canal—the Kachhi canal built between 2006-2017 was empty except for shallow, stagnant pools of rainwater unable to drain through its concrete-lined floor. D.G. and Kachhi canals have a combined capacity of over 20,000 cusecs of water and a combined length of over 550 km. Neither was built to benefit the people of Ghumman.

The area irrigated by the D.G. canal is further south. Locals started to withdraw water using lift irrigation illicitly. "You will see some people using Petter pumps to draw water from the

canal,” Fazal pointed to the loud diesel engine pumps introduced in the 1970s and known by the German brand name, “These were not allowed till a few years ago.” In the late 1990s, a court ruling allowed riparian farmers to withdraw water from the D.G canal. But during the mid-2000s, the construction of the Kachhi canal disrupted this practice. The water of the Kachhi canal was off-limits since this canal was built to irrigate parts of the Balochistan province about 300 km south of Ghumman.

Fazal recounted the days of surveys and land acquisition for the Kachhi canal -- how Ghumman became a site of struggle as the villagers stood in front of the bulldozers and faced baton charges by the police. He pointed to a curve in the canal as it reached the outskirts of the residential part of his village. “The original design cut right through the center of the village. The land acquisition already took away part of our agricultural land, but we did not let the canal destroy our houses,” he said proudly. But that’s not the end of the troubles of Kachhi.

As we moved further to the south along the two canals, I saw the spoil banks of Kachhi – large mounds of excavated earth, piled up along the western canal bank forming a 30-odd feet tall and wide bulwark designed to protect the canal from the hill torrent floods. The canal was in the path of the natural drainage channels of the hill torrents of the Kohe-Suleiman mountain. Fazal took me to a spot with a massive gap in the mud wall as if someone had used dynamites to blow away this part of the spoil banks.

“The 2012 hill floods did the damage,” Fazal noted. I found that hard to believe. The spoil bank was massive. How could a flood do that much damage? “The hill torrents are powerful,” Fazal explained, “We’ve seen floods so powerful that when these hit the Indus, the river stops flowing as the hill torrents cross and wreak havoc on the other bank,” Fazal noted that they were

lucky that the torrents broke through the spoil banks. The village was merely a couple of hundred meters away. If the banks hadn't breached, "there would have been nothing left in our village."

We backtracked through the village and continued westward to reach the CRBC, designed to benefit local farmers like Fazal. A couple of miles on the road and we came across two young men sitting next to the bridge over the dry canal. They were waiting for canal water. "Maybe it'll come today, maybe tomorrow," Sajid said that he might have to go to the city to find work – he might go all the way to my hometown, Lahore. But he didn't like Lahore – "there's no job security, work is tough to come by, and the entire city turns into a sewer when it rains." Hamid didn't like city life either. "There's no place to take a leak," everyone laughs. "Here, we are free to go anywhere," he pointed to the open fields. We drove along the canal further to the north to find water and came across two farmers repairing a breach on the western bank of the channel – a small but sizable breach caused by recent rains and floods. I asked them if they were working for the government to maintain the canal. "Screw Wapda and the Irrigation department," they hurled curses at the water bureaucracies, "they don't do anything here."

We turned around and continued southward along the canal and reached the final distributary - the small watercourse then distributes water to the farms. The left distributary went to Fazal's land, but the channel was dry and heavily silted, filled with rocks carried by the hill torrents. Fazal, the supposedly beneficiary of CRBC, said: "They promised us 300 cusecs of water here, but there is not a single drop in the canal." We drove along the dried-up channel with cotton fields ready for harvesting and some cleared up for the wheat crop. "Where do you get the water for these crops?" I asked. "Rain and groundwater," Fazal replied, "We may get CRBC water once a year, but that's not enough to grow a single crop. So, we rely on boring [groundwater] and only those who can afford to pay for it." Local farmers had cleared up some sections of the water

channel and were using it to transfer pumped-up groundwater, but this water isn't cheap. Fazal had to pay a significant portion of his crop yields as the price of water to wealthier landowners who could afford to install and run these pumps.

Places like Ghumman are in the path of a relentless drive for development fueled by the human attempts to control river flows by separating water from land and remixing it in other areas. Modern farmers rely on this water, diverted into canals that reach beyond the floodplains and inundation canals, to irrigate “barren wastelands” that the state and investors want to turn into high-yield agricultural fields. The shift from inundation to perennial irrigation by altering the natural rhythms of land and water mixing. The system relies on the combination of large storage dams like Tarbela and irrigation canals like CRBC.

However, the mixing and remixing of water and land as an experiment in river control was fraught with problems of social and ecological overflows. Stocking and diverting the Indus waters created familiar problems anticipated by the canal builders, like the salinization of land due to over-irrigation and subsequent loss of economic productivity. Perennial canals in *daman* also generated new and unexpected problems, like the destruction of *rod kohi*, or hill torrent irrigation systems, increased risk of floods, and the accompanying disintegration of social solidarity.

If the state's ideas of development and well-being were grounded in claims over the Indus River, the legitimacy of state's authority was rooted in its ability to deal with the overflow challenges. The conflict around CRBC, as I seek to demonstrate in this chapter, was not limited to the excluded demanding restitution. It extended to a dispute over different ideas of well-being in which the riverine movements of *daman*, questioned the state's capacity to deal with the overflows

and the inability of new and old regulatory mechanisms to recognize the local claims grounded in the social and hydrological conditions of the *daman* region.

Focusing on the material and social impact of the CRBC project, I describe the activist strategies of mobilizing the diversely affected peoples, primarily organizing among the traditional and modern irrigators. Daman Bachao Tarla (Daman), like Samat, coincided with the new riverine movements of the 21st century. Daman worked with PNRDP and transnational advocacy groups to expand local resistance and challenged Wapda and the international investors of the project, the Asian Development Bank (ADB).

The chapter examines the potential of alliances and new regulatory mechanisms to address the concerns of the excluded and identifies an essential shift in the riverine movements in central Pakistan. Daman made use of the new regulatory mechanisms and challenged ADB's environmental and social processes by invoking the Bank's Inspection mechanism – an internal accountability mechanism introduced in the 1990s. But before the process started, Daman activists decided to disengage. Why this change of heart?

The chapter presents an analysis of the limited capacity of state-arena to recognize the impact of canal irrigation in *daman*, and the subsequent activist strategy of using the Lok Sath, alternatively translated as People's Tribunal by Damani activists, as alternative spaces of deliberation and performances that drew upon traditional and modern ideas of justice and participation.¹⁰² The Sath, I argue, created the conditions for the subsequent emergence of river defense movement (covered in chapter 4).

¹⁰² Daman Bachao's activists generally use the term Sath, or Lok Sath, avoiding the English translation. However in written documents, interviews and some published articles, they alternate between the terms People's Tribunal, People's Law Tribunal, or People's Tribunal/Assembly.

3.2 Irrigation Designs in *Barani* Wastelands

The right bank of Indus is a semi-arid zone with low rainfall, where agriculture has relied on rain harvesting primarily by controlling hill-torrents after seasonal rains. Urdu borrows the term *barani*, بارانی, from the Persian word for the rain to describe agricultural land supported by rain. The British colonizers confused the word *barani* (of rain) with barren (infertile, not productive). The rain-fed areas of *daman* on the right bank of Indus became the barren wastelands on the dry side of Indus.

The existing *barani* irrigation systems of the *damani* plains survived the British drive for modernization through the enclosure of the Indus river. Modern canal irrigation started to spread across the Indian floodplains during the 19th century, but the west side of the Indus River remained untouched. Here the British had merely established indirect rule, driven primarily by geostrategic concerns. They regularized traditional irrigation systems that comprised of inundation canals, wells, and the *rod kahi* system of managing the hill-torrents, also known as spate-irrigation. The local ruling elites, tribal chiefs, built inundation canals even before the British assumed formal control of the area – the Mussuwah and Fazalwah are two examples of large inundation canals. The British also encouraged the construction of inundation canals, such as the Paharpur diverted near the Balot creek in 1907. But these seasonal canals relied on high-flows of Indus River during summer and monsoon months and had a limited range confined to the low-lying land close to the river along its western bank. The irrigation complex in the *pachad* -- areas lying westwards towards the mountains – consisted primarily of the massive spate-irrigation system that constitutes Pakistan's second-largest irrigation system. Until the 1970s, this system was mostly in-tact.

The colonial dreams of turning *barani*/barren (waste)land into 'productive' fields were realized much later when the cold-war era Green Revolution modernized irrigation in the region.

Wapda hatched up the plans for building CRBC. The British administrators were concerned about the speculative and unpredictable nature of the *barani* irrigation system. The new projects of perennial irrigation, helmed by Wapda and funded by the Banks, wanted to change this and bring the Indus water flows to produce new land that grew high-yield cash crops. If the Indus Development Project (IDP) of the 1960s and 1970s created the potential for expanding the Indus Basin Irrigation System by stocking water in Tarbela, projects like CRBC sought to realize this potential.

The Chashma Right Bank Canal (CRBC) canal was diverted at the Chashma Barrage, built in the 1970s. Chashma barrage extended the IBIS in two ways, similar to the Tarbela dam, and worked by using the water stock at Tarbela and Chashma. Two irrigation canals were diverted at Chashma when it was built. The Paharpur inundation canal was turned into a perennial canal, and the Chashma-Jhelum Link (CJL) canal transferred the Indus waters to the eastern tributary of Jhelum River. If Paharpur extended the IBIS westwards, CJL shifted the river flows eastwards as a river-link canal that ‘replaced’ the water lost to India under the Indus Water Treaty of 1960 (described in chapter 1&2). The CJL canal became one of the most controversial canals in Pakistan, termed as the ‘robber canal’ by the political activists from the lower riparian province of Sindh.¹⁰³ The Paharpur canal, which was irrigating along the western banks of Indus in D.I. Khan provided the model for the later development of the CRBC.

¹⁰³ While the state considered the option of diverting new river-link canals at existing barrages, particularly at the Jinnah Barrage on Indus River near Kalabagh town, they decided to build the Chashma Barrage as part of the World Bank funded IBP, given the technical difficulty of diverting large canals at the Jinnah Barrage. Chashma Barrage was built near Dear Ismail Khan in 1967-1970. The Chashma-Jhelum link canal was diverted on the left bank of the Indus, running eastwards for about 64 miles to bring up to 21,700 cusecs to the Jhelum river. The canal was designed “to meet the requirements of the canals off-taking at Trimmu Headworks on the Jhelum near Jhang”, which feed areas of central Punjab. The CJL canal has been a source of controversy, as Sindhi nationalist and the provincial government have argued that the canal robs them of their rightful entitlement to the Indus river as per inter-provincial agreements. Some academics have noted that the canal plays a symbolic role in a certain elite nationalist, ‘river-linked identity’, where the Sindhi nationalist lay claim to the Indus river which is seen under assault by a large engineering bureaucracy, Wapda, that claims to work in a technical manner for the entire Indus river basin. (Gilmartin, 2015, p232).

With the CRBC, the government of Pakistan and MDBs sought to change the agricultural landscape of *daman* area by irrigating areas further westwards towards the Suleiman mountain range, thereby extending the temporal and spatial range of irrigation using Indus river water. It was part of the Chashma Right Bank Irrigation Project (CRBIP) that consisted of the CRBC canal, minor canals and distributaries, watercourses, and other interventions such as the leveling of land, on-farm water management, and the modernization of agricultural techniques and implements. The Pakistani government and international experts/lenders classified the project as “high priority,” as an important piece of development intervention that would set Pakistan firmly on the path of modernized agriculture-based economic growth. The project’s objective aligned with the national economic strategy of sustained growth, poverty reduction, and improved income distribution by investing in underdeveloped rural areas of the country (ADB 1991).

Investors in Water Distribution

The Asian Development Bank was excited about its first investment in Pakistan’s profitable irrigation sector. The Bank started lending to Pakistan in 1968, with investments in industrial development, power plants, and urban water supply and sanitation schemes. But it was looking to diversify its lending portfolio and was particularly interested in funding irrigation development projects, given the promise of a high rate of return on investment as experienced by the World Bank.

The Pakistan state and international investors lauded the potential for making productive the “vast tracts of barren [land]” that relied on inundation canals, the limited groundwater, or *rod kahi* -- the “undependable and risky practice of harvesting the short-duration flood flows from small intermittent streams for supplemental irrigation” (ADB, 1991). New irrigation schemes

would increase crop yields by introducing water-intensive cash crops such as wheat, barley, cotton, rice, maize, and oilseed.¹⁰⁴ The project had three goals: increase agricultural production, improve the economic and social conditions of the rural population, and develop less-developed areas of the country. These goals fit with the broader agenda of economic growth for the Pakistani state and promised good returns on investment to the ADB.

While ADB and Wapda were keen to get started, a shifting political climate in Pakistan created some delays. By the early 1970s, democratic forces had overthrown Ayub Khan, the country fought two wars with India, and the eastern part of the country became the independent nation-state of Bangladesh. The first democratically elected government of the new Pakistan, under PM Zulfikar Ali Bhutto, was eager to decentralize power and redistribute resources. Bhutto was particularly keen on investing in the southern and western regions of Punjab. But new irrigation schemes in Punjab were not viewed favorably in the PM's province of Sindh. The issue lingered on, and the project design was modified – original plans of CRBC envisioned a large canal with 18,000 cusecs that were revised down to 12,000 in 1973 and 5,000 cusecs by 1977.¹⁰⁵ By this time, another military coup led by General Zia ul Haq overthrew the Bhutto government.

¹⁰⁴ The planners envisioned an increase in the income of 27,000 farming families, new employment opportunities in the agro-industrial sector, and growing foreign exchange reserves due to increased exports. ADB. "Completion Report: Chashma Right Bank Irrigation Project in Pakistan (Loan No. 330-Pak [SF])." Project Completion Report. Manila: Asian Development Bank, August 1989.

¹⁰⁵ Archival sources show that the CRBC was designed to have a capacity of almost 12,000 cusecs in 1973, to irrigate about 1.3 million acres of land in KPK and the Punjab, primarily through gravity irrigation with some provisions for lift-irrigation utilizing the groundwater recharge caused by seepage from the waterways and flood irrigation. This would have been the first modern, perennial canal in the region, utilizing the channels of the previously existing inundation canals, such as the Paharpur and Mussuwah that were built during the colonial era. By August 1974, these provincial disputes continued, and The Executive Committee of the National Economic Council (ECNEC) called for the Chief Ministers of the two provinces to reach an agreement. ADB sent a mission to Pakistan in October 1976, and met with the central and provincial governments, along with WAPDA, and showed interest in the project, particularly in the 'gravity' component of the project. Assurances were given to the ADB mission "that there would be no constraint on account of non-availability of water." [cite]. With a cost estimate of about USD 134 million, the ADB and Wapda came up with a new design plan for a canal carrying 5,000 cusecs of water, to be built over three stages. While the MOU was signed in 1977, it took about a decade for the first stage of the CRBC, with 79 of the 260km, to be commissioned.

The military general appointed as the Chairman of Wapda gave the CRBC project the go-ahead, with “a formal assurance ... to the Asian Development Bank regarding the availability of 5000 cusecs of water for the [CRBC] project.”¹⁰⁶

The ADB and Wapda moved to finalize the project funding but realized that building the canal in *daman* posed a difficult challenge. The project suffered delays resulting in cost overruns, overestimated economic returns, and failed to consider adverse social and ecological impacts. Instead of the five to ten years predicted construction time, the project took four decades. ADB realized they had severely underestimated the costs – initial estimates put the cost at USD 31.5 million, revised to USD 287 million by 1982 (ADB, 2010:1).

Further appraisal suggested that it was best to build the canal in three stages, with the final cost of about USD 577 million.¹⁰⁷ It took ADB and Wapda three decades to build the divert the CRBC on the right bank of Indus River at Chashma, with the main channel snaking through the Dera Ismail Khan and Dera Ghazi Khan districts for 274 km until it reaches the Suri Lund hill torrent next to Fazal’s village Ghumman. The project underwent various revisions, and the Canal was built in three different stages. Stage-I built 79 km of the main canal (RD 0 to RD 260)¹⁰⁸ with work beginning in the early 1980s and completed in 1991. It took two years to complete stage-II, which added another 36 km (RD 260-380). The ADB built the 145 km of stage-III from 1995 to

¹⁰⁶ (NDC, 1977)

¹⁰⁷ Controlling for dollar inflation the final cost was 1,000% of the original estimates. This included: USD 377 million for the 260 km canal, 600 km distributary and minor channels, and the remodeling of the 110 km of the existing inundation Paharpur canal; while another USD 200 million allocated for on-farm water management and development of the command area.

¹⁰⁸ RD stands for Reduced Distance and is a unit of length commonly used as a standard marker to identify different sections of the canals in Pakistan. 1 RD equals 1,000 feet.

2010. The project sought to irrigate 260,000 ha of cultivable command area (CCA), with 60% of CCA in the D.I Khan district of the KPK province, and 40% in the D.G. Khan district in Punjab.

Each stage was marred with design problems. A fifth of the projected cultivated command area of CRBC was lost to waterlogging in the upstream areas due to overflows and water scarcity in the downstream areas due to underflows. None of these estimates accounted for the economic cost of increased risk of floods in the upstream (western bank) areas of the hill-torrents, or the operation and management costs of the project.

Despite the design challenges, cost overruns, and overflow issues, the ADB's internal evaluation reports listed the project as successful. The Bank viewed the losses of stages I and II as 'sunk' costs that would be recovered from the profits of stage III. They expected a 13 percent rate of return, but actual returns were merely 6% by the mid-1990s. The developers took measures to recover lost profits by increasing cropping intensity, but this caused other problems. CRBIP areas saw an unexpected increase in rice and sugarcane cultivation across the years, which caused water shortages in 20,000 to 25,000 ha of the tail area.

For ADB, the CRBC was an overall success in turning the barren lands of daman into fields of gold. A promotional video for its investors shows drone footage of the desert-like terrain, with three camels looking quite disinterested and a local man sitting on the ground looking towards the sky, with a text that states that before the canal was built "much of the area was nothing but barren desert", which the canal transformed "barren land not a farmland where water-intensive crops can now be cultivated". The video shows images of vast green fields, cotton, rice, and sugarcane - crops that were deemed as prohibited in the area. Farmers in the command area boast of higher yields, economic prosperity, and increased incomes.¹⁰⁹ Even place names had become redundant,

¹⁰⁹ From various ADB sources, videos, and interviews in the area.

ADB's PR video claims – farmers of the village 'Dhup Sari,' or sun-scorched, are cultivating rice and sugarcane. Images of farmers harvesting crops are intermixed with interviews of mechanics who claim that their business is flourishing as local farmers can now own their own tractors, instead of leasing these expensive tools. Some have even set up fish farms in the desert. The irrigation canal, as the video title shows, made "the desert bloom in Pakistan's Punjab."¹¹⁰

3.3 Chashma's Overflow Problems

The introduction of modern canal irrigation in *daman* reflected a broader shift in human-river interaction – a shift from inundation to perennial irrigation. The region used to rely on the management of the seasonal rhythms of the Indus River and the Koh-e-Suleiman hill-torrents. Now it has shifted to the year-long supply of water through canal water. The shift in hydrological and social flows, however, came with ecological and social costs. This section describes the problems of CRBC overflows that correspond with old and new challenges of enclosing the Indus River.

By the early 1980s, ADB and Wapda realized that they had overestimated their capacity to separate water from land and remix it in an orderly fashion to boost land productivity. They faced two major problems: the old menace of waterlogging and salinity (hereon salinity); and the new problem of dealing with the hill torrents left in disarray due to the construction of the canals. The hill-torrents of Koh-e-Suleiman range posed a unique challenge to the builders that Wapda and experts at the Banks were not equipped to deal with. The problem of salinity was not new as irrigation engineers had known about the issue since the early twentieth century. While we may

¹¹⁰ Irrigation Canal Makes the Desert Bloom in Pakistan's Punjab. (2017). Asian Development Bank. Retrieved October 08, 2018, from <https://www.adb.org/news/videos/irrigation-canal-makes-desert-bloom-pakistans-punjab>.

think of these problems today as ‘ecological’ issues, Wapda and the Bank’s main concerns, as usual, were protecting the investments and ensuring productivity.

The premise of perennial canal irrigation is to provide a year-round supply of water in areas where seasonal availability of water doesn’t allow intensive cash cropping throughout the year. The oversupply of water, particularly in semi-arid terrains, leads to a peculiar problem – excess water and inadequate drainage raise the underground water table bringing large amounts of subterranean salts to the surface, rendering the land unfit for cultivation. The problem is quite severe and widespread across the Indus basin and most irrigated areas of the world. About a quarter of all of the irrigated land worldwide suffers from the problem of salinity.¹¹¹

In South Asia, the problem emerged soon after the introduction of modern perennial canals and continued to worsen. The British colonial administrators viewed this as a technical problem related to surface structures that blocked runoff drainage, not of over-irrigation.¹¹² The high-water table was also seen as advantageous for operating hundreds of Persian wheels, which created a sort of anti-drainage lobby (Alam et al. 2007: 213). Yet the problem continued to trouble the irrigation experts, and by 1959 about 100,000 acres of the 23 million acres of total irrigated land in the Indus Basin Irrigation System was being lost to salinization.¹¹³

¹¹¹ Prathapar et al (2005) estimate that about 223,000 ha of canal irrigated land goes out of production each year.

¹¹² The problem of waterlogging and salinity is known to irrigation experts in the Indus basin since the mid nineteenth century with the problem surfacing in 1859 with the development of the Western Jumna Canal in the Ganges basin. As the scale of the problem rose, the British colonizers set up the Waterlogging Enquiry Committee in 1925, which concluded that the problem wasn’t caused by excess irrigation but due to infrastructure that blocked surface runoff. Punjab was deemed by the Committee to be in a rainy cycle, even though by 1908 the Lower Chenab Canal cultivated area had seen serious waterlogging with only 15 years of canal operation [built 1892].

¹¹³ Modern irrigation practices are estimated to increase the water table, on average between 0.6-1.0 feet per year, and by 1959, 5 million acres of the IBIS were seriously waterlogged or salinized out of 23 million acres annually irrigated, with a loss of 50,000 to 100,000 acres per year. Drainage is an effective solution, but the infrastructure is costly without tangible results until the land becomes unproductive, and the impact is long-term while political and policy decisions can be short-term (Alam et al 2007:213). In Pakistan, several drainage programs were initiated during the 1960s, which were 'complex and costly' -- the cost of these programs between 1965 and 1975 are estimated to be around USD 1.1 billion, which is approximately the cost of the Tarbela dam itself. Michel (1972: 263) points out, the “lure of adding new acreage was still strong, and few were interested in reclamation when lost acreage could be replaced

By the time CRBC was planned, Wapda and the Banks (ADB, WB) were keen on finding solutions to the economic productivity lost to the canal and on-farm seepage. The old approach for managing water-logging and salinity included an over-reliance on tube wells to withdraw groundwater – the Lieftink’s *Indus Special study* of 1968 had given attention to the use of groundwater. Pakistan saw a rapid increase in private and public tube wells during the 1980s. However, by the time of CRBC, the designers were keen on limiting water seepage from canal channels and the farms.

While dealing with salinity became key to turning ‘wasteland’ into productive farms without losing a quarter of the productivity, attempts at realizing this dream fell short of the mark. The ADB viewed CRBC as a “pioneering venture,” designed to deal with the menace of salinity by building concrete-lined canals, leveling farmland, and using new on-farm water management schemes. However, Wapda was interested in cutting costs and decided to forgo these new measures. When Stage I was commissioned in 1987, the ADB objected with concerns around severe waterlogging and "flooding of lands adjacent to the canal from certain canal seepage and possible breaching upon commissioning." Wapda argued that a delay in water delivery would create another year's delay in terms of reaping the economic benefits, and was prepared to accept some waterlogging and flooding as "normal consequences" since this "had occurred with almost all major new canal systems in Pakistan."¹¹⁴ As a result, 29,000 ha of the 58,000 ha of the total command area of Stage-I faced the issue of waterlogging.

elsewhere”, even though costs of irrigating new lands was higher and soil quality poorer. Alam et al (2007) notes: "Many of today's water problems in the Indus basin have their roots in the colonial period -- salinity, drainage, inadequate water pricing, poor maintenance, provincial conflicts, and ineffective bureaucratic organization." Westcoat (1991: 392) muses, “the sobering lesson from the colonial period is that a problem may be well understood, and potential solutions may be well known, but it may take decades or centuries before the problem can be resolved.”

¹¹⁴ ADB, 1998: EIA carried out [TA No. 1629-PAK: *Strengthening Environmental Management for Water Resources Development...* 1991; *Environmental Management Plan for Chashma Right Bank Irrigation Project*. 1994. P7

Salinity wasn't the only woe for CRBC builders. They were also confronted with the challenge of the hill-torrents from the Kohe Sulieman mountain range. The riverine land along the right bank of the Indus river, called *kachii* or *sindh*, consisted of low gradient alluvial floodplains of the Indus river, the *pachad* area towards the western mountains comprised of a steep gradient with clayed soil that is cut into several gullies and ravines by the natural drainage channels of the hill torrents. The *pachad* area constituted the floodplains of the hill torrents and perennial streams of the Kohe-Suleiman mountain range. This area consisted of several large perennial streams, or *nullahs*, such as the Vihowa, Sangarh, Kaha, and Sori Lund, and a couple of hundred minor *nullahs* that received flash floods after rainfall. The summer monsoon drained a large quantity of water through these channels into the Indus River 20 to 30km to the west, often carving out new channels. The torrents carried a heavy load of silt, sediments, and rocks, and peak floods in large nullahs matched high-floods in the major rivers Indus basin. Locals even reported that during high-flood season, the water flow in these torrents had such power that it would hit the Indus river on the western bank, cut through the mile-wide river channel, stop the river from flowing southwards, and cause havoc on the eastern bank.

The CRBC designers struggled to deal with the eastward flow of the hill torrents as they built new channels that ran north-to-south blocking the drainage paths, built to shift the Indus flows westwards closer to the mountains. Wapda and ADB initially saw this as a manageable problem and designed culverts for hill torrents to cross under the canal. But these would get blocked with the silt, and caused breaches in the canal or backflow floods to the west of the main canal channel. The engineers experimented with several designs – they built siphons and ‘supper passageways’ over the canals, consolidated multiple streams through the construction of weirs and embankments

to increase water quantity and velocity, hoping to flush the sediments. New design features saw newer problems – the siphons were raised above ground, causing permanent flooding in some areas, and the consolidating of multiple nullahs increased intensity of floods.¹¹⁵ Wapda and ADB realized that the canal would require regular upkeep to clear up the drains, prevent ponding, and mend breaches. The design capacity of the flood control channels was based on 30-year flood levels without any consideration for the extreme floods that were more likely due to changing weather patterns linked to global warming. The designer ignored local knowledge about the shifting nullahs and used historical maps and satellite imaging to predict the hill torrents path, but floodwaters shifted paths and avoided some of the siphons and curvelets built.

[Figure 6 CRBC super passage] [Figure 7 Super Passage]

For the builders, these two problems of salinity and floods put the economic viability of the project into question. Solving salinity was not limited to the cost of building surface and subsurface drainage channels, but included the cost of leveling the cultivable land. The *pachad* geography consisted of a steep west-to-east gradient, and the hill-torrents cut through the terrain creating an uneven surface. The torrents, running west to east, threatened to destroy the canal and cause flooding on the western side of the canal. Any design solutions would've significantly increased the cost of the project, and cost-cutting was a prime directive.

¹¹⁵ An evaluation of the Stage I, conducted in 1989 when stage II was already under way and design for Stage III was being finalized, noted that the project suffered from “under-design of the canal system, particularly cross drainage structures, due to inadequate information on the hill torrent hydrology.” ADB envisioned regular maintenance for stage I, and sought alternate designs approaches for Stage II and III. New designs such as super passages or canal siphons were incorporated into the canal design, which further increased the cost of construction, caused further delays, and in the end did not prove to be effective. The idea seemed sound – instead of culverts that would pass under the canal, canal syphons and super passages envisioned carrying the cross-drainage channels over the canal. But while these above ground structures were easier to maintain, the entry point to these flood carrying channels (FCC) were at a higher level than the ground, causing the problem of ponding to persist.

Views on CRBC Overflows:

CRBC produced many winners and losers and unveiled the tensions between desires for modern irrigation and economic development among some and the dreams of preserving existing relations to water flows. Landowners of the canal command area were the primary beneficiaries and saw increases in income and land value. Some of these landowners faced water shortages or salinity problems. The land users outside the command area faced the most adverse effects of the CRBC project. In this section, I give a brief anecdotal account of conversations with landowners in and out of the canal area, to demonstrate that despite the problems of overflows, their desires are influenced by the promise of economic gain by canal irrigation. While some of these participated in the Daman Bachao Tarla movement against CRBC – their views show interest in benefiting from river enclosure.

The peasant and farmers on the west side of the canal were excluded from the direct benefits of canal irrigation and were threatened by the hill-torrent floods. I visited a community with Daman activists. The village of *Katehrewala* is located about 100 km north of Fazal's village on the right bank of the canal. The village is difficult to reach, especially after rain when the unmetalled road along the CRBC turns into a swampy mud-track. Our car struggled on this track, getting stuck, slipping, and veering dangerously close to the edge of the canal multiple times. The canal was about 20 feet wide near the village.

The village is at high risk of floods due to CRBC's western embankments and the badly designed Flood Control Channels (FCCs) that consolidate several hill torrents, increasing the quantity and velocity of floodwater. It is surrounded on all sides by a 30-foot high mud embankment. This embankment was built to protect the villagers from the floods. But the wall is

in a state of disrepair. We were given a tour of this wall -- neglected by the government officials, large cracks and holes had appeared all across filled with loose rocks and bushes by the villagers.

“Each time it rains, the cracks widen. We have to stand guard all through the night. Otherwise, we can be swept away,” an elder of the village, Abdul Razak said. Only a handful of mud and chafe houses remained, and many had emigrated to avoid the floods. Others were still waiting for resettlement. Abdul Razak mentioned the 2010 floods:

The 2012 floods destroyed the embankments, and we barely made it through. Now there are cracks in the embankments, and the village won't last an hour if flood water reaches here. But no one does anything. They just want this *basti* to be destroyed. Wapda irrigation department, etc. etc. – no one has come, no repairs, no alternatives.

The villagers had been waiting under these conditions for about fifteen years. Razak mentioned that an official recently came to the village, perhaps from Wapda, and promised to expand the embankment and give the villagers monetary compensation. The villagers wanted land for land.

Razaq looked across the canal towards the green fields and said they'd like some land in the command area. Or perhaps the government could make a stronger embankment, but allow the villagers to use the canal water. Someone pointed out that there was no water in the tail areas, how could the *Katehrewala* villagers divert water. Razak nodded. As we drove back from Katehrewala, a couple of activists started discussing the challenges of organizing local groups with conflicting interests. One of them noted that the government knew about the problems for over a decade, but offered no solution. The other mentioned that there was no point in expecting the government to do anything. The conversation went back to the conflicting desires of canal irrigation in upstream areas, lack of water in the downstream areas, and the problem of over-watering that was causing waterlogging and salinity in other areas.

We traveled to another spot in the canal command area - an 8km stretch of land on both sides of the Indus highway stretching about 15 km from the canal in the west to the riverbank in the east. The land was covered with a thin layer of salt. Nothing grew here, in the heart of the most productive and fertile parts of the CRBC command area. We stopped to speak with local farmers, who told us that the problem started to surface a couple of years after the canal started to run. Those with significant landholdings made up for the loss of productivity by profits from other areas. Small peasants didn't have that luxury, and an entire village of small landowners had to sell their land to brick-kiln contractors and move out of the area.

Some of the beneficiaries didn't think the problem of salinity was caused by the canal. A local landowner, Miani, claimed that the problem wasn't caused by the canal. He noted that the canal brought *meetha* paani, sweet or freshwater from the river, and could not cause salinity. The problem was with the land itself. The sweet water of the canal did not mix with the land with *karwa paani* or brackish groundwater. He also noted that the use of Pieter pump in areas susceptible to waterlogging could allow for some cropping – in particular, rice can give good yield, and even wheat and cotton can also be grown, but the yields are low:

“We have land that is bitter [ہمارے رقبے کوڑے ہیں], and the canal brought sweet water [میٹھا پانی]. That's what caused the problem. We started using the canal water, and slowly the problem became worse. This has been our situation for about 6 years now. We can't use the canal water, but we can still use the groundwater using Pieter [diesel engine] pumps. So, some parts can still be irrigated. The canal water doesn't get absorbed in the land. It doesn't mix with the brackish underground water. The land that is sweet [underground water is sweet], the canal doesn't do any damage.”

Fazal decided to intervene and contested Miani's interpretation. He pointed to another patch of land, near the Qaisarani landholding, across from the petrol pump at Raitla, with a *khara* [bitter] well. The groundwater there is brackish, and it lies in the CRBC command area but doesn't

have the problem of salinity. The problem is with the design of the canal, not groundwater quality.

Salinity appears in areas where the canal is higher than the surrounding land.

The canal is at least 15 feet above the ground level in this area — [Miani nodded in agreement]. If ever the canal is at the ground level or below surface level, and there's a problem of salinity, then you can hold me responsible, fine me, and I'll pay you in cash.

Miani conceded some ground but insisted that the problem is with the groundwater quality, not the canal. "Find any piece of land that is below the level of the canal that has sweet groundwater and suffers from salinity," he countered. 'Even the land close to the river here,' pointing eastwards 'doesn't have salinity.' Fazal countered:

"These problems can't exist near the river. You will never see salinity in *katcha* [riverine tracts]. You've seen the river bed here [speaking to me]. It spreads across several kilometers. It won't allow salinity but wash it all away... *Darya badshah hai, uss ke aage kis ki banti hai* [The river is the king, nothing is a problem for it]."

Fazal presented an accurate analysis of the problem, and these issues are well-documented in official project documents. But the without access to this information, Miani's observations reflect theories that emerge out of understandings grounded in peoples' lived experience. Perhaps this even reflects his general support of canal irrigation, given that he owned land outside of the salinized tracts. As Miani said when the canal was built, everyone expected benefits, but no one imagined that such problems could emerge.

The landowners of the Indus Valley, by and large, have strong desires for canal irrigation. The issue of water distribution or the complex nature of environmental problems often distances the farmers on the ground from the broader conflict around water irrigation. Conflicting interests and tensions are not uncommon in river infrastructure projects, as I have demonstrated in the case of Tarbela. The issues of water distribution among lower and upper riparian users often go hand in hand with the support of canal irrigation among landowners and project beneficiaries.

However, the CRBC also represents a case where the technology of river enclosure actively destroyed an alternative system of irrigation. While many landowners view the modern irrigation system favorably, the Damani activists like Fazal are also concerned about the loss of the traditional systems. “These are dreams of canal irrigation in *barani* lands,” Fazal puts it. Concerns with the loss of traditional irrigation system and its cultural and social impact, however, become a significant factor in the shifting riverine movements of *daman*.

3.4 Rod Kohi and Social Disintegration

We visited Mushtaq Gaadi on his farm near the town of Taunsa and spoke about the disintegration of the *rod kohi* system and its social and ecological consequences. Mushtaq is a scholar and intellectual, a central figure in the CRBC campaign, a member of the Daman and Sindhu Bachao Tarla movements, and part of the Siraiki cultural and political movement. He also had a brief but intense career in the non-profit advocacy sector, working in Sungi and with PNRDP in the early 2000s. Mushtaq Gaadi is also a beneficiary of the CRBC canal - his ancestral land lies within the bounds of the canal command area, seemingly well supplied with water.

Mushtaq and Fazal explained the key features of the *rod kohi* system. This ancient technique of water management is unique to arid and semi-arid mountainous regions of Asia, Africa, and Latin America. Hill-torrents are diverted to irrigate large tracts of land by building earthen embankments, or bunds, and spurs. In parts of KPK and Punjab, the spate irrigation system is known as *rod kohi* – a Persian term remnant of the pre-colonial era bureaucracies where *rod* signifies water flow or torrent bed and *kohi*, of the mountains. Locally this is referred to as *nai*. Pakistan’s spate irrigation system is the county’s largest irrigation system after the IBIS and covers

up to 10% of the total irrigated area, spreading across semi-arid regions of all provinces.¹¹⁶ And just as the IBIS is the world's largest contiguous irrigation system, spate irrigation complex of Pakistan is also one of the largest in the world.¹¹⁷ The practice in Pakistan dates back 9,000-years to the Mehrgarh civilization with archeological finds of 5000-year-old bunds in parts of Balochistan and bund dagint to 330 B.C. found in mountains of Punjab and KP. [CITATION]

The rod kohi system is managed using collective labor and relies on social solidarity networks and local knowledge about the terrain and shifting torrents. The *nai* or *rod kohi* flows are diverted using bunds, called *gundh* in Saraiki. A large bund is built close to the mouth of the rod kohi to split the water into two channels, known as *wah*. The *wah* is further split by building additional *bunds* downstream. Major channels, or *wah*, are identified with the name of the *mauza* (village settlements). The bunds have to be carefully built before the rainy season so that the water can be diverted all the way from the mountains to the different *khet* (fields).

The labor is measured in terms of units of contribution – the minimum commitment is an individual's labor to build bunds. A pair of bulls is the next unit of contribution – used to drag mud with a leveling plow (*peendh*) and to stamp down the dirt. Folks can contribute in units of one, two, five, or ten individuals or animals. The distribution of water rights followed an upper riparian scheme, where those at the head (*saropa*) of the *nai* used water before those at the tail (*paina*) received their share. It took several villages and tribes to manage a single rod kohi.

¹¹⁶ These estimates are based on IFAD, 2010 and *Dry Side of Indus*. Almost 2.2 million ha of land prepared for spate irrigation in 2010, with total irrigated area in the country about 23 million ha. The expansion of IBIS and introduction of tractors and tubewells have reduced the spate irrigation practice. However, the lack of concern by agricultural and irrigation development experts in spate irrigation also shows with the lack of consistent data on the cultivated area – for some years the estimated area is anywhere between 0.6 million to 1.3 million hectares (see IFAD, 2010, p91).

¹¹⁷ For instance, estimates of spate irrigation in Pakistan for the year 1999 are in the range of 0.64 to 1.28 million hectares, compared to 0.12 million ha in Yemen, 0.45 to 0.8 million ha in Iran, and 0.08 million ha in Morocco. IFAD, 2010

Mushtaq recalled the development of the command area in his village, three km from one of the large nullahs of Sangarh. People of tens of settlements had to come together and contribute them to build earthen bunds every season.

I believe around 40-50 *bastiaN* [settlements], maybe even more used to come together...to build earthen bunds each year before the monsoons... then they'd put stones on it; many small bushes were also placed on it [to prevent erosion and to build] a better structure.

The collective demands of the *rod kohi* system engendered strong social bonds and relationships between the communities. Fazal observed that the time spent together extended beyond the labor-intensive months of monsoon season, and cultivated deep social bonds.

Rod kohi sustained our relationships, created social solidarity. For two months of the monsoon... people from paina-saroba [head and tail of the rod kohi], all across the command area, the “beneficiaries”, used to live together, eat together, and work together... This nurtured our relationships, our love, and intimacy... We won't just labor together, but also attend weddings and funerals, visit each other throughout the year. The disintegration of rod kohi also led to the disintegration of all these social relationships.

The geography of rod kohi brought together villagers from different tribes, caste and kinship groups. Building the rod kohi was a source of building bridging capital among the people of the area.

A single rod kohi, a tribe is called phallee پہلی, a tribe can have several branches [phallee], and there are separate tribes in the command area of a single rod kohi, three or four tribes benefit from a rod kohi. These are not separated by qaum or nasal [ethnicity or race]. Everyone benefits. For instance, the Suri rod kohi falls in tumman Lund [the tribe of Lund], then the beneficiary also includes Khosa [a different tribal group].

The *rod kohi* irrigators sowed a variety of crops, including wheat and cotton. But these crops were different from the high-yield GMO varieties. These were indigenous crops that are still grown in the west of the CRBC canal. Mushtaq recalled that his mother used to tell him about the rod kohi wheat and cotton, and Fazal remembered seeing cotton fields on rod kohi water.

M: My mother tells me that wheat on rod kohi water, and sometimes cotton as well, in our village. I never saw it in my lifetime that cotton is grown on rod kohi. But the kalapani was a more regular source of water.

F: I've seen cotton grown on rod kohi. This cotton was of a different variety. The plant was taller than I am. And what you've seen yourself [Fazal refers to our visit to the west of the CRBC to the area still irrigated by rod kohi].

They claim that rod kohi, along with the perennial streams (*kalapani*), and wells were used to grow a variety of crops including bajra/millet, jawar, channa/chickpeas, assun [leafy herb for oil], cotton, wheat, and even indigo planted as a cloth dye during the colonial period. Regardless, the colonial administrators saw rod kohi systems as 'risk-prone,' unreliable due to the unpredictable nature of the floods and frequent changes in watercourses. They saw the rod kohi cultivation as a speculative endeavor with high demands of seasonal labor that might pay dividends once every three years (Gilmartin 2015:32). The system also worked in tandem with a supply of mobile labor and pastoralists, who'd move around with their cattle in case the rod kohi yields were low in one season. These mobile populations posed a challenge for the British, along with the view that the idle time spent by zamindar was a source of "local mischief."¹¹⁸

Rod Kohi in Decline:

The decline in the *rod kohi* system began with the introduction of modern irrigation and agriculture in the *damani* region. Before CRBC was built, the introduction of motorized tubewell to exploit groundwater caused a slight shift towards groundwater use. However, it was really the

¹¹⁸ C.f. Gilmartin:2015, footnote 14, ch2, p262. Citing the correspondence of a Minchin, DC DGK to Comm & Super Derajad on Nov 16, 1861 (Punjab BOR, file 251/106 "Purchase of the Nur and Dhundi Canals", p10. Minchin adds that during lean years "the zamindars must remain idle and unemployed, --a fruitful source of mischief, --unless they can obtain service in other parts of the country."

introduction of tractors that transformed things here. Tractors were introduced as part of the Green Revolution.

When tractors were introduced in this area [ca the 1970s], people no longer had bulls. Without bulls, folks expected the government to build the darra. But the government didn't build these, because to make the same type of bunds you'd need bulldozers, and the government wouldn't lend bulldozers [The bulls could bring the soil and stomp over it, a process that couldn't be replicated by tractors alone]. So, from the 1970s till the late 1990s, it was an era that saw the total devastation of the rod kahi system within two to three decades.¹¹⁹

This period identified with the devastation of the rod kahi system, from the 1970s to the 1990s coincides with not only the introduction of tractors and the planning and design of the CRBIP project. Mushtaq identified another key factor that resulted in the destruction of the rod kahi system – the government did not take responsibility for maintaining the structures. While many tractors are privately owned, and increasingly so, the government also maintains programs to lend tractors during cropping seasons for poorer segments of society. Furthermore, the local district officials can also provide bulldozers that are necessary for strengthening the bunds. But the system was ignored:

I remember that we used to plea sometimes with the MNA at times with the MPA that please get approval for a bulldozer this time [this season]. But they didn't use to approve these or weren't able to obtain it. Now there are many darras [needed to be built or repaired every year], but a few bulldozers. The government didn't take up the responsibility of maintaining the rod kahi system. The irrigation department was interested because, by the 1970s, this [CRBC] canal was also being considered, at the time of [Zulfiqar Ali] Bhutto sb, that this [rod kahi system] will be further destroyed [by the canal]. Now in their books [irrigation department] they mention that the restoration of the rod kahi system is also an option, since the canal was delayed for some reason ..that is also a whole another story, but for this reason [?] as well they [government/irrigation department] stopped attending to the needs of maintenance of the rod kahi system.

¹¹⁹ Mushtaq Gaadi, interview, Nov 2017.

By the 1980s, the Tarbela dam had started supplying electricity, and with the arrival of electricity in the Taunsa area, tube-wells were being installed. Tubewell irrigation was a big part of the World Bank's plan for increasing irrigation in non-canal areas, and to control the waterlogging and salinity problem. Mushtaq's view, from an activist's perspective, draws the link between the World Bank and ADB's desire to lend and invest in the irrigation scheme – so rather than just viewing tubewells as a technology of modernization, Mushtaq highlights that these were based on loans and investments.

By the 1980s, people started installing tubewell. The World Bank started pushing for subsidies for electricity and tube-wells ... tubewells, as you know, was a big source for loans [to fulfill the Bank's goals of investments in the profitable agricultural sector]. So, [the Bank] pressed the government to provide subsidies for tubewells in barani [rain-irrigated] areas, for the use of underground water, just like they did it all over Balochistan. When subsidies were provided, folks with financial means jumped on the opportunity and started installing tubewell. I remember that in our village during the early 1980s, all of the villagers pooled money.

With the replacement of bulls with tractors, the lack of interest by the government, and the introduction of tubewells with the provision of electricity, by the 1980s, the rod kahi system was in a state of disarray. These shifts in the irrigation patterns also shifted labor arrangements. Plowing with bulls required manual labor, and tenants used to provide this, but with tractors that need for human labor ended, and with that, the need for keeping permanent tenants. As Mushtaq notes,

this was a complete package [English] introduced in the 1970s, became entrenched by the 1980s, and by the 1990s, the canal [CRBC] started showing its face. By the late 1990s, people had pinned their hopes on the canal. The rod kahi system was in disarray – for at least three decades before the canal water arrived, it had become dysfunctional, completely dysfunctional.

Fazal sums it up in these terms:

The disintegration of rod kahi, at first it was impacted by the turbine system. This effect was limited, but the disturbance was due to the turbine system. People started using underground water, started making independent arrangements, and the commitment to building and constructing the bunds lost its drive. The Chashma canal has just completely devastated the system.

The Uncertainty of flows

The destruction of the *rod kohi* system caused the disintegration of existing social solidarities that tied communities of kinship and blood and beyond in reciprocal labor arrangements. Land and water conflicts are pervasive, destroying the social fabric and the cooperation or the *sanjh* of local communities.

Now the form of community is such that whichever house I go to, there's conflict. Land prices have increased. If I used moral language, then greed is on the rise. Brothers are fighting with brothers over inheritance and shares — conflicts over small pieces of land. *Ishtimal* [land consolidation] is done to formalize land arrangements in places where land was not valued this much. Then it has to be divided internally in a large household. The valuation of land has also been transformed by this development. Where you get water and where you can't, what about road access, everywhere there are new calculations. It has been completely transformed.

The replacement of rod kohi with canal irrigation created new types of anxieties, social, and psychological conditions that exacerbated violence. The uncertainty of water created a certain temperament of living with uncertainty. Without a desire for controlling nature, people worked with the rhythms of existing flows.

Rod kohi's water also shaped the psychology of the local people. sometimes water would come, at other times water won't come. The coming and going, the uncertainty of water, some seasons the rains weren't enough, there were conditions of drought, so people are just sitting.

The desire for canal irrigation for controlling water and controlling nature was shared by locals who wanted the certainty of water provision, Mushtaq noted. However, the new canal did not do away with this uncertainty, unlike what the British, ADB, or Wapda sought to do with canal irrigation. Farmers still wait for water and fight over it.

People also said that when the canal would come, we'd benefit from the constant supply of water. But the canal also has water shortages, there's no water in it for days and weeks and months, and people are just sitting and waiting. The distry

[distributary channel] is breached, and then they are sitting. That desired certainty is not forthcoming.

As humans took control over water flows, they began to influence the uncertainty around water provision. Things may have been uncertain when nature was in charge, Mushtaq noted, but with humans in control, “water has become an instrument of torture.”

Is this more uncertain, given that previously one could have a seasonal expectation, but now there are other calculations, like decisions upstream of how much water to release, etc.? Yes, now it’s in the hands of humans. So, in the upstream, the gates [at the head of the canal] may be closed, they aren't opening the gates, now that's the anxiety.

Mushtaq compared the disintegration with the experience of the Native American and indigenous people elsewhere, noting that with such broader shifts, there’s nothing left in terms of existing material arrangements, only memories which also get destroyed over time. Speaking about blood as a metaphor for social solidarity, he noted that the Siraiki people had a sense of solidarity, *sanjh*, that was lost because of the development of water.

What we call *sanjh* in Siraiki, cooperation, is no longer there, because older forms of community solidarity have disintegrated. Blood is a metaphor for brothers, but blood actually refers to social interdependence. Now that blood is no more. It has turned white.

The narrative of loss and social disintegration also signals an important shift in the politics of water in the region. Siraiki political and cultural elites had long demanded irrigation development and welcomed the arrival of the canal when the Bhutto government announced the plans in the 1970s. Mushtaq’s father, who was a renowned Siraiki intellectual and socialist, one of the central figures in the rise of Siraiki ethnolinguistic cultural identity, was in favor of the CRBC canal. The expectation was that the perennial flows would bring some certainty. Such expectations still influence certain strands of the Siraiki nationalist movement, with support for

irrigation dams and canals. For the Daman activists, however, the realization of the disintegration of the local hydro-social cycles, built around the rod kahi and traditional flow-based irrigation systems, created a shift in views. The realization of the loss of the rod kahi, along with all the other problems of exclusion associated with the CRBC, galvanized the local and wider community of activists against river enclosures in the Siraike Waseb.

3.5 New Riverine Movements in Daman

This section provides an account of mobilization by local communities and activists of the Daman Bachao Tarla movement, founded in the early 2000s, and their various strategies and deliberations to overcome the challenges of mobilizing among diverse groups and working with limited forums of participation. In particular, I consider how they mobilized with local communities, and utilized the opportunities afforded to them at the national and transnational level due to the work of advocacy networks and activists elsewhere in the global South. The description of their strategies, engagements, and subsequent selective disengagement with the state (Wapda and ADB included), also opened up new avenues for building local institutions that I discuss in the next section.

The affected people of CRBC were spread over a large area and, along the canal and from the western mountains to the riverine tracts. The long-term effects of modernized agriculture had disrupted existing forms of collective and communal organizing around water-based issues. New logics of water use, the introduction of water pricing, and the north-to-south flows that replaced the west-to-east hydro-social formations of rod kahi introduced new types of conflicts between upper and lower riparian water users. Like Tarbela, the state response to the varied grievances was limited, recognizing individual property-based claims and grievances with the land acquisition

laws. The focus on project-proximate effects of a single project (CRBC) was not conducive for local claims of collective and communal losses that were caused by the slow-moving, long-term integrated development approach.

Early challenges to the CRBIP project started with the familiar pattern of direct-action protests, court cases, and lobbying efforts against the various material harms of the project. Land acquisition and displacement were significant mobilizing grievances for many land users, including property owners, tenants, and the landless facing increased risk of floods, destruction of forests and productive land, and loss of livelihood. The original official resettlement plans used the land acquisition laws,¹²⁰ but unlike the resistance to the Tarbela dam, there was no comparable common organization of landowners, perhaps since the affected people were spread over a larger area. Landowners engaged with the state at formal, legal and existing political arenas and these contestations were visible in all three stages of the project.¹²¹ The legal provisions didn't address the concerns of the landless, tenants, pastoralists, and riverine communities.¹²² By 1999, flood risk and displacement threatened 22 villages with 20,000 inhabitants to the west of the CRBC

¹²⁰ The primary policy instrument here was the Land Acquisition Act, 1894 (see chapter 2 section XXXX). While LAA has provisions for property owners, lessees, and formal tenants, most of these provisions fail to capture the informal ways in which land use arrangements are managed. Land "owners" may not have kept up with the formal document requirements with inter-generational land transfers usually kept off the books to avoid taxes and transfer fees, land values are under-reported partly because free market transfers are not prevalent and in part to keep the taxes low on land transfers.

¹²¹ Some litigation around CRBC-III shows the influence of other similar cases around Pakistan's land acquisition laws, and can provide a good comparison of similar cases in the case of Tarbela. For instance, in the case of *Ghulam Yahya v Wapda*, the Peshawar High court ruled that the fair compensation must be carefully calculated depending on a variety of factors, citing Supreme court rulings that set the precedent for using the 'potentiality of land' based on a variety of factors such as: "the size and shape of land, the locality and its situation, the tenure of property, the user, its potential value and the rise or depression in the value of the land in the locality and even in its near vicinity." *Ghulam Yahya vs WAPDA*, No. RFA.No.56-D/2013 (Peshawar High Court D.I. Khan Bench February 6, 2015).

¹²² Local elites and most of the political forces, such as the Siraiiki nationalist movement that emerged in the 1980s, was by and large supportive of development projects, even demanded it as a way for the investments on par with the Punjab-majority areas of central and northern Punjab province.

canal.¹²³ These worsening conditions increased local protests and created the conditions for the emergence of a wider riverine movement.

A shift from disparate local protests to a coherent social movement occurred when local activists, who were adversely affected by CRBC and other irrigation projects, were able to mobilize resources and alliances at the local, national, and transnational levels. The 1990s was a vibrant period of NGO based advocacy. Working with local groups, the Daman activists formed small local NGOs like the Hirrak Development Center and Parah Development Foundation. With support from national NGOs and networks like Sungi, Action Aid Pakistan, and the Pakistan Network for Rivers, Dams, and People (PNRDP), local activists connected with Japan, Philippines, and U.S. based watchdogs groups, such as the NGO Forum on the ADB and the Japan Center for Sustainable Environment and Society (JACSES).¹²⁴ JACSES, in particular, was interested in monitoring ADB funded projects and contacted Sungi that led the PNRDP coalition.¹²⁵

At the time, Mushtaq Gaadi, mentioned in the previous section, was heading Sungi's advocacy program. The CRBC project aligned with his personal, professional, and political interests and with Sungi's and PNRDP's mandate of contesting river infrastructure projects. Bringing these diverse strands together, activists like Mushtaq and Fazal launched a campaign

¹²³ "Complaint Filed on May 28 2002, with the President under the Inspection Procedure of the Asian Development Bank," May 28, 2002. <http://jacses.org/en/sdap/chashma/documents/Inspection.Claim021911.pdf>.

¹²⁴ JACSES is an NGO with a mission for environmental and social justice through policy research and advocacy, founded in 1993 in the wake of the 1992 Earth Summit held at Rio de Janeiro, Brazil. It founded the NGO Forum on the ADB in 1995, and continues to organize workshops on MDB reforms, monitoring their accountability mechanisms.

¹²⁵ JACSES was in search of Pakistani NGOs to work with, and were put in touch with Sungi via the D.C. based Bank Information Center (BIC) which "partners with civil society in developing and transition countries to influence the World Bank and other international financial institutions to promote social and economic justice and ecological sustainability." At the time, the Asia Program of BIC was managed by Mishka Zaman who was previously at Sungi and one of the founding members of the PNRDP. Zaman later joined the World Bank.

against the CRBC and other projects, known as the Daman Bachao Tarla (A Plea to Save Daman, hereon Daman).¹²⁶

Daman developed a multi-pronged strategy that utilized research and advocacy, challenged the ADB and Wapda on emergent institutions of accountability, and invested in local institutions of representation. In a way, the Daman activists experimented with two different models of participatory development – the induced, top-down ‘state-sanctioned’ model, and the organic, from-below people-centric models. The first of these models is represented by the newly introduced participatory accountability institutions by the ADB (and Wapda) that, in theory, offered the project affected people a path for voicing their grievance and under particular circumstances, invoke a thorough inspection of the project design and implementation.

Alliances and Advocacy

Daman activists started engaging with the state, Wapda, and ADB in early 2000 when the design failures of CRBIP III started to become evident. On their part, the state responded to protests by promising to devise a social action and resettlement plan in consultation with local groups. ADB hired consultants to conduct focus group discussions, to get a sense of local preferences – most of the affected villagers to the west of the canal favored land for land compensation and wanted to be resettled to the east of the canal in the command area. The riverine people impacted by the mismanaged overflows of the hill torrents were not consulted, and locals reported that the ADB consultants were strong-arming villagers to accept monetary compensation instead of land grants, even threatening them with forcible removal using the emergency provisions of the Land

¹²⁶ I used Damaan to refer to this campaign, and *daman* for the geographical area between Indus river and Kohe Suleiman range.

Acquisition Act of 1894. Despite these pressures, a survey of 7 of the 22 villages under risk of floods showed that one village, Katehrewala, opted to stay in place while all others wanted land allotments in the canal command area. The ADB and Wapda promised to respect the wishes of these different communities but did not allocate any funds for obtaining alternative land or maintenance the flood embankments to protect Katehrewala. Eventually, Wapda invoked the emergency provision of the Land Acquisition Act and forcibly removing the other communities by paying them minimal monetary compensation.

Daman activists decided to conduct an independent study and visited all of the affected villages and consulted with the communities.¹²⁷ This model of deliberation was later refined and institutionalized in the form of Lok Sath or People's Assemblies (described in the next section). The discussions brought to light the wider range of issues beyond resettlement outlined in the previous section: problems of social disintegration, shifts to monoculture cropping, deforestation, and concerns with the influx of non-local ethnic groups as agriculture labor and land contractors.¹²⁸

Daman sent these findings to the ADB and Wapda and confronted a team of ADB executives who visited the project areas in Feb 2001 to release the results of their official survey. Daman observed that the ADB and Wapda had failed to hold effective consultations with locals, did not respect peoples' stated preferences in the matter of resettlement and was effectively wasting everyone's time and energy. They feared that without any funds allocated, the tall claims in the official report would fall through, and ADB/Wapda would end up leaving the matter of

¹²⁷ This work was supported by national and transnational NGOs, such as Sungi, Bank Information Center, and JACSES.

¹²⁸ The term *abadkar* or settler is commonly used to refer to these, pointing to a long history of the British and Pakistani authorities bringing in non-local groups, including military soldiers to 'new land' available after an irrigation scheme. The settlers also came from 1947 partition migrants, 1971 partition migration, and the displaced of large dams like Mangla and Tarbela. [refer to section from previous chapter that talks about this phenomenon in detail?]

resettlement in the hands of the local government that neither had funds nor the capacity to deal with the consequences of CRBC's design failures.¹²⁹

Grounding their movement in participatory research and community-based organizing, Daman worked with national and international advocacy groups to put pressure on Wapda and the ADB.¹³⁰ Between April 2001 and May 2002, Daman Bachao and PNRDP members attended meetings of various transnational advocacy forums and confronted ADB officials at their yearly meetings. In April 2001, some twenty-two groups participated in an NGO Forum in the Philippines, where Daman presented the case of the CRBC affected people, and the participants signed a letter of support, which was subsequently presented at the Bank's headquarters in Manila.¹³¹ Daman and PNRDP presented the case once again in May 2001, when advocacy groups gathered at the Annual General Meeting of the Asian Development Bank held in Honolulu on May 2001 – this being a common strategy of the transnational movement. Daman activists continued to engage with ADB, at these various levels, with the expectation of more transparency and accountability.

By the summer of 2001, a pattern began to emerge as the ADB and Wapda continued the discourse of participation and accountability but failed to offer any practical solution to the CRBC affected people. Meanwhile, the construction work on the canal continued. The claims of transparency indicated a discursive turn, as development banks like the World Bank and ADB

¹²⁹ By 2002 official figures were revised from 7 villages to 22 villages, with the largest effect village with a population of 10,000 individuals. JACSES study.

¹³⁰ Alliances between local groups like Chashma Struggles (or Chashma Lok Sath), other affected groups, such as SMT of Tarbela, PFF of Indus Delta, leftist and ethno-nationalist political groups from various provinces, national NGOs like Sungi and Action Aid, national networks like PNRDP, and transnational organization and networks, like the Narmada Bachao Andolan in India, JACSES in Japan, NGO Forum on the ADB in Philippines, and the Bank Information Center in USA.

¹³¹ NGO Forum on the ADB, Chashma Updates, url: <https://www.forum-adb.org/chasma-updates>

introduced reforms to mitigate the social and environmental harms of their funded projects.¹³² However, per advocacy groups these reforms merely paid lip service rather than offer substantive changes. The advocacy groups called out the ADB in particular for denying access to project-related documents, internal records of meetings and correspondence, and other related documents.¹³³ The ADB insiders pointed out that the institution was formally accountable only to investors and member governments.¹³⁴ Accountability was limited to the internal evaluation of the completed projects with an eye to improving future designs, but as I've already shown, the failures of stages I and II of CRBC did not prevent internal reviewers from classifying the projects as 'successful.'

New Regulations 1: Dialogue and Grievances

Notwithstanding claims of open engagement with NGOs, CSOs, and local communities, the ADB Management treated the Chashma affectees and Daman as adversaries – problems to be contained and managed. They sidelined the Daman activists and devised a resettlement plan that focused on monetary compensation to the 20,000 plus villagers facing recurring floods to the west

¹³² The ADB started introducing a variety of transparency and accountability related policies in the early 1990s, which continue to evolve to this day. For instance, the Bank introduced two policies on disclosure and information in 1994: *Policy on Confidentiality and Disclosure of Information (Disclosure Policy)* and *Information Policy and Strategy of ADB (Information Policy)*, which were reviewed ca 2004, at the time of Chashma campaign, and later consolidated into a *Public Communications Policy* and currently the *Access to Information Policy*. In terms of accountability, an "Inspection Function" was first introduced in 1995, which allowed any project affected people to start a process of independent evaluation of ADB's compliance with its own independent policies. This function was later replaced by a two-function *Accountability Mechanism* adopted in December 2003, consisting of a *consultation* function and a *compliance-review* function. The case of Chashma struggles describes the activists' firsthand experience of the evolution, and limitations, of these various policies and functions.

¹³³ A Betrayal of Asia and the Pacific – Boycott of the 37th Annual Meeting of the Asian Development Bank," NGO Forum on ADB Press Release, 13 May 2004.

¹³⁴ ADB claimed that it needed to consider "certain legal and practical constraints" and protect the interests of various stakeholders, including the investors and private businesses. (Curtis, 2004)

of the canal while ignoring the broader ecological disaster that spread from the *pachad* to the eastern riverine tracts. These plans also ignored people's demands for land compensation.¹³⁵ Once the plan was devised, the ADB turned to a Boston-based firm that provides 'dispute resolution' services to multi-national corporations and international financial institutions to protect their investments in situations of conflicts and local resistance around natural resource extraction and exploitation – their clients include Chevron in Nigeria, Shell in Colombia, and World Bank in hydropower sector across the global South.¹³⁶ The ADB employed these consultants to recommend ways of conducting "a joint assessment of [CRBC's] social issues, and [develop] a mutually acceptable resolution of these issues, using a process that all stakeholders would consider fair and effective."¹³⁷ In this vein, the consultants conducted some interviews in the federal and provincial capitals through August 2001 and visited the project area. Based on this preliminary work, the consultants decided to hold a single-day "Chashma Multi-Stakeholder's Dialogue" in September 2001, which was later pushed to March 2002.

Meanwhile, Daman activists were kept in the dark about new resettlement plans and denied access to information about the project and the new consultative process. The activist reported many hostile interactions with the ADB Management, who saw them as 'troublemakers' and

¹³⁵ Supplement to Chashma Inspection Claim, 2004. <http://jacses.org/en/sdap/chashma/documents/2ndSupplement.pdf>

¹³⁶ The Consensus-Building Institute (CBI), who hires professors in the business, management, law, and international affairs faculties of Harvard, MIT and other elite universities. The CBI employed Adil Najam, a Pakistani origin academic who has spent most of his career in Boston University, private consulting gigs, and for a brief period as the Vice Chancellor of the largest elite private university in Pakistan, the Lahore University of Management Sciences (LUMS) that trains, among others business and engineering professionals. CBI boasts of "manage multi-party conflicts, disputes and planning efforts," especially in "complicated resource management disputes." It has intervened on behalf of Chevron in Nigeria, Shell in Colombia, and the International Finance Corporation (IFC) the private investment arm of the World Bank in India for hydropower related project. [cite sources].

¹³⁷ Joint Comments on Social Assessment of CRBIP Stage III. (2001). Retrieved April 12, 2019, from <http://www.jacses.org/en/sdap/chashma/documents/commentdraft.pdf>.

outsiders who didn't represent the project affected peoples. To the activists' dismay, the Bank's management hid the fact that most Daman activists belonged to the project area and instead focused on the criticism of national advocacy groups like Sungi that didn't have a local presence. Furthermore, Daman activist noted that they never presented themselves as representatives of the broader community, but were merely demanding direct representation of the diversely affected local groups.

The Chashma Multi-stakeholder's Dialogue was a turning point for Daman as the group realized that it was pushing against certain fundamental and procedural limitations of informal engagement with the ADB. The Bank had thus far ignored the concerns raised by Daman about the lack of environmental impact assessments, the failure to consider the alternative to canal irrigation, the preservation of rod kahi system. The Consultant's report had not mentioned the design flaws of the Flood control channels, or the fact that designers downplayed the impact of peak floods, or even refer to the problems of flooding in the west and land degradation in the riverine belt.

Despite their reservations, Daman decided to attend the Chashma Dialogue. The proceedings of the day unveiled further problems with the consultative process. The activists and affectees realized that they were being kept in the dark about key decisions about involuntary resettlement. Wapda had failed to honor its promise that it won't use the emergency powers under Section 17 of the LAA and retrospectively applied these powers in the original resettlement plans. The consultants refused to share the details of their field visits and proceedings of the workshop. The activist noted that the entire framework of the consultative process did not refer to any of the fundamental constitutional rights of the people, including the right to life, the right to information, and the right to fair compensation in cases of involuntary land acquisition. The consultative process

didn't include legitimate civil society groups, such as the Pakistan NGO Forum and PNRDP, and instead included influential political elites in the decision-making process. The ADB and Wapda officials were incapable of conducting the proceedings in Siraiki, the local language, and in general, had a dismissive and hostile attitude towards local activists. The overall impact of these failures to recognize rights, to be transparent, to create an inclusive environment, led the activists to 'disengage' with the Chashma Stakeholder's Dialogue.

The Chashma affectees and Daman activists spelled out their intent to disengage with the Dialogue in a joint statement sent to the ADB and Wapda. The statement noted that while local communities and affectees were the real stakeholders, the Stakeholder's Dialogue focused on including Wapda and international investors. They observed that the social action plan presented at the Dialogue was based on a report prepared by ADB consultants in Feb 2001, and consultations with NGOs was required by the Terms of Reference but never conducted. Furthermore, the NGOs and activists were denied access to the report. A brief field visit meant that the team of consultants didn't visit a number of projects affected areas, including the riverine belt. The conduct of Wapda officials and ADB consultants was questionable, as demonstrated by an account of the visit to Katehrewala. Wapda officials intimidated locals, asking them to accept the compensation amount being offered. In response, the activists and community members present threatened to boycott the process. In some cases, the Wapda and ADB tried to control the process by relying on influential local elites and large landowners to organize some meetings, allowing only select speakers to speak.¹³⁸

¹³⁸ Joint statement of the project affectees and civil society organizations on the conclusion of the Chashma Multi-stakeholders Workshop. (2002, March). Retrieved April 12, 2019, from <http://www.jacses.org/en/sdap/chashma/documents/jointstatement.pdf>.

The Chashma Dialogue proved to be a “breaking point of consultation and negotiation process” for Daman activists, but the ADB and Wapda celebrated this as a successful participatory and inclusive process. Following the consultant’s suggestion, the ADB and Wapda set up a Grievance Redressal and Settlement Committee (GRSC, hereon Grievance Committee), as part of ADB’s ‘problem solving’ mechanisms, with the mandate to resolve ‘all outstanding issues of land acquisition, resettlement, compensation, and rehabilitation.’ The Grievance Committee was to resolve all matters in compliance with Pakistan’s laws and ADB’s safeguard policies, especially the Policy on Involuntary Resettlement (adopted in 1995) and on Indigenous Peoples (adopted in 1998). It took another year and a half for the Grievance Committee to get to work, and its final recommendations included compensation schemes, remedial actions, timely dissemination of information, and collection of complaints from locals that could be used to devise effective resettlement and compensation plans.¹³⁹

The problems identified by the Daman activists during the Dialogue continued to limit the scope and work of the Grievance Committee. The focus on solving problems without a comprehensive environmental and social impact assessment, or any review of the technical design, meant that a large number of adverse impacts were beyond the mandate of the Grievance Committee. The proposed composition of the committee reinforced the strong role of ADB and Wapda, and 6 out of 11 members of the committee belonged to the water bureaucracies and international investors, giving the Bank and Wapda the mandate to enforce their decisions based on simple majority. Two spots were reserved for local representatives, but these were filled with

¹³⁹ ADB. “Report and Recommendation of the Board Inspection Committee to the Board of Directors on the Request for Inspection on Chashma Right Bank Irrigation Project (State III).” Inspection Panel Review. Manila: Asian Development Bank, July 2004.

landowning elites, both men, who were known for allying with the government and opposing the Daman campaign.¹⁴⁰

For Damani activists, the use of elites to represent local concerns was a fundamentally flawed idea, and they argued that only direct representations would be deemed appropriate and legitimate. The Damaan activists were concerned about the lack of representation of women, tenants, sharecroppers, small farmers, and riverine groups. Here's a selection of quotes compiled by the affected peoples and activists:¹⁴¹

"Poor and affectees should be on the [Grievance Committee] - only those who have suffered can articulate [the problems they face]. No one else needs to represent us."
"Nobody will listen to the poor."
"People like us should be on the [Grievance Committee]. [Wapda officials are] plunderers, not sincere, and will make money from the [Grievance Committee]. If they come, I will fight them, and use sticks to train them and break their legs.

The Grievance Committee's work suffered from delays,¹⁴² many villagers had not even heard about it,¹⁴³ and there was a remarkable lack of coordination between ADB and the GoP.¹⁴⁴

¹⁴⁰ The representative (Punjab) was appointed by the Nazim (Mayor) of D.G Khan on his discretion without proper discussion at the district council, as required in the ToR. Author notes that even local union councilors were not aware of the GRSC. The two representatives, Mr. Iftikhar-ul-Hasan and Mr. Shoaib Mian Khel were prominent landowners of the area, well known for their alliances with government officials. Mr. Khel, a relative of the former MPA and provincial cabinet, and Mr. Hasan an opponent of the Affectee's campaign. C.f. JACSES. "Report on Facts and Concerns Regarding Chashma Right Bank Irrigation Project-Stage III (CRBIP-III) and Grievance Redress and Settlement Committee (GRSC)." Japan Center for a Sustainable Environment and Society, May 7, 2003. http://jacses.org/en/sdap/chashma/Report/chashma_report_.pdf.

¹⁴¹ Comment of an affectee of Katehrewala village, in a Stakeholders' Dialogue Workshop held in March 2002.

¹⁴² Commencement of GRSC's operation delayed for nearly 2 months due to the fact that 2 of its members had not been selected. MOU of the GRSC, Pakistani government to send shortlist of candidates for the National Legal Expert and Land Acquisition Expert, and send to ADB by Feb 2003, with activities commencing in by March 3, 2003. But failure to send such nominations; overall neglect of timeframe required in the ToR. *ibid*

¹⁴³ None of the villagers Sugita Rena met were informed of the GRSC. No affectees informed of GRSC, other than those in touch with local NGOs. No site visits, consultations with affectees, or establishment of an information center as required by the TOR. This was confirmed by a Wapda official. *ibid*

¹⁴⁴ Lack of coordination between ADB and GoP, evident from authors interviews with both actors. Only one meeting held with only 2 members of Committee present. Acting Chief Engineer of Wapda misunderstood that the second GRSC meeting was being held in Islamabad on the day of the interview. *ibid*

On the issue of direct representation of marginalized people, an activist report produces the following quote based on an interview with the ADB staff member:

Mr. [...] expressed that poor people are incapable of participating in the [Grievance committee], stating that “we don’t want poor people who can’t say a word.”¹⁴⁵

Questioning this composition of the Grievance Committee, the activists noted in a letter to the ADB:

“Asian Development Bank (ADB) approved the grant of approximately \$3 million to finance the salaries and activities of the GRSC members. How can we believe that ADB consultants who are receiving fat salaries to perform prescribed duties are independent, and their integrity is beyond any questioning? Similarly, the members of the GRSC representing various executing agencies (EAs) are salaried staff and are thus, directly and indirectly accountable to the government for their actions. Even the members from the district governments are also paid and are part and parcel of larger government system.”¹⁴⁶

The Daman activists were disappointed with these experiences and decided to disengage with the ADB in its ‘problem solving’ function via the Inspection Panel mechanism. They noted their lack of confidence in the capacity of the ADB’s country management staff and Wapda:

Our experiences of engagements proved disappointing, resulting in the erosion of confidence in intentions and capability of [ADB] Management and [Wapda] for solving the problems faced by the affected communities. Rather, some of the Bank engagements with the affected people and allied civil society organizations appear beyond the usual civil practices. An engagement that started with trust and hope turned into mistrust and despair within a very short period of time.

¹⁴⁵ My own interviews with ADB mission, albeit a decade and a half later, did not garner such crude dismissal of “poor people’s” voices. Mr. Amjad [name changed] noted that the CRBC was a learning experience, and emphasized that ADB could still do better. But when asked about direct representation and participation, he did note that it is difficult and unpragmatic to include all community voices in projects that span such a large area.

¹⁴⁶ Gaadi, M. (2003, July 21). A Response to the Invitation Letter from the GRSC. Retrieved April 9, 2019, from <http://chashma.web.fc2.com/resources/inspection/grsc/respnse072103.htm>.

New Regulations 2: Accountability & Inspection Panel

The move from direct action to dialogue, and subsequent refusal to become part of the Grievance Committee left only one institutional option for the Daman activists. The ADB had introduced the “Inspection Function” in 1995 that allowed project-affected communities to file a request with the Bank’s Board of Directors to investigate the Bank’s country staff’s or the Management’s conduct of the project and possible violations of the Bank’s social and environmental policies.¹⁴⁷ At the time, there had been only one full inspection process in the case of Thailand’s Samut Prakarn Wastewater Management Project (April 2001 to March 2002).¹⁴⁸ Based on their experience with ADB Management and knowledge of the Thailand case, the Daman activists had reservations about the cost, scope, and potential of engaging in this new process.

¹⁴⁷ The World Bank adopted the Inspection Panel mechanisms in 1993, after it launched an independent investigation of the Sardar Sarovar Dam in the early 1990s in direct response to the challenges by the one of the largest anti-dam movement/riverine resistance in the world – the Narmada Bachao Andolan in India. For literature on World Bank’s adoption of the “Inspection Panel”, see Shihata, Ibrahim F.I. *The World Bank Inspection Panel*. Oxford University Press, 1994. Cernea, Michael M., and April L. Adams. *Sociology, Anthropology, and Development: An Annotated Bibliography of World Bank Publications, 1975-1993*. World Bank Publications, 1994. *The World Bank Inspection Panel*. The World Bank, 1998. Fox, Jonathan A. “The World Bank Inspection Panel: Lessons from the First Five Years.” *Global Governance* 6, no. 3 (2000): 279–318. Alfredsson, Guðmundur S., and Rolf Ring. *The Inspection Panel of the World Bank: A Different Complaints Procedure*. Martinus Nijhoff Publishers, 2001. For the history and a review of various accountability mechanism during the early 2000s, cf Fukuda, Kenji. “Critical Analysis of the New Accountability Mechanism of the Asian Development Bank.” In *A Handbook on the Asian Development Bank: The ADB and Its Operations in Asia and the Pacific Region*, edited by Dorothy Guerrero. Asienstiftung/Asienhaus, 2003.

¹⁴⁸ For Daman activists, already frustrated by the attitude of ADB and Wapda, the Samut Prakarn case had some positives and negatives. On the positive side, the Inspection team despite being denied entry into Thailand by Bangkok and facing internal challenges, gave a resounding verdict against the ADB Management pointing to violations of a variety of internal policies. The case also had some procedural similarities with Chashma, setting a strong precedence for the Chashma affectees case. On the negative side, the whole episode laid bare a conflict internal to the ADB with the Management denying all charges of non-compliance, and the Board accepting the Inspection panel’s recommendation while denying any wrongdoings on the part of the management. Thai activists and affected communities were pleased with some of the Inspection Panel’s finding, but were dissatisfied with the limited scope of its work and the conduct of Management and the Board. Focus on the Global South. (2002). *Too Hot to Handle: The Samut Prakan Wastewater Management Project Inspection Process*. Bangkok: Focus on the Global South. Retrieved August 13, 2018, from <https://focusweb.org/wp-content/uploads/2002/05/too-hot-to-handle.pdf>.

Nevertheless, they decided to invoke the Inspection Function and filed a Complaint with the Bank's Board on May 2002.¹⁴⁹

The Complaint referred to the violation of land and water-related national laws – in particular, violation of the Land Acquisition Act of 1894 and the “historical and legal rights of local communities to [rod kahi] floodwater... were formally negotiated between local communities and the British Indian Government at the start of the 20th century.”¹⁵⁰ The Complaint noted that the Bank's official failed to assess the potential for alternative irrigation schemes, including the expansion of the rod kahi irrigation system -- formalized during the British colonial rule and continued under the Pakistani government. Linking this violation ADB's policy for social analysis of the project, the Complaint specifically referred to the clause for the protection and involvement of “traditional water-user societies.”¹⁵¹ Furthermore, the Complaint noted that while ADB's technical consultants had known about the flood risk and its links to the project design, the ADB Management still categorized the project as category C, i.e. a project without any significant social and environmental impacts. The Complaint goes on to talk about other issues, including involuntary resettlement, forced land acquisition and lack of compensation, particularly in the riverine belt, disruption of livelihoods, increased influx of migrants, potential rise in ethnic

¹⁴⁹ Filing a request for inspection had certain barriers to entry for local communities, but Chashma activists were able to tap into the national and transnational advocacy networks, along with independent researchers and lawyers to overcome these barriers. The ADB policy required a complaint by 2 or 3 project affected peoples, called PAPs, who had to show that ADB failed to comply with its own operations policies and procedures, and this failure caused material harm upon the requesters, and that the ADB management (country office or project staff) had been contacted to remedy the issue and yet failed to remedy the problem. Since the Chashma campaign, had already been trying to approach Wapda and ADB's Project staff with their independent findings and the result of their consultations with the affected people, the key burden was to read through a tome of ADB documents regarding different policies, project's technical documents, and preparing a semi-legal complaint.

¹⁵⁰ Complaint filed on May 28 2002, with the President under the Inspection Procedure of the Asian Development Bank. (2002).

¹⁵¹ Ibid page 2. The policy cited is *ADB Guidelines for Social Analysis of Development Projects*, p 108.

tensions due to emigrant labor, social disorganization, waterlogging and salinity, and the lack of information sharing, consultation, and participation of the affected communities.¹⁵² Providing detailed examples of each type of adverse impact and the relevant policy, the Daman activists, or Requesters as per ADB's language, hoped that the Board would launch a comprehensive and independent investigation into the project's design and its environmental and social impact.

The ADB's Board forwarded the Complaint to the Bank's Management, which responded by contesting the validity of the Inspection claim. The Management pointed to the 'problem solving' process with the Grievance Committee, claiming that the process was sufficient to address all outstanding concerns of the affected communities. They also questioned the legitimacy of the "NGOs" who filed the complaint, mischaracterizing the Requesters who were both activists as well as project affected peoples. The Management also argued that some of the violations listed in the Complaint did not apply to the CRBC project since the relevant policies were adopted after the loan for the project was approved in 1991.

The Daman activists, also the Requesters, spent the next four months preparing their responses to these procedural and technical objections, which they saw as delaying tactics instead of addressing the real issues. A fresh Request for Inspection was filed in November 2002, and six project-affected people who were also central figures in the Chashma campaign came forward as the Requesters. To the Managements first concern regarding the Grievance Committee, the Requesters described the details of their engagement with the ADB since late 2000, and the reasons for their disengagement – pointing to the lack of transparency and participation, limited scope of the 'problem solving', and the intimidation and hostility by Wapda and ADB towards affected communities. To the second point, they noted that the third stage of CRBC project was partly

¹⁵² Most of these issues have been discussed at length in the previous sections of this chapter.

funded by a supplementary loan approved in 1999 after the policies regarding resettlement and indigenous peoples had been adopted. They pointed to ADB procedures that mandated that a full project appraisal must be carried out for supplementary loan approvals, citing the precedent set by the Samat Prakrun Inspection Panel. These claims by the activists were given weight by the advisors to the ADB's Board Inspection Committee, who also noted that since the project was 'ongoing,' new policies had to be considered.¹⁵³

In a strange decision, the ADB's Board deemed the request eligible in Dec 2002 but delayed forming an Inspection Panel for a year and a half, and asked the Management to proceed with the Grievance Process. This mixing of the 'problem solving' and 'inspection' functions indicated confusion and lack of clarity on the ADB's part regarding the new accountability processes, which undermined the legitimacy of the Inspection process. The activists saw this decision as a ploy to scare or buy off the landowning groups while ignoring the concerns of riverine groups and traditional irrigators. They urged the ADB's Board to launch a full and independent investigation into the design failures and the adverse impacts of the project.

¹⁵³ Counseling the BIC on the Management's response, one Arthur M. Mitchell (?), notes that while policies cannot be applied retroactively for loans approved at an earlier date, if new policies pertained to project administration and monitoring, then there's no case of retrospective application for project classified as 'ongoing'. Thus, "to the extent that a request for inspection relates to administration or monitoring of a project as opposed to its preparation, it is reasonable (and required by the Inspection Policy) for the BIC to consider it." Furthermore, since the Board approved two loans (in 1991 and 1999), the project was approved twice. Thus, while considering which policies apply, the steps involved in approval of supplementary financing and original loan must both be considered. The Board considered the Samut Prakam matter as a precedent for Chashma, as the Management argued that policies adopted after the original approval were not relevant as the 'reappraisal' for supplementary financing was limited to financial reasons for cost overruns. [cites para 25 of Management's response to the Request for Inspection for the Samut Prakam Wastewater Management Project (May 24, 2001)]. The precedence set in that case by the Inspection Panel concurred by the BIC was that this interpretation by the Management's obligation regarding 'reappraisal' was "unduly narrow." OM 13 states that "The procedure for processing a supplementary loan, whether by additional financing or by reallocating funds from other Bank-financed projects, is similar to that for new loans, and includes reappraisal of the entire project." C.f. Appendix 7: ADB. (2004). *Report and Recommendation of the Board Inspection Committee to the Board of Directors on the Request for Inspection on Chashma Right Bank Irrigation Project (state III)*. Inspection Panel Review, Manila: Asian Development Bank.

While skeptical of the intent of the Grievance Committee, the Daman activists continued to monitor the grievance process. In a supplement to their initial request, the activists demanded that 50% of the seats of the committee be filled by project-affected people through “direct nomination of their legitimate representative forums,” in line with the “principles and guidelines provided by the World Commission on Dams Final Report.”

The Damaan activists decided not to boycott the process and did not discourage other affected groups from independently seeking grievance redressal, but refused to participate as a group. When asked to appear in front of the Grievance Committee to provide their testimonies as Requesters of the inspection process, Daman activists questioned the legitimacy of this ask and noted: “We are neither witnesses nor the committee a court, why should we appear before it.”

In a detailed response to the Grievance Committee and the ADB board, Daman spelled out their position and the reason for their disengagement with the Grievance Process. They pointed to the past manipulations and lies by the ADB Management, and criticized the delays in forming the Inspection Panel:

“The majority of the government members of the GRSC are directly responsible for the sufferings of local communities and violations committed in the process of decision-making.... Our past experiences instruct us that ADB and EAs had always wrongly used and manipulated our sincere and constructive engagements with them. We have not only been told bundle of lies and thus misguided but were also refused to give access to fundamental and primary information pertaining to the Project. You might be aware that the establishment of the GRSC is also the product of such maneuvering game that was aimed to obstruct our demand for immediate and unconditional inspection of the Project. We are unable to re-engage constructively unless our primary demands are not fulfilled.”¹⁵⁴

¹⁵⁴ Gaadi, M. (2003, July 21). A Response to the Invitation Letter from the GRSC. Retrieved April 9, 2019, from <http://chashma.web.fc2.com/resources/inspection/grsc/respnse072103.htm>.

These manipulations and lies continued, as one of the activists recalled an interaction with the ADB and Grievance committee, and the misrepresentation of that interaction in the ADB's internal documents.

I met with the [Committee] to get an update about their activities, and to inform them of our decision not to discourage locals from engaging with the [Committee]. We still had our reservations, both given our past experience and the limited scope of their work. We also wanted to clarify that we did not want to engage with the Committee. Yet, we received the internal minutes of that meeting and were shocked to find that this interaction was falsely reported. They had me saying that I was satisfied with the work of the committee, even when I on the record stating all the reasons why we were not satisfied with the scope of the committee, our past experience, and the current sidelining of the Inspection process to proceed with this 'problem solving' mechanism.

This type of misrepresentation of local's views on the Grievance Committee was foundational to the Management's claim that the 'problem solving' function was successful. Over the course of its work from March to December 2003, the Grievance committee received a total of 8,914 people filed 5,212 separate grievances. About a third of these complaints were by traditional irrigators on the long-term ecological destruction, deforestation, and ecological problems. Daman had asked these complaints to be put on the record for the Inspection Panel, as the only social and environmental impact assessment survey in the project area. However, not only were such request denied, the final report of the Grievance committee failed to address these specific issues. Most of the recommendations in the final report dealt with the issues of land ownership, consistent with the standard requirements under the Land Acquisition Act 1894. Some other 'mitigating' measures including finishing the incomplete Flood control channels and establishing farmers association for managing water distribution. In sum, the Grievance committee was merely suggesting that the project be completed as per regular national laws and the project design documents. Despite this, the Management tried to claim this as a work grounded in the participatory and consultative process, while simultaneously trying to discredit Daman and other community-based groups. For

instance, the Management noted: that “none of the NGOs representing the Requesters have organizational roots [in the project area] and where community groups or formations are largely absent, the establishment of the [Grievance Committee] with representatives elected on the basis of universal suffrage was a great success.”

Like the experience of Samat and PNRDP with the WCD and Tabela Investigative Commission, discussed in chapter 2, Daman found the state arena institutions limited in their capacity to deal with the full temporal and spatial scope of the impacts of CRBC project. However, while Samat decided to continue engaging with state-arena institutions and lost southern riverine allies, Damani activists decided to disengage with the state partially. After local deliberations, the Daman activists, the Requesters, formally withdraw their Request for Inspection but announced the intention to continue to support the process by facilitating the visit of the Inspection Panel. Hereon, they turned to organize on community-centric social movement forums.

3.6 New Movement Infrastructure: The Lok Sath

Engaging with the state and the ADB was not the only strategy the Damaan activists adopted, not even the most important one from their point of view. Organizing within the communities remained their primary tasks. This work began as Damaan activists went from village to village and held *sath* or *kacheri*, a traditional form of informal gathering where folks sit together, share stories of their challenges, sufferings, or joys, and deliberate on problems in order to reach some collective decisions. With time, these informal gatherings took a different shape, influenced by ideas of People’s law and justice, inspired by the similar people’s institutions emerging across the globe and particularly in the southern movements against dams, development, and neoliberal

globalization.¹⁵⁵ The full expression of this form of engagement became the *Lok Sath*, translated as People's Tribunal.¹⁵⁶

The Lok Sath started as an informal gathering held at the various villages. I have previously noted the difficulty of organizing across a large area where the communities were differently impacted by the CRBC project, and many locals were keen on being included in the benefits of the project. Many saw the project as inevitable and attempts to challenge powerful state and ADB as futile.¹⁵⁷ Other activists pointed to the positive response they received as they went from village to village to hold village level meetings. One Daman activist recalled how the sath started to grow in popularity:

The first Saths were organized informally, as we'd go to a village with affected peoples. We'd go to places where we knew someone. People also knew that we were active on the issue [of CRBC], so someone would approach us and invite us. There was a time when we went on a long march, from one village to the next, holding *saths* as we went along.

The popularity of the sath grew, and the informal gatherings gradually become an organizing tool to mobilize a wide range of folks impacted by the CRBC project – from those suffering from canal water shortage and salinity issues in the command area to those at increased risk of flood in the *pachad* areas. Sath fostered dialogues among these communities around their common and varied difficulties, even when previously existing organic solidarity had deteriorated – whether due to the disintegration of rod kahi related social interaction or due to the impact of canal water conflicts on kinship networks

¹⁵⁵ (Esteva, Babones, & Babcicky, 2013; Esteva & Escobar, 2017; Santos, 2015)

¹⁵⁶ Daman Bachao's activist generally use the term Sath, or Lok Sath, avoiding the English translation. However in their writtend documents, interviews or some published articles, they've translated the term Lok Sath into People's Tribunal, People's Law Tribunal, or People's Assembly.

¹⁵⁷ Interviews, Sarfaraz, Nazir. Nov 2017.

While these saths were grounded in traditional and informal practices, Damani activists were influenced by the ideas of people's tribunal and people's justice that became popular elsewhere during the last few decades of the 20th century.¹⁵⁸ As a broader phenomenon, the international peoples' tribunals, shared some features with formal state-sponsored tribunals, "such as the application of orthodox international law standards, the deliberative public process of consideration of evidence, and the adoption of reasoned conclusions," but lacked state authority (Byrnes & Simm 2013). At the international levels, these tribunals filled the gaps in the legal system, acting as a precursor to an official court or tribunal by creating publicity and political pressure.

The synthesis of traditional and transnational ideas of people's justice transformed the Sath from village level meetings to a larger movement institution. On August 24, 2003, the Damaan activist organized the first large *Chashma Lok Sath* organized at Taunsa Sharif. This gathering was an outcome of months of mobilizing around the *daman* region. Smaller Saths, emulated traditional models of deliberation and participation, but outsiders were usually not invited to these village-level gatherings. At the Chashma Lok Sath three hundred people from over 30 villages and about a dozen national and local NGOs attended. The activists invited ADB, Wapda, and the Grievance Committee, but none of these attended that Sath.

The move from small assemblies in different villages to larger tribunals created spaces for local deliberation, where the state-centric institutions were criticized, and people spoke about their sufferings in a different idiom. The first Chashma Lok Sath deliberated on the strategy of engaging

¹⁵⁸ Many of the Damani activists, like Mushtaq Gadi were exposed to these ideas from their prior academic and activist work. They also got support from urban academics and activist, like Asad Farooq, a British born lawyer based in Lahore who had experience with People's Tribunals Against the Iraq War. Farooq was one of the intellectual who brought his training in law and organizing skills to support the struggle of the people of Chashma. He behind and got involved with Damaan at the time of the filing of the inspection claim.

and disengaging with the state and the ADB and discussed the work of the Grievance Committee's work.¹⁵⁹ In an open field, the 300 odd people sat down in a large circle. Proceedings began with performances by local musicians, followed by a brief statement on the intent of the Sath and the issues at hand. The organizers explained the history of Damani struggle and the details of the ADB's Grievance Committee procedures. They mentioned all the problems around lack of transparency and representation of the local voices in the Committee's composition. They read out the recommendations of the Grievance Committee and questioned its claims of consent and representativeness—lies that must be denounced and recommendations that must be rejected.

Opening up the floor to the people, the Damani activists asked people to share their problems and talk about their sufferings (مشكلات), rather than merely list their grievances (گزارشات) towards the State. For Damani activists, the shift from grievances to suffering was a symbolic move away from the state-centric legal language of individuals claims to a collective language that used narratives of loss and suffering to build solidarity among the diversely affected peoples. In a summary report sent to the ADB, they pointed out that they were not interested in framing their sufferings as 'grievances,' they were not looking for grievance redressal but for justice:

We don't have any grievances at all. Rather, we are struggling to uphold the truth, seeking justice and recognition of our fundamental rights. We believe what has been forcibly snatched away from us should be returned to us. Our [rod kahi], lands, houses, means of livelihoods, ways and paths, dignity, bonds, everything. If your laws and pocket do not permit it, then you should at least confess this before us. We are ready to forgive but not ready to forget.

The Sath provided an opportunity for locals to speak openly, using their own language and idioms. Many people stood up, one by one, and spoke about the floods, the loss of land,

¹⁵⁹ The details of the Sath are based on various interviews and video recordings of the event, along with the excerpts from *A Statement from Chashma Lok Sath*: Taunsa Sharif, 24th August 2003. (2003, August 24). Retrieved April 9, 2019, from <http://chashma.web.fc2.com/resources/loksath/resolusion082403.htm>.

displacement, loss of trees, loss of rod kohi. Consolidated these claims in a poetic letter sent to the ADB that relied on anthropomorphic metaphors that equated the flows of Indus and the rod kohi with parental figures, the Damani activist noted how the canal turned their mother and father away from them.

The canal was built. Everything changed. [Rod kohi], our mother, turned its back from her children. She went through a strange metamorphosis. She turned into violent and raging floods. The Indus River, our father, abandoned us and inflicted unbearable sufferings upon us. Our springs disappeared. Our wells vomited poisonous canal water. Our lands were snatched away. Houses were demolished. Old ways and paths started to disappear.¹⁶⁰

From the Inspection Panel to People's Tribunal:

Building on these ideas, the Damaan activists continued to question the scope and mandate of the Inspection Panel and invited the Inspection Panel to meet with members of the local community during a Lok Sath. Using the same language as in the invitation of by the Grievance Committee that had invited Daman activists as Requesters to act as witnesses to the process, the Daman activist asked the Inspection panel to act as “witnesses of testimonies given by the victims of the project.” They promised to take the Inspection Panel members to the various villages and provide translation services, with the condition that ADB Management and Wapda didn't attend such meetings given past experiences of repression.¹⁶¹ The second major Chashma Lok Sath was held on March 2004, but the Inspection Panel did not attend this Sath either.

¹⁶⁰ ibid

¹⁶¹ Gaadi, Mushtaq. “Email to the Secretariat of ADB Board Inspection Committee Regarding Scope of Inspection and Lack of Transparency,” January 19, 2004

The ADB and the Inspection Panel members did attend another Sath that was organized in one of the western villages – Katehrewala. The Daman activist spoke about how bringing the ADB and state official out of their element was a deliberate strategy.

A: The main goal was to take them out of their environment. They [ADB staff] would chat very eagerly and contently with you in their offices. But we wanted that these folks step out of their office environment and step into people's environment. *And it is jarring for them.* They do go to the field, but usually in a very controlled environment, which makes no difference. But in the Sath, the environment is different. When people start speaking, in Siraiki, they have a no holds bar attitude. *GaliaN ShaliaN* (swearing and cursing), and what not – people start speaking. And when we took them [the ADB officials] to the areas that were flooded, it started raining. They were slipping and falling.

F: that day was something else [intiha ho gai thi]; Sath was on the banks of the canal, and as soon as it ended, it started raining. People couldn't have food and had to run away [starts to laugh].

The ADB's Inspection process lasted another few months after the selective disengagement of the Damaan activists. When the final report of the Inspection Panel came out, it pointed out the severe failures of the ADB management in the design of the project, and failure to comply with the ADB's internal policy guidelines. Management had failed to conduct comprehensive surveys and appraisals during the design and implementation stages, despite its operational policies that mandated such action, and instead relied on investigations that relied on stage I and II knowledge that didn't extend to stage III area and limited scope of investigation, often with concerns of delays, rather than for the people adversely affected. Management "erroneously" classified the project as at low risk of severe environmental impact instead of a high-risk classification that was usual for "large-scale irrigation and water management" project. In 1999, at the time of Supplementary Financing, ADB went against the OM 20 of 1997 and failed to determine whether or not significant environmental impacts warranted an environmental impact assessment. The ADB not only failed to identify the project's environmental impacts, but missed the opportunity to incorporate

provisions in the loan agreements..., and missed the opportunity to secure funding required to mitigate identified measures. The panel found a variety of problems, including flooding, use of agricultural chemicals, forest and grazing land problems, waterlogging and salinity, and pollution and waste management issues. The feasibility study also did not adequately identify the social and economic impacts, failing to identify potentially adversely affected people or to develop any safeguard and compensation mechanisms. This resulted in a range of issues, from poor water management and distribution, interference with rod kahi system, unsafe flood embankments, insufficient drainage channels, loss of land, standing crops, trees, and dwellings, and restriction or denial of access to burial grounds. The Panel also found that the policies for involuntary resettlement and indigenous peoples were also violated.¹⁶²

It appeared that the Panel's report confirmed most of the concerns of the Damaan activists about the CRBC project and ADB's conduct, yet ADB's subsequent response also confirmed their doubts about the limited nature of these processes. The ADB Management disputed the Panel's finding, claiming that the Panel "ignored Management's substantial evidence-based submissions," and retroactively applied ADB's operational policies. It also pointed to the Grievance Committee as a comprehensive plan for resolving the issues. Furthermore, the Management claimed that the ADB's policies were confusing; there was a lack of resources for implementing the rigors demanded. Most importantly, the Management showed its disappointment in the fact that the Panel had ignored the fact that all the decisions made by the Management were in good faith and to the best of their technical abilities. The problem was not just about design and preparation, but the lack of effective supervision of the implementation agencies like Wapda. Passing the buck, the

¹⁶² ADB. (2004). *Report and Recommendation of the Board Inspection Committee to the Board of Directors on the Request for Inspection on Chashma Right Bank Irrigation Project (state III)*. Inspection Panel Review, Manila: Asian Development Bank.

Management claimed that the Grievance committee recommendations could be followed as the next concrete steps.¹⁶³

The Damaan movement may have started struggles started as standard legal activism, as NGOs lobbied, participated in stakeholders' dialogue with ADB and the government, filed complaints, and prepared the inspection claim. The invocation of the Inspection Panel meant accepting the formal (legal) parameters set by the ADB, and thus also affirming its power in seeking redressal. However, the ADB and the GoP came established the Grievance Redress and Settlement Committee (GRSC), despite their own procedures, had found the claim for Inspection valid. The Chashma Struggles saw GRSC as "a threat to the peoples' struggles and unity." This started a discussion on doing people's law, and the suggestion of People's Tribunal emerged

The Lok Sath emerges as an alternative forum with the potential to articulate subaltern speech – speech that goes ‘unheard’ on the institutional arrangement sanctioned by the state. Here the residual from the operations of powers is rendered visible. The disengagement was an outcome, not merely due to the procedural limitations imposed by law and power, but by the very nature of the acts of speech and articulation that are sanctioned as unintelligible, and thus silenced. Invoking Freirean pedagogy, the Chashma activists deliberately worked towards creating spaces of alternative self-representations. The letter observed that the panel refused to join in these meditations on Truth: “This was the first time we seriously realized that you were not fully free.”

¹⁶³ Appendix 4: Management’s Response in ADB. (2004). *Report and Recommendation of the Board Inspection Committee to the Board of Directors on the Request for Inspection on Chashma Right Bank Irrigation Project (state III)*. Inspection Panel Review, Manila: Asian Development Bank.

3.7 The Impact of Sath on Riverine Activism:

The Daman activist saw the Sath as an experiment – “a meditation on Truth,” a praxis of building movement infrastructure to foster deliberation and local self-representation. The praxis created a space for the synthesis of local cultural idioms with new water activism, and of decentering state’s power and claims of legitimacy. It was precisely their disillusionment with the new regulatory mechanisms by state actors (in this case the ADB) that led them to disengage and rely on the Sath without any direct goals of using it for strategic wins.

They did not discourage participation on the Grievance Committee, neither hindered the work of the Inspection Panel, but found these limited in their capacity to address local concerns, particularly around the loss associated with the rod kahi and the problems of the modern canal irrigation led development as a whole. When the Inspection Panel members failed to attend one of the Saths, the Daman activists drafted a letter based on the deliberations and proceedings of the day. The letter begins by identifying the gathering at a local village, Daira Din-Panha, that translates to Circle of God’s Protection, calling the Lok Sath “the moment of our meditation on Truth”:

We sat in a circle at the bank of Sindhu River and started our meditation. The meditation began with mourning and grief. And thus, we sang the ‘Story of Dead River’ composed by the Siraiki poet, Sain Ashu Lal:

If the River dies, my dearest listen,
the eyes die, the heart dies,
the identity of our being and our living dies.

The Sath, non-goal directed as it was, had two impacts on the riverine movements, that later became significant in the emergence of river defense mobilization at Taunsa. The first of these was the synthesis of Siraiki cultural idioms with water activism. While the proceedings of

smaller community level sath were in Siraiki, the local language, dialogues, or meetings with state officials used to be in Urdu. Giving an example, an activist referred to the participation of Taj M Langah, a Siraiki intellectual, author, and nationalist leader in one of the Sath.

“When Taj sahib attended one of the Lok Sath, he started speaking with the people in Urdu. There was a sort of code-switching at play. Even Siraiki nationalists like Langah, who were speaking at these public forums, were not used to using Siraiki language, especially when communicating with powerful state or development actors.”

The use of Siraiki language was a deliberate move indeed, from the perspective of creating open and democratic spaces where local conversations and deliberations are articulated in the peoples mother tongue. However, the goal was explicitly the practice itself – to synthesize the idioms of ‘modern’ and new riverine activism with the broader Siraiki ethnolinguistic cultural and political mobilization. Here the goal was also to expand the scope of the Siraiki movement as well.

As Mushtaq mentioned:

We took a little bit of Siraiki and threw it in the water projects [and riverine activism], and then we threw some of these riverine issues into the Siraiki language movement.¹⁶⁴

The second major aspect of the praxis of Lok Sath, partly a consequence of the use of Siraiki, was focused on altering the spaces of interaction between the excluded groups and state officials. The activists strategized to bring the state officials, ADB, Wapda, World Bank, Irrigation department, and others, out of their elements and into the realm of the people. Here the use of Siraiki was also a deliberate strategy to subvert the power held by the state officials. As Mushtaq noted, speaking in English was to relinquish power to the state, and local communities were never

کچھ ہم نے سرائیکی کو پانی کے پراجکٹوں کے خلاف تحریکوں میں ڈالا، اور تھوڑا سا ہم نے ان ایشوز کو سرائیکی تحریک میں ڈالا¹⁶⁴

able to represent themselves. Referring to their participation in forums like the Dialogue and the Grievance committee meetings, Mushtaq emphasized the need for speaking in Siraiki:

If we start in English, then it's a problem because they can capture the whole discourse. They are well-versed in such discourse, well-trained, and we have people that do not even speak English. So, with Urdu even, there's a marginalization of people. So, when we went [to the meeting in D.I Khan], we told them that we would be speaking in Siraiki. We said that all over the world, there's a tradition of speaking in local languages. So, we told them that we would speak in Siraiki. Thus, we put them in a conundrum. Why should we marginalize our own people? Instead, we will marginalize them [ADB, consultants, etc.].

Mushtaq emphasized that the use of Siraiki was both a right claimed by the people, and a subversive move, to take control away from the development experts and place it in the hands of the people. People's voices are amplified and not the speech of the powerful.

The Sath as a praxis of self-representation used existing cultural idioms and institutions but infused these with the discourses of water activism. Mourning of the loss of rod kahi was linked to the boycott of the payment of *abiana* or water taxes on the canal water. It was a strategy that emerged out of the engagement with ADB's Dialogue, Grievances, and Inspection processes. The Sath created a potential for new things to emerge. In an article, Gaadi reflected on the experience of engagement with ADB and the Sath.

The rupture-abyss that emerged through Lok Sath led to the collapse of the Chashma Inspection. Things fella part. This was not the final act of Lok Sath. The future of Lok Sath is open and will be decided through the new dialectics of actions and reflections.¹⁶⁵

¹⁶⁵ (Gaadi, 2005)

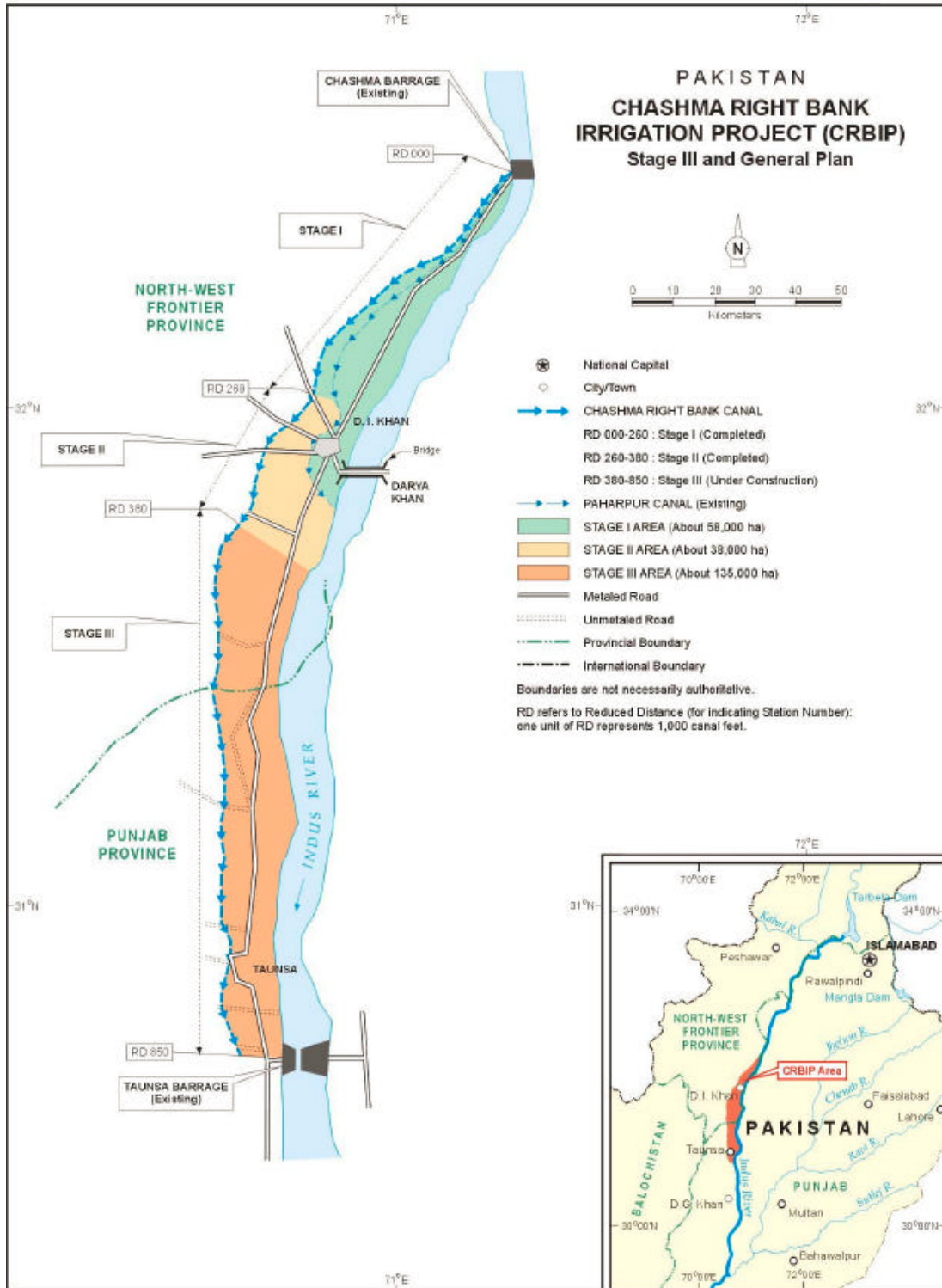


Figure 5: Chashma Right Bank Canal (CRBC)

Src: ADB. "Report and Recommendation of the Board Inspection Committee to the Board of Directors on the Request for Inspection on Chashma Right Bank Irrigation Project (State III)." Inspection Panel Review. Manila: Asian Development Bank, July 2004.

Figure 6 CRBC super passage



Src: Chashma Struggles, website: <http://chashma.web.fc2.com/image/photos/bcross-drainage1.gif>

Src:

Figure 7 Super Passage



Src: <http://chashma.web.fc2.com/image/photos/scross-drainage2.gif>

4: SATH AND SINDHU

I've known rivers ancient as the world and older than the flow of human blood in human veins.

Langston Hughes

4.1 Who Speaks of Rivers?

“Why Sindhu?” I asked Khadim Hussain Khar, mild-mannered, mid-thirties, as we sat on outside the mud and thatched-roofed room with a sign of *Sindhu Bachao Tarla* – A Plea to Save the Indus River. Khadim’s village Wasti Allah Wali was a stone’s throw from Taunsa Barrage, an irrigation dam built in 1958.¹⁶⁶ In 2005, the Pakistani government and the World Bank launched a project to repair and remodeling this dam, which after half a century of use was at risk of collapse. The remodeled dam was completed in 2009, but a year later nearly collapsed under the pressure of the 2010 mega-floods in Pakistan that impacted 20 million people across the country. At Taunsa, the remodeling project altered the river flows and was a factor that exacerbated the adverse impact of the river floods.

Since 2005, two riverine villages on either side of the river have been resisting evictions and other adverse impacts of infrastructure development at Taunsa: Khadim’s village Wasti Allah Aali with about 250 houses on the right bank, and Wasti Sheikhan on the left bank of Indus with

¹⁶⁶ A barrage is a run-of-the-river type dam, built across the river with weirs and gates that control water level to divert it into canals. Barrages are usually low-height dams without a reservoir. C.f. WCD, 2000

almost 2,000 houses. The spontaneous protests led to the emergence of a river defense movement, helmed by the activists of Sindhu Bachao Tarla and Daman Bachao Tarla, mentioned in chapter 3.

“A lot of people ask us about our name,” Khadim responded with a smile. “When we go to Islamabad and Lahore to protests... against the World Bank, against Wapda, [the Department of] Irrigation, and [the Department of] Fisheries... they ask the same question: Why Sindhu? Aren’t you from Punjab? Why are you talking about the Sindh province?” The river is *darya-e sindh* in Urdu, sharing the name with the southern province of Sindh.

“We tell them: *Sindhu* is the name of the river,” Khadim continued. “We are the people of the *pachad*, the right bank of Indus. Our area is a pure Siraiki region, and everyone here calls the river Sindhu.”

“It is the ancient name of the river, mentioned in the Rig Veda,” Fazal added, “*Sapta Sindhava* – the seven sacred rivers of this land.”¹⁶⁷

Fazal and I had traveled from his village Ghumman, ‘the most developed’ one, to Khadim’s village, Wasti Allah Wali, another one in the path of riverine development. I was visiting the Taunsa riverine villages to understand why ideas of river defense took hold in these places, even though evictions and displacement of fishers, peasants, and landless groups is not an uncommon phenomenon in Pakistan.

The fishers, boaters, and *Adivasi* (indigenous) peoples settled near the Taunsa Barrage in the 1950s when the barrage was built. Before that, they had a lot more mobility and traveled along the river with semi-permanent settlements along the riverbank. Half a century later, the state tried to evict these riverine communities forcibly. In subsequent years some villagers faced yet another

¹⁶⁷ The seven rivers mentioned in the Rig Veda as *Saptu Sindhavah* – Sindhu (Indus), Vitasta (Vehit/Jhelum), Asikni (Chenab), Prusni/Eravati (Ravi), Vipasha (Beas), Sutudri (Sutlej) and Sarasvati (Ghaggar-Hakro).

round of displacement due to the riverbank erosion caused by the barrage. Another round of eviction looms on the horizon as the government is planning to build a hydel-power station with Chinese funding.

They told me how it all started. In the summer of 2005, the construction crew accompanied by the Punjab police arrived in the village. They had come without any notice. They asked everyone to vacate the villages over the next two to three days. Villagers did not hold formal titles to this public land. When the villagers protested, the police threatened them with violence: “take your stuff and leave, or else we’ll throw you in the river with your belongings,” recalled a villager. Protests erupted. People resisted. They founded the Sindhu Bachao Tarla.

“Zafar Khan suggested the name of our organization,” Khadim said and paused, pointing over my shoulder. I turned and saw a man in his 70s walking an oil pipeline that crossed over the silt-ejector channel of one of the canals that marked the western boundary of Khadim’s village. The elder walked across, steadily and with confidence. Fazal praised the effort and said he tried to cross once but fell in the water. “Can you do it?” He asked me. I said sure but was glad that he didn’t ask me to demonstrate. He mentioned that the silt-ejector channel was built when the Barrage was remodeled, to desilt the D.G Khan Canal that goes to Fazal’s village. For two winters, the canal was closed off. Muhammad Shakoor, another SBT activist and a skilled mason, noted that the silt-ejector isolated some houses, cutting their direct path to the market near the Barrage. “This elder has made a bridge out of the pipeline,” quipped Shakoor.

By this time, the old man was climbing down the fence set up to protect the pipeline. A pair of *jaman* fruit trees stood next to the fence, just-married in a ceremony the past week -- ‘they were barren but will now bear fruit, Insha’Allah.’ A small open mosque with some burned-out oil lamps stood in the shade of the *jaman*. A protest banner was stretched out between the fence and

the jaman trees, with a picture of Zafar Khan Lund, marking his first death anniversary. Zafar appeared to be speaking at a protest event, possibly at one of the many Sindh Sagar Sath, or People's Tribunal for the Indus River.



Figure 8: Zafar Speaking at Sindh Sagar Sath

Zafar was one of the driving forces behind riverine movements in the Siraiki areas of central Pakistan -- part of the Chashma Lok Sath campaign, a Requestor to the ADB's Inspection Panel, and instrumental in founding Daman Bachao Tarla and Sindhu Bachao Tarla. Local activists knew him as a friend and an *ustad* - a teacher and a guide.

In the summer of 2016, Zafar was murdered at his home in Kot Addu. His son woke him up from his afternoon nap. Two young men had come to his door, looking for jobs. When Zafar stepped out of the house, one of them held him while the other shot him point-blank in the head. He died on the spot. No one was caught; no one was charged with murder. The police investigations didn't lead anywhere. Some say he was killed because he belonged to the Ahmadi minority religious sect. Others point to his bold political stance, especially in support of the Baloch nationalist groups targeted by the Pakistani military.

For members of the Sindhu Bachao and Daman Bachao Tarlas, Zafar was a martyr of Sindhu who gave his life fighting against greedy investors, corrupt bureaucrats, and the landed, moneyed and military elites who had taken control over the wealth of the river.



Figure 9: Day of the River, 2018 at Taunsa

“Our friends, Zafar Khan, Fazal-e-Rab, picked the name Daman Bachao Tarla for their struggle,” Khadim said. “We picked the name Sindhu,” because:

“Sindhu is our home and our destination. When the river is alive, we come back to life,” said Khadim of Wasti Allah Wali near Taunsa.

“Sindhu is ours, and we [fishers] find our wealth in the river, and Allah is our hakim [ruler],” said Nooran Mai and her husband, of Wasti Sheikan near Taunsa.

“Sindhu is the king... it is Khwaj Kizer [the river saint], and we are of this river,” said Fazal-e Rab of “the most developed village” in Pakistan.

“River O River!
Your Waters are Deep
You are our father-mother
We are your fish-children and heirs,”
sang the fishers the songs of the Siraiki poet Ashu Laal.

The riverine fishers of Taunsa, the irrigators of the floodplains of *daman*, and the poets of Siraiki waseb, all speak of the river. These groups represent the river defense movement in the Siraiki majority areas along the Indus River in central Pakistan. Their concerns are grounded in their different socio-material and cultural experiences of the river's flows. The riverine fishers and boaters live in existential proximity to Sindhu and rely on it for their sustenance and social reproduction. The Taunsa barrage threatens their lives: recurring threats of displacement, increased flood hazard, and the enclosure of the river's fishes. The *damani* irrigators, as explained in the previous chapter, also faced issues of displacement and flood hazard due to the construction of canals, and bemoaned the loss of the *rod kohi* system. The Siraiki poets and intellectuals saw the longer history of the colonization of the region and the enclosure of the river as an attack on their identity and their being. The various strands of riverine resistance converged at Taunsa Barrage in the mid-2000s and gave rise to the Sindhu Bachao Tarla movement.

The Daman Bachao Tarla activists interpreted their movement as a struggle “to decolonize the landscapes and the mindscapes” of the Siraiki Waseb, socio-material, and cultural colonization by the British and Pakistani states that enclosed the Indus River.¹⁶⁸ They saw an opportunity to work with the riverine communities of Taunsa, in the mid-2000s. By this time, they had engaged and disengaged on state arenas – particularly the ADB and Wapda's grievance and accountability mechanisms. Concerned with the issue of representation, they had started experimenting with alternative models of justice in the form of the Lok Sath. The institution of the Sath drew upon traditional and transnational practices—traditional practices of village gatherings for collective deliberation to resolve societal conflicts and common problems; and transnational practices of people's tribunals that challenged the interstate order of the violence of wars and development.

¹⁶⁸ Interview, Mushtaq Gaadi, Nov 2017

As riverine activism spread from the irrigation fields to the riverbank, the alternative models of self-representation and justice shaped the direction of riverine movements at Taunsa. Multiple social movement groups emerged to contest the enclosure of Indus with political action and cultural work. By mid-2000s, the Daman Bacho Tarla had been protesting against CRBC and other irrigation projects, particularly the Kacchi Canal that passed through Fazal's village Ghumman. They used a variety of strategies, including direct action protest, advocacy campaigns, and alliance formation. They introduced these strategies to the riverine communities, with the foundation of Sindhu Bachao Tarla. Their experience expanded the scope and scale of the local resistance, in ways similar to the impact of riverine alliances in other areas. The impact here was similar to the challenges to Tarbela and CRBC – riverine groups of Taunsa were able to mobilize resources to challenge powerful actors, like the World Bank and Wapda.

However, the DBT activist also introduced the Lok Sath to SBT, based on their previous experience. For Damani activists, the Sath represented an alternative space of deliberation and justice, as I demonstrated in the previous chapter. The Sath emerged precisely out of the realization that the state arena did not address their broader concerns around river enclosure. The praxis of the Sath led to two interesting outcomes – the mixing of Siraiki cultural movement with water activism; and building a sense of local autonomy by criticizing and rejecting the state's interpretation of law and legitimacy.

The Sath and Sindhu represent attempts at countering the state's political and cultural authority over Indus River and creating spaces for subaltern representation. The founding of Sindhu Bachao Tarla and the praxis of Sindh Sagar Sath wrestled with the issue of making claims on the state and non-state arenas that, as per prior experience at CRBC, did not appear to be legible to the Pakistani state and the Banks. The idea of defending the river came from ideas of the rights

of the fishers over the river – rights that were not given by the state but were contained in the self-sovereign status of the people. Sath and Sindhu created the spaces that afforded these ideas to spread and take hold.

This chapter uses historical and ethnographic data to give an account of the emergence of SBT and the use of the Lok Sath, to show how ideas of river defense were propagated and retained by activists of the Taunsa Barrage. The next section gives an overview of the barrage technology, and the particular challenges of controlling the Indus flows at Taunsa. This is followed by an account of the emergence of riverine protests at Taunsa, the founding of Sindhu Bachao Tarla, and alliances with Daman Bachao Tarla. The final half of the chapter gives an account of the Sindh Sagar Sath.

4.2 Fixing Rivers and Overflows

Controlling the Indus's water and sediment flows proved to be a daunting task for the Pakistani state, as the river eluded state's attempts of full capture. Given their centrality to canal irrigation, building, maintaining, and extending barrages is central to the colonial and post-colonial states' claims of legitimacy through technical and bureaucratic supremacy over the river. When the river refused to cooperate, the state's claim to legitimacy was threatened. This became evident from the challenges faced at Taunsa Barrage in 2005 when the state started a program to repair and expand the old dams of the Indus irrigation system. While engineers attempted to 'train the river' to flow through the gated-walls of the dam, the river threatened the very integrity of these structures. In this tussle of the state and the river, the riverine communities faced multiple rounds of displacement related to the construction work, recurring threat of floods, and the cumulative

problem of bank erosion in downstream areas. This section gives an overview of these technical problems and associated socio-material impacts of Taunsa barrage.

The modern barrage is arguably the most important piece of river enclosure technology in South Asia that created the possibility of perennial irrigation and thus altered human-river relations. A barrage is a type of small, run-of-the-river dam that consists of large number of gates that control the water level and divert river flows into canals. These dams don't have a large reservoir but create a 'ponding' area upstream with a few meters of raised water level.¹⁶⁹ While there's evidence of large diversion dams built in India before British colonialism, these had limited capacity to divert river flows, as they fed inundation canals, and storage tanks during high flow season.¹⁷⁰ With the rise the birth of modern civil engineering, the British started to build barrages in early 19th century and extended this to the Indus River by the early 20th century. Pakistan's irrigation system currently consists of 19 barrages that feed 12 river-link and 43 irrigation canals, with a total length of 60,000 km of main canal channels.

The construction of barrages poses significant design challenges as the river has to be 'trained,' and the foundations have to be protected from erosion. In engineering terminology, river training refers to the process of fixing the river's path so it passes through the gates of the barrages. The Indus River is particularly susceptible to shifting course, due to its particular hydrological and geological features that consist of heavy seasonal flows and the particular soil composition of the river bed and floodplains. Rivers are, thus, trained to flow through the barrage by building a series

¹⁶⁹ This distinction is spelled out in the World Commission of Dams 2000 report. However, it must be pointed out that in some cases dams classified as barrages have reservoirs. Chashma barrage is one such example.

¹⁷⁰ Barrages are also different from the weirs that were built in pre-colonial period across some of the widest rivers of South Asia – like the Kallani dam was built ca. 100 AD across the Kaveri river in Tamil Nadu. Kallani dam was over a thousand feet long and sixty feet wide, with a crest about 20 feet above the river bed. British colonialists referred to the dam as the Grand Anicut dam across the Cauveri river in Madras. C.f. Buckley, R. B. (1905). *The Irrigation Works of India* (Second Edition.). London and Tonbridge: Bradbury, Agnew, & Co. Ld., Printers.

of angled spurs made of rock, earth, and stones along the river bank. The other challenge is to deal with the constant erosion of the river bed. The concrete foundations of the barrage are under additional pressure from the sped-up river flows, as the water falls from the higher levels on the upstream down with rapid speed in the downstream area. Subsidiary weirs are built in the downstream side to slow down the water. However, friction from water and sediments can undermine the foundations at the toe of the barrage floor.

The Taunsa Barrage was particularly susceptible to these challenges and has been termed as one of the most ‘badly designed’ dams by development experts and engineers.¹⁷¹ The dam was built in 1953-1958, one of the first projects undertaken by the Pakistani state after the partition of the Indus Basin in 1947.¹⁷² The barrage is about a mile in length and diverted two canals when it was built, the D.G Khan on the right bank and Muzaffargarh canal on the left bank. These canals were designed to irrigate 1.3 million acres of land. By the mid-2000s, the dam had been identified at high risk of failure, “stemming from design and construction defects, aging and changes in hydrological conditions.”¹⁷³ The barrage floor had eroded with significant loss of foundation material, with “no way of telling when or how the Taunsa Barrage might fail.”¹⁷⁴

¹⁷¹ The Indus divides into braided streams and multiple channels in the Chashma-Taunsa stretch due to soil topology and geography. The river training measures, explained above, try to contain the river flowing through the fixed and, rather narrow channel across the barrage. While the barrage is almost a mile long, the river flows over up to five miles in braided streams just a few kilometers upstream of the barrage, as is its historical pattern.

¹⁷² NDC. (1953). Irrigation-Taunsa Barrage Project (Punjab).

¹⁷³ World Bank. (2005). *Pakistan - Taunsa Barrage Emergency Rehabilitation and Modernization Project* (p. 1). The World Bank.

¹⁷⁴ World Bank. (2005). *Pakistan - Taunsa Barrage Emergency Rehabilitation and Modernization Project* (p. 1). The World Bank. Retrieved June 12, 2017, from <http://documents.worldbank.org/curated/en/819451468758395555/Pakistan-Taunsa-Barrage-Emergency-Rehabilitation-and-Modernization-Project>.

Remodeling Old Barrages

By the mid-2000s, the oldest barrages on the Indus river needed repair, which led to a new round of investments with promises of fixing the old design problems and addressing new social and environmental concerns. The World Bank funded a massive project titled The Punjab Barrages Remodeling and Modernization Project that sought to repair the 100 to 50-year-old barrages of the upper Indus Valley. At Taunsa, the rehabilitation works required building a 4,300 feet long subsidiary weir about 1,000 feet downstream of the barrage to raise the tailwater level and ensure proper energy dissipation, repairing the damaged floor and adding a new layer of concrete, seal joints and filling voids in the foundations, and building a new silt ejector on the right bank of the river. The project was expected to start in April 2005 and end in June 2008, funded by the World Bank, and implemented by the Punjab Irrigation and Power department.

The remodeling project was a technical failure. Apart from the problems of floor erosion, the silt deposits in the upstream areas of the dam caused significant problems in the downstream areas. The Indus River carries massive silt loads, which add up to almost 250 mega tones annually. The reservoirs of dams and ponding areas of barrages capture this silt, raising the lake or river bed. The silt deposit created river islands in the upstream where the water slows down due to the barrage. In the case of Taunsa, additional silt is carried into the river by the hill-torrents of the Kohe-Suleiman range. The *rod kahi* system used to distribute the sediment and water from hill torrents in the *pachad* area, but the CRBC destroyed this system (see chapter 3). Now the flood control channels consolidated hill torrents that flowed to the river. Furthermore, barrage modification required construction of temporary earthen dams in the river channel – coffer dams to dry up parts of the riverbed to allow construction work. These cofferdams are usually removed,

but the project was marred by usual corruption by contractors, who tried to cut costs and left merely breached the cofferdams hoping the river flow would carry the silt downstream.

Over time, the river's hydrology shifted drastically and caused severe erosion and floods in the downstream areas. The construction began with a cofferdam, a temporary earth and stone dam, was built above the barrage to the left side, to dry half of the riverbed for construction. The cofferdam pushed the river into a narrower path, and as the river cut from the left to the right side, it dissolved the upstream *bela* or island and started to deposit the silt on the right side at the downstream. The downstream channel started to cut to the left bank, gradually eroding that area and forcing land loss and displacement on the left bank.

The remodeling of Taunsa Barrage completed in 2009, but the 2010 super floods in the Indus river left the barrage once again on the brink of destruction. The flood eroded the barrage's foundations and flood. According to some studies, the 2010 flood levels were within the maximum flood capacity of the barrage but exposed the structural flaws in the barrage design. Despite the remodeling efforts, the barrage is once again at high risk of failure (Chaudary & Sarwar, 2016; Chaudhry, 2016).

Socio-material impacts:

The Taunsa remodeling project caused multiple problems, including single and recurring shocks of displacement, increased risk of floods in certain parts, and problems of water availability for the irrigators in the canal irrigated areas. New regulations had kicked in by the time, imposing stricter requirements for environmental and social impact assessment, but failed to address the challenges of managing the social and material flows of the Indus.

The Bank hired a group of Pakistani and British private engineering consultants who prepared a 200-page report and claimed that the project did not pose any social or environmental challenges,¹⁷⁵ as it merely proposed to rehabilitate an existing barrage. The consultants noted that there was no expected impact on riverine wildlife and no need for land acquisition or resettlement. They ignored the settlements of fishers along the river, mainly because these communities did not have legal rights to the public land around the Barrage that fell under the jurisdiction of the provincial irrigation department. Instead, the consultants boosted the economic and environmental benefits of the remodeling project.¹⁷⁶ Notwithstanding these claims that are usual when the projects are being financed, the Taunsa and barrages remodeling project was marred with design failure, ineffective social and environmental planning, and cost and time overruns.

The Barrage remodeling impacted both the riverine groups and irrigators of the Daman. The riverine communities faced multiple rounds of displacement. When the construction crew arrived on location, they tried to evict the riverine communities forcibly. The downstream communities suffered from the gradual and accumulating erosion of the riverbank. The Barrage remodeling project also impacted the irrigators in the canal command areas. Part of the remodeling envisioned building a silt-ejector for the D.G Khan canal – in theory, a silt-ejector starts above the barrage and bypasses it to take the silt back into the river. The silt-ejector was thus designed to

¹⁷⁵ The National Engineering Service of Pakistan (NESPAK), National Development Consultants, and ATKINS

¹⁷⁶ The consultants' report classified the project as a 'category B' with limited adverse impacts to sensitive habitat, wildlife, or cultural heritage. They didn't see any need for land acquisition or rehabilitation or resettlement as a result of the project. The report also boasts of social consultations with local communities, including "indirect women consultations" to ensure all perspectives were heard. The report goes to some lengths to emphasize the positive economic impacts of the project, which stand out in a report about environmental and social impacts. The increased efficiency in irrigation will, the consultants insist, raise the quality of life and increase access to clean drinking water, education, health, and markets. On the environmental side no significant "noise, air, or water pollution, or any threats to the upstream sanctuary which was declared a Ramsar site in 1996. Instead, the consultant's added, rather speculatively, that the structure "oxygenate the water for the aquatic life in the downstream part of the river." (NDC et al, 2004).

reduce silt flows in the D.G. Canal and to protect the structure integrity of the barrage itself. However, the construction crew closed the canal for two winter cropping season to build the silt-ejector. This created problems for the irrigators on the right bank of the Indus, including Fazal of Ghumman. The irrigators who relied on lift-irrigation from the D.G. canal had another problem – the construction of the Kacchi canal. The Kacchi Canal project is a 363 km long lined canal diverted at Taunsa barrage on the Indus and runs parallel to the older D.G Khan canal. The command area of this canal starts 282 km south of Taunsa Barrage.¹⁷⁷ Apart from the land acquisition for the canal, the canal also prevented lift-irrigation from the D.G. Canal, since it was built parallel to D.G on the west side (see chapter 3, section 2 for details). The loss of irrigated area was estimated by locals and activists to be about the same size as the command area of the first phase of the Kacchi canal.

The remodeling of Taunsa Barrage demonstrates the limited capacity of the state to deal with the social and material flows of the Indus River. The barrage stands at high risk of failure, unable to adapt to the hydrological shifts in the Indus River and the hill-torrents of Koh-e-Suleiman. The project also demonstrates yet another failure to plan for the adverse social and ecological effects of riverine projects. By the mid-2000s, new regulations were in place, but the assessments proved insufficient to address the immediate and long-term problems of displacement

¹⁷⁷ Part of mega-development projects initiated by General Musharraf's government, Kacchi canal was the State's plan for uplifting of the historically under-developed province of Balochistan, and to appease the tribal elites who owned large swathes of land. This project aims to irrigate around 713,000 acres of agricultural land in the Dera Bugti, Naseerabad, Bolan and Jhal Magsi districts along the 80 km stretch of canal, although the first phase of the project completed in 2017 is supposed to irrigate about 70,000 acres, or less than 10% of the final command area. Balochistan is Pakistan's largest province by land at around XXX acres [US state comparison], and smallest in terms of population [7ish millions, less than Faisalabad city?] Most of the province lies outside the Indus basin, but the strip of land between the Indus and Kirthar mountain range lies in the Indus basin. Kacchi was the second large canal built to irrigate this area, after the Pat Feeder canal that was diverted in the 1970s at the Guddu barrage in Sindh province.

and risk of floods. The World Bank's consultants boasted of social consultations with local communities, including "indirect women consultations," emphasized the positive economic impacts of the project, and even the environmental benefits, noting that the barrage "may oxygenate the water for the aquatic life in the downstream part of the river." The problems of displacement and lack of water in the irrigated fields became mobilizing grievances for the fishers of Taunsa and the irrigators of Daman.

4.3 Riverine Movements of Taunsa

Sindhu Bachao Tarla was founded in 2005 by the fishers of Taunsa when the activists from Daman Bachao Tarla introduced new ideas of self-organization that went beyond the usual patronage-based politics of subaltern groups in Pakistan. These alliances infused new dynamics of resistance, as SBT confronted powerful actors and assumed a role in the broader movements against river infrastructure protests.

Early resistance took the shape of spontaneous protests and approaching local influential, but these strategies didn't prevent eviction. Khadim and others described the violent encounter in detail. The construction crew came with bulldozers and heavy machinery to level the villages. A large squad of armed police accompanied "There were a lot of people out, everyone from the village," Shakoor, another Sindhu Bachao activist recalled. "We might have stopped the bulldozers, but there was a lot of police. And the police, you know how they are... people were scared of them and couldn't do anything." With their houses leveled and personal belongings lying out in the open, locals had no option but to move out. "We had no permanent place, no roof over our heads. They [the state] just threw us to the side... left us to rot."

Local political action is generally geared towards patronage politics, but these channels didn't work in the context of the high-stakes game of river enclosure led by centralized water bureaucracies and international investors. The usual mode of patronage politics often referred to as *thana-katcheri* [police-court] politics allow marginalized groups to contest their claims through already established patronage networks, where social bonds of caste and kinship mediate ties with the landed and political elites. These elites can help inform state policy if the claims are deemed legible and acceptable within the paternalistic framework of 'moral economy' based contentions. However, this course of action did not work at Taunsa. Khadim of SBT mentioned that some of the villagers reached out to the local influentials and political representatives to plead with them to stop the evictions but to no avail.

We went to our MNAs, MPAs [Member of National/Provincial Assemblies], to the Khwajas and Khars and others. We asked for their help, asked them to stop the construction, speak with the government [bureaucratic officials]. We asked them to do something to save our homes. But they said they couldn't stop what the government was doing.

In this context, contact with Damani activists infused a new spirit of self-organized mobilization among the riverine communities of Taunsa. Zafar Khan Lound was based in Kot Addu at the time and ran an advocacy and welfare nonprofit – Hirrak Development Center. He had been a key figure in the Damani activists against CRBC, along with Fazal and Mushtaq, mentioned in chapter 3. Zafar heard about the evictions through local newspapers and made his way to Wasti Allah Aali.

Khadim noted that when Zafar first came to the village, locals were not impressed. Zafar did not fit the existing perceptions of a patron. "People did not have faith [in Zafar]... [He] had come to the village on a wagon [local transport], paying 10 rupee bus fare [about a dime] and

walked to the Wasti. People didn't believe that someone who didn't even come to the village on a motorbike, much less a car, could help us.”

To get a sense of the situation and the tactics already used, Zafar spoke with several villagers and suggested that instead of approaching local politicians, the villagers should build an organization of their own. Khadim recalled his meeting with Zafar: “He told us that if all of you unite, all of the evicted, then we could start a campaign and movement, so your voice would reach the *hukamran* [rulers]. Then your problems will be resolved, Insha'Allah [god willing].”

This message resonated with a few younger folks, like Khadim in Wasti Allah Ali and Muhammad Ismail, a spry young activist from Wasti Sheikhan across the river. Ismail noted that he was impressed by Zafar's honesty, sincerity, and belief in people's power to organize. Inspired by their first encounter, Ismail went door knocking and started recruiting people for a meeting to discuss the forming of a local organization:

At that time, I had a small milk shop, so people used to come to get milk, and I started telling them this story, that this person is coming, he is an educated person, he is doing all this for us, so we also need to do something. So, let's get together, listen to what he has to say if your heart likes what you listen then that's okay, otherwise let it go. People agreed. So, we gathered about 700 people.

Expanding the Local Resistance

Sindhu Bachao Tarla was founded after the first meeting and benefited from the experience and resourcefulness of the Daman activists. The interaction introduced new ideas of self-organizing, built a sense of confidence through direct action, and allowed locals to target actors like the World Bank going beyond the limits of the framework of patronage politics.

In describing the scope and impact of this campaign, Ismail of Wasti Sheikhan noted how they raised a variety of issues encompassing living conditions of fishers, displacement, bonded labor, and harms of river infrastructure development. At the early stages, the central demand was

immediate resettlement of the displaced. SBT action ranged from direct action to stop construction, rallies in nearby cities, and sit-ins and hunger-strike camps outside the offices of Wapda, Irrigation department, and World Bank in the provincial and federal capitals of Lahore and Islamabad.

We started a campaign to show that thousands of people were displaced, and the resettlement plan didn't care about us. So, we protested, here at the barrage, in Kot Addu [capital of district Muzaffargarh on the left bank of the river], in Multan [the biggest city in Siraiki Waseb]... we even went to Lahore [the provincial capital] and Islamabad [federal capital] to protest. We made a lot of noise, created an uproar to unsettle the order of things.

The spread of mobilization from local protest to other cities also mattered for building confidence, as locals hadn't considered taking on the World Bank itself. The riverine activists of Sindhu Bachao often speak of the support and training they received from Zafar, Fazal, and others. With their prior experience of advocacy campaigns against IFIs and development banks, Daman activists were able to train locals around issues of the Project design, the wider social and ecological impact, and the absences of resettlement plans despite claims of World Bank and the development actors around local consultations.¹⁷⁸ Ismail summed this up by pointing out that during the early stages of organizing, they didn't know much about the World Bank but realized that they had a better shot at being resettled by putting pressure on the investors of the project.

Now this was [Taunsa remodeling] was a World Bank project; World Bank gave the money for this, with *sud*" [He uses the Arabic term for interest on loans, which is *haram* -- immoral, illegal, and un-Islamic.] World Bank was embarrassed [by our action], and they asked the Irrigation Department, the government of Punjab, 'What is going on with these people? Why are they making this noise? Handle the situation and deal with these people.'

¹⁷⁸ The World Bank had been under scrutiny for the ongoing displacement caused by these development interventions, came under a lot of pressure for ignoring its own policies regarding forced displacement, resettlement, and indigenous peoples [footnote, cite]. Despite three decades of knowledge around the social and environmental impacts, about a decade of new policy reforms, the Taunsa project suffered from the same failures that marred similar projects on the Indus and elsewhere.

The strategy of “embarrassing” the Bank with direct action to prevent construction worked wonders. The Bank asked the Punjab government to look into the issues. The Punjab government advertised widely the Taunsa project as a step to boost the local economy by reviving, extending, and modernizing the irrigation infrastructure of the province. With all the noise and protests, they had to address the problem of the displaced for their claims to have legitimacy. The government put together a survey team to evaluate the extent of damage and loss and devised a resettlement action plan.

Khadim noted that their protests forced the government to create a new resettlement action plan, but the plan had major problems. The government hadn't surveyed the area before displacement and did not believe people when there was no evidence of what they had lost. The resettlement awards were budgeted with the construction funds, which caused delays in delivering awards, and the people didn't receive restitution for a long time.

They responded to our action and prepared a new "Resettlement Action Plan" As per this plan, they inquired about the people who lost their houses, made local committees, then they conducted surveys, asked people about whose houses, trees, how many items were lost, who had a kitchen how many bathrooms were in the demolished houses. But all of the houses had been bulldozed. The survey was done afterward, and all of the data collection happened after demolition: these many families, these many houses. And then compensation was paid to the *mustasareen*. That compensation was tied to the Taunsa Barrage Remodeling project, the project to rehabilitate the barrage along modern lines. They attached the resettlement plan with this new project so that the local would get compensated when the work for barrage remodeling would start... after gaps of three months, six months.

The Impact of SBT

Despite the problems of the new resettlement policy, the SBT saw this as a major win. They had forced the World Bank and the government to address their main socio-material concerns and resettle them near the Taunsa barrage. Locals used the momentum from these victories and

pushed the government even further, asking for the provision of basic health facilities, schools, and proper roads in the new settlements. The win gave a boost of confidence to the riverine communities.

SBT built a sense of power among the subaltern groups, particularly the indigenous fishers and the women of the riverine groups. Much of the activity in Wasti Sheikhan on the left bank was helmed by several women of the fisher communities, belonging to the *Adivasi* (indigenous) kihal groups who had originally migrated from the southern Sindh province. “We came here when they started building dams and barrages, and there was no water left for us,” noted Amna bibi. Migrations along the river had been a way of life for the indigenous riverine groups, who would spend most of their lives on boats. The natural wetlands started to disappear as the river flows dwindled, causing some upstream migration.

The women activists from the fishing communities took on significant labor of organizing, especially in Wasti Shaikhan. Bashiran bibi recalled this period of founding Sindhu Bachao Tarla. She noted how these efforts channeled their grief into self-organizing momentum that built a sense of home:

When we were evicted, we tried everything, but there was no hope. Zafar came to our village and gave us some suggestions. He was very supportive; may Allah grant him a place in heaven. So, we made Sindhu Bachao Tarla and started to work. The entire village [Wasti Sekihan] rose up and came out to protests. We took matters in our own hands, held protests and rallies, demanded our rights, and won many battles. All under the banner of an organization of the *mahigeer* [fishers].

Amna bibi and Nooran Mai referred to their powerful demonstrations, in particular, their confrontations with the police. They noted that the women played a critical role, even becoming “protectors” for the men. Male activists also noted made this observation. Ismail explained that the villagers were poor and scared of the police. At the rallies, they feared that the police would

use violence: “they'd beat us, threaten us, even offer us money to shut up. But we had women as leaders of our movement as well.” One of these leaders Amna Bibi explained:

“We held a lot of powerful demonstrations. We were not afraid of the police. We'd go to the protests, and we women would be on the frontlines. And if they [the police] showed us a danda [baton], then we can grab it and take it, and I am not afraid. I'd beat them with it.

Bashiran bibi expressed that the presence of women strengthened the movement: “We didn't fear anyone. And when we stepped out of our houses, we could face anyone.” Furthermore, the exposure also introduced new ideas about the right to protest.

“We found out what the world was about, what these powerful actors were doing. They'd ask us why do we protest. We'd tell them that to protest is our right, our constitutional right. everyone does it, and we'll do it too.”

The widespread and inclusive participation from the local communities also allowed the movement to sustain themselves, as many of the wage-laborers and fishers from the area were not able to actively participate in many rallies and demonstrations. The sense of ownership of the organization and their right to confront the police, the State, and the Bank became a crucial element in the future work of the Sindhu Bachao Tarla movement, particularly as their demands expanded beyond demands of resettlement to claims of ownership over the river itself.

Alliances From Daman to Sindhu

The convergence of various strands of riverine resistance was a crucial step in the emergence of ideas of river defense. The previous section described the influence of Daman Bachao Tarla on the riverine communities of Taunsa. Damani activists like Zafar and Fazal nurtured resistance and alliances, helped channel the spontaneous energy of protests into building an organized movement. Sindhu Bachao Tarla changed the shape of riverine resistance by

centering the subaltern figures of the subaltern *Adivasi* (indigenous) fishers. However, two strands of Damani and Sindhu activism also intersected precisely because the Taunsa Barrage had impacts that spread beyond the river to the irrigated fields, as described in section 4.2. In particular, mobilization against CRBC and Kachhi canal in Fazal's village Ghumman was directly and physically linked to the riverine communities' displacement at the barrages like Taunsa.

At the time Taunsa Remodeling project under the Punjab Barrages Remodeling project of Wapda and the World Bank, the Damani activists were engaged in a multi-fronted resistance against hydro-development. The Damani activists, introduced in the previous chapter continued to put pressure on the State and Banks by protesting against the CRBC canal – and took on issues of displacement and resettlement, water shortages and pricing, neoliberalization of on-farm water management, lack of drainage and increased flood risk to the west, silt deposits along the riverine belt in the east, the destruction of traditional irrigation, and adverse effects on the ecosystem. Their concerns were never limited to the CRBC project alone, as they addressed a whole set of hydro-projects in the Siraiki Waseb, including the Kacchi Canal, Gomal Zam dam, Kalabagh dam, and Thal canal project.

By the mid-2000s, though, the Damani activists had started experimenting with the organizational forms. While interested in building a broader movement, they were wary of subsumption of multiple actors and organization under a single dominant group. The main concern was around self-representation. Instead of forming a large organization, they focused on building loose alliances for various campaigns and established several smaller non-profits groups, militant collectives, and grassroots organizations that created a symbiosis of water advocacy, political campaigns, and cultural work.¹⁷⁹

¹⁷⁹ These groups included Hirrak Development Center, Parrah Development Foundation, Mauj, Chashma Lok Sath campaign, Daman Bachao Tarla, etc. These groups linked up with existing political parties and with the Siraiki cultural

The resistance against the Kachhi canal, diverted at Taunsa and passing through Ghumman, provides an example of the collaboration between Daman and Sindhu activists. When construction around the Kachhi canal began, Daman Bachao Tarla was already working with new formations like Sindhu Bachao Tarla and the Treemath Sanjh, or Women's Cooperation, which was a first attempt to organize women separately. Women had always been at the forefront of such resistance, especially at Taunsa Barrage and in Ghumman when private contractors started to arrive in the village.¹⁸⁰ The women blocked the path of the construction crew, camped out in front of the village entrance, and formed the vanguard while facing the police. Channeling this energy, the Treemath Sanjh held independent meetings and several. A *treemath* sath, a tribunal of women, was organized, focusing on the Kacchi canal project. Apart from the usual concerns around displacement, land acquisition below-market prices, and lack of agricultural water, local women focused on accessibility and the provision of drinking water. Given the gendered division of labor in these villages, women are primarily responsible for providing water, often walking several miles to gather water. Women also constituted seasonal agricultural labor, especially during the cotton harvesting season.¹⁸¹

Concurrently, the Taunsa Remodeling project was causing problems for the downstream irrigators who were relying on the D.G Khan canal water. The D.G. Khan canal had to be closed for several winter months. For the irrigators relying on the canal, this meant no water for the winter (kharif) wheat crop. When work started, the canal was closed without effective notice and was

and political movement. Many of the 'water' activists were also influential members of the Siraiki Lok Sanjh, a cultural group that briefly launched a small political party as well.

¹⁸⁰ *Khabrain*, May 29, 2006, Multan, "Shadan Lund: Kacchi canal mansobe ke khilaf muzahira, kaam rukwa dia"; *The News*, June 12, 2006. "Work on Kachi Canal be Stopped."

¹⁸¹ The event, Treemath Sanjh, was covered by several local newspapers, such as *Khabrain* and *Nawai-waqt*, Multan editions, Dec 6, 2005.

kept closed for a month longer than expected. Farmers had planted the wheat crop in hopes of receiving water in the crucial months of February, but the canal closure continued well into March, drying out the crops. The pattern repeated the following year.

The Daman Bachao Tarla activist formed a united front with the irrigators of the D.G Khan canal, and the women and men of the villages impacted by the construction of the Kacchi canal. They also to build broader alliances and unite communities impacted by the ongoing enclosure of Indus river and irrigated land across the Siraiki Waseb. They highlighted the problems of a variety of ongoing attempts of water and land occupation by the state – from hydro projects such as Taunsa Remodeling, Kacchi Canal, and Gomal Zam dam to the land grabs through the expansion of Military cantonments, land grants to military personal, and lease of state land for corporate framing. Meanwhile, Sindhu Bachao Tarla was also expanding along the river, centering the concerns of the Adivasi fishers in other areas. The movement spread along 300 miles of the river, from Chashma barrage in the north to the downstream areas of Taunsa barrage, till Ghazi Ghat.

The riverine alliances of Damani activists and Sindhu Bachao Tarla were informed by their socio-material and cultural connections to the Indus River, and the exchange of ideas and collective action strengthened their commitment to fighting against river infrastructure project. Mobilization strengthened their organization, and they became significant political actors in the area.¹⁸²

The shift from riverine resistance to river defense came through cultural work, where SBT and DBT, along with other allies, brought together different strands of resistance: against hydro-

¹⁸² Various members of SBT reflected on this sense of empowerment, and spoke about their ability to challenge the police, get the World Bank to agree to their demands, and even influence local political dynamics. For instance, Khadim mentioned an incident when the SBT members had gathered in large numbers in the village, in order to go to a rally for the Siraiki province in a nearby city, Multan. The buses were late for some reason. As they waited, Khadim received a call from the contractor of the fishing lease at Taunsa barrage, a local political and landed elite, who was concerned that the people were gathering to protests against the contract regime. He offered to meet and talk with Khadim in person, until Khadim assured him that the gathering had nothing to do with the contract fishing problems.

projects, for Siraiki culture and history, and the rights of the indigenous fishers and traditional irrigators. Elements of anti-development advocacy, poetry and music, and indigeneity created an association with the river itself. Idioms of advocacy emphasized the integrated nature of hydro-projects and their various effects and found allies in other communities impacted by hydro-infrastructure. The poetic imagination of Siraiki nationalism helped create rituals of mourning and sanctifying the river and provided links with the wider Siraiki nationalist movement. The figure of the Adivasi fisher (and boater) came with a sense of river ownership while forging alliances with the peasant, the landless, and the irrigators of the Siraiki waseb. These strands generated ideas of river defense, and the institution of Lok Sath created the discursive and performative space than necessary for the transformation of riverine alliances into river defense movement.

4.4 Sath and River Defense

To summarize some key points from the previous chapter, Daman activists faced the problem of representation when they engaged in state-direct political action. They were frustrated with the limitation of the new regulatory mechanisms, especially the grievance and accountability mechanisms introduced by the ADB and Wapda. The ADB Grievance Process, in particular, felt short of delivering on the promise of participation, and the Inspection Panel was limited in scope and marred with proceduralism. The forums gave representation to various state actors and landholding elites who opposed popular mobilizations. The ADB refused to accept responsibility for mismanaging the hydrological and social overflows, even though the shortcomings in project design caused these problems. The scope of the Inspection Panel was limited, and it didn't address issues of historical, cultural, and collective loss due to displacement, recurring flood hazards, and the disintegration of the socio-hydrological flows of the rod kahi system.

The Daman activists saw the Sath as an attempt at a novel solution to overcome the challenge of representation of subaltern groups. The Sath for them created an autonomous space of deliberation and truth-telling, grieving their losses collectively rather than articulating these as individualized property-based claims, and articulating that which was not legible to the state. In this sense, the Sath constituted an institution of subaltern representation – a decolonized and autonomous zone to build solidarities and challenge the state’s claims of legitimacy over river flows.

Here I first describe the intent behind the Sath based on conversations, interviews, and articles by some organic intellectuals of the Sath movement. Then I provide an account of the Sath to show how the intention of creating an autonomous space operated and was critical to the cultural work necessary for the ideas of river defense to take hold.

Sovereignty and Subalternity

Attempts of representation of the subaltern raise questions and suspicions among activists and academics from South Asia. The term subaltern was made popular through the study of South Asian social movements by Ranajit Guha and other members of the subaltern studies collective. These scholars borrowed the term from Antonio Gramsci, who used the term subaltern in his Prison Notebooks to refer to subordinate classes subjected to the initiatives of dominant classes for maintaining hegemonic power. When South Asian historiographies used the term, they wanted to reclaim subaltern histories, fragmented and episodic, from the totalizing narratives of imperial and nationalist historiography. Guha viewed the subaltern as an attribute of subordination in terms of class, caste, age, gender, or authority in other ways. Conceptually, the subaltern represents the heterogeneous differences between the masses and the elite representation of them by imperial or

native elites alike (Guha, 1983). By telling their histories, the project sought to ‘give voice’ to the subaltern. The subaltern resides in registers different from the hegemonic liberal, Marxist, nationalist ones. However, this also leads to an empirical conundrum, as discussed in Gayatri Spivak’s (Spivak, 1988) in ‘Can the subaltern speak?’. Spivak argues that if the subaltern occupies the space of difference (from Marxist, liberal, and nationalist histories), then any project to render them visible raises the question: how can the subaltern speak if the act of speaking itself is political and authorized by the very dominant structures of power that the subaltern studies project seeks to de-authorize?¹⁸³

The activists of Daman Bachao Tarla wrestled with the issue of representation and were familiar with the South Asian debates on subalternity and representation. Their use of the Sath and multiplicity of organizational forms suggested a possible way forward. These approaches coincide with the theoretical developments, as Spivak revised the concept of subalternity as the absence of institutionalized agency (Spivak 2005) and others pointed to Gramsci’s original formulation that left open the possibility of subaltern organization.¹⁸⁴ The Sath wasn’t

¹⁸³ Spivak’s challenge has generated a wide-ranging debate, particularly focusing on her seemingly pessimistic view and the impossibility of academics to get at these rationalities. Is there even a scope for empirical investigation? The self-assigned task of the postcolonial theorists is not to speak for the subaltern in the political arena, but even the re-presentation of subaltern subjectivity requires a work of translation and interpretation by academics, who are driven and limited by the rituals of academic knowledge production – what Silvia Rivera Cusicanqui (Rivera Cusicanqui, 2012) criticizes as the referencing and cross-referencing within the Northern Academy. Re-presenting the subaltern is a project inherently fraught with the problems of representation, given how knowledge interacts with conflicts of representation within the political arena. A clear demonstration of this is in Majumdar’s (Majumdar, 2017) discussion of Ranajit Guha’s article, “Chandra’s Death”, in which she convincingly shows that despite the many virtues of the article, Guha reads emancipatory and solidarity politics in the actions of subaltern women without presenting a shred of evidence to substantiate this claim. One can wonder if such a reading is influenced by Guha’s own political sensibilities, and more importantly, as a direct response to the criticism on Subaltern Studies collective for ignoring gender issues.

¹⁸⁴ C.f. (Beverly, 2000; Green, 2002) As per Green, Gramsci believed that it was possible to produce a history of subaltern classes even if it was an arduous task. Subaltern group developed in different phases corresponding to different levels of political organization that must be taken into account by historians. Subaltern groups face political, social, cultural, and economic relations that marginalize them and prevent group autonomy. But these groups have the ability to transform their subordinate social positions, which was the goal of Gramsci’s analysis, to formulate a political

conceptualized as a strategic tool, but a response to the challenge of representation, to create a space of deliberation and truth-telling that affords space to subaltern ideas, such as the ideas of riverine peoples and river defense.

The movement intellectuals, including Damani activists and urban lawyers and academics, have written several articles describing the intent behind the Sath, based on their experience of organizing these assemblies. Holding a Sath was a refusal to conform to the terms of “Law and Power” represented in the institutions of the state (*sarkar*) and money-lenders, or the Banks, (*sahukar*).¹⁸⁵ State-directed action, or legal activism, was important to “prevent injury to the people,” but also meant accepting the terms set out by the powerful. In postcolonial setting, the continued presence of colonial-era laws, for land acquisition or contract fishing regimes, suggested a different dynamic -- here “sovereignty [was] defined by brute force...the more the victims perform the labor of justice, the more alienated and estranged they feel.”¹⁸⁶ Even then, the oppressed have an innate sense of the violence they face, as this violence permeates their everyday lives. However, their constant immersion in conditions of oppression limits their imaginations. The task then was to demystify the spell of power articulated in Law. The Sath becomes an institution that unchains the imagination, an institution of “people’s law, that carries the spirit of a people’s *experimentation* with the truth and truth-telling.”¹⁸⁷

The actual proceedings of the Sath demonstrate how these ideas are put in practice and are discussed and presented to those who attend the Sath. Video recordings of the various Sath

strategy. For a reinforced Spivakian challenge to these, and others, c.f (Asher, 2013, 2017; Asher & Wainwright, 2018)

¹⁸⁵ In this instance represented by the ADB’s inspection process, but generally applicable to the State itself.

¹⁸⁶ The article draws on Marxist ideas, Freirean Pedagogy, and Hegelian dialectics, among others. C.f. Gaadi, M. (2005). When Things Fall Apart. *The ADB and Policy (Mis)Governance in Asia*. Focus on the Global South.

¹⁸⁷ *ibid*, p75

organized by the Sindhu Bachao Tarla and Damani activists give a sense of the proceedings. The first large Sath was organized in Wasti Allah Ali in 2005 - a two-day event that started with a cultural event. The first day consisted of an evening of song, music, and dance to welcome allies and guests and to celebrate the local riverine communities. The organizers had set up a venue in the village center with a *pindaal* (arena) with flower-patterned canvas walls and a high canopy commonly used for weddings, funerals, and political events. About 700 women, men, and children were in attendance, most of the locals from the riverine villages. People sat on the ground or *darris* - blue, red, and black striped cotton rugs. Young boys smiled at the camera lens when it was pointed at them. Some young women covered their faces, but others didn't care much.

Zafar Khan Lund led the ceremonies and welcomed everyone. He introduced Sindhu Bachao Tarla as an organization of the riverine communities, those who live in and along the river. The organization dealt with the issues of the fish, the birds, and all folks who rely on these beings for their existence. In the name of displacement and all things progress, he continued, the wealth of the Adivasi had been stolen. Now, things have gotten so bad that these folks living on the bank of rivers don't have enough to eat. "So, we all have gathered here, people from the community and those from outside the community, all here to build unity and struggle together. To save the river, our lives depend on saving the river itself," he ended with a smile. The event proceeded with poetry, singing, and dancing that went into the late hours of the night.

The second day consisted of a sitting under the open sky, and Zafar, who was moderating invited Mushtaq Gaadi to speak about the purpose of the Sath itself. Mushtaq recounted some of the key elements mentioned in the articles referred previously in this section. He emphasized the Sath as an institution that affords people agency based on the notion that people must be able to govern themselves and exercise sovereignty over their beings.

The basic purpose of this ritual [ریت] of Sath is for people to rule over themselves [اپنے اوپر حکمرانی کر سکیں], exercising their inherent sovereignty [اختیار]. Self-Rule based on self-sovereignty that was snatched away from them when the State [حکومت; hakoomat] was founded.

Identifying what he meant by *hakoomat*, as the term is also commonly used to refer to the democratically elected or undemocratically appointed representative government, Mushtaq noted that *hakoomat* or State referred to the judiciary, law enforcement, and the bureaucracy.

When this State was formed, the courts became the name of the State. The lawyer became the state. The judge became the state. The police became the state. All the different [bureaucratic] departments. The Fisheries Department, the [Irrigation &] Canal department, Agricultural department, Forestry department. These are the names of the state.

He moved on to speak about the historical constitution of this State during the British era. Over two centuries of the colonial rule in India, the British established the modern state bureaucracies, police, courts, judges, lawyers. Pointing to the long history of Indus Valley Civilization, he noted that the state did not penetrate local societies, and people had their ways of resolving disputes and managing conflicts over resources.

Before the State, how did the people here manage the land and the fish and the river? They did it by exercising their sovereignty on themselves. Each village [basti], each jog, each *wasoon*, is in of itself a sovereign unit. A right that was taken away from the people when the State came into being. Its interest was to rule over people, to dispossess them, to occupy their resources [قبضہ]. To occupy peoples' resources and wealth [wasail] is done by creating Law. With all of this, the institutions of Sath and local self-sovereignty perished. The meaning of the Sath is that we take back our self-rule, that was taken away from us by establishing the government, the judge, lawyer, police, court, and all these departments. We take back all of these ikhtiar [soverign power].

Emphasizing the need to reclaim their inherent right to govern themselves, or their sovereignty, Mushtaq suggested two ways of moving forward – people's law-making and collective decisions based on the people's laws. He used the example of the contract fishing regime

that troubled fishers of Taunsa and elsewhere in the country. A rejection of the State's law is precisely the rejection of the colonial practices of dispossessing the local population.

The first way is for us to make our own law - qanoon. For example, there's the law of contract fishing. This is the government's law. It wasn't made in consultation with us. The government's law that when they have a project, to build a canal, then the government demands land from the people [referring to the Land Acquisition laws]. *The meaning of Sath is that we, firstly, do not accept this law.* If we accept this law, then all these folks evicted from Taunsa barrage with State's law, then we also accept that this was just. If we accept the law of contract fishing, then we will never be able to get our rights. Because the meaning of LAW, the state's law is that people's sovereign control over their resources is snatched from them and is given in the hands of the state. And when it's in the hand of the state then it's in the hands of the officers [bureaucrats], and in this way sovereignty is snatched from the people. That is why the first decree [gaalh] of the Sath is that we only accept the law of the natives [mqami], we do not accept the laws of the state.

The organizers of the Sath viewed the rejection of the state enacted laws and their implementation to displace and dispossess the local community as a necessary first step to claiming local sovereignty. This discursive attack on the state's claim to legitimate authority over the river and riverine people, as the first step, had to be translated into action. Here Mushtaq pointed to the second major point of the Sath – a second decree – claiming the historical rights of the people over riverine wealth and resources.

The second decree/statement [گالھ] is that with our rights, historical rights that people have, the right over land, over fish, the right to make decisions, all of these rights for these we make our own laws. So, we decide how we fish, if the government has the right to take away our land, and if we agree to give land to the government, then we decide the compensation. Sath means to make oneself the kind of one's self.

Pointing to the British colonial rule, Mushtaq noted that the entire edifice of state's law took away people's sovereignty and enslaved them.

We were enslaved by the British rule and want to regain what was stolen – our right to rule, our right to sovereignty that was taken away from us bit by bit.

The task at hand, through Sath and organizing, was to make people's law, to reclaim sovereignty, and to do so, people needed to come together, and build power in unity.

We will make our law. We will make our decisions. And to act on these decisions, we need power. And this power will come from this Sath, this kath (gathering), this sanjh (togetherness). The more we unite, the more we become power [taqat] for each other, become each other's friends and allies, the more we'll grow.

Unraveling State Power

The Sath also provided an opportunity for the participant to attack the State's power discursively and performatively. They challenged the state power and wrestled some space of autonomy – contingent, provisional, yet symbolically and psychologically significant. Consistent with the stated goals of decolonizing the state by challenging the legitimacy of law, and building power locally through people's movement, the Sath is a performance of decolonization through remembering and mocking state power.

The modern state, as I've noted by pointing to the cultural dimension of the enclosure framework, claims authority over the river flows through performative acts. Scholarship on hydro-politics has therefore explored the importance of cementing the legitimacy of the state through inauguration ceremonies of mega-dams or, in the case of South Asia, barrages (c.f. Haines, 2013). This performance of authority is also present at the interaction between state and society, in courts, bureaucratic offices, and, for our purpose, the consultative meetings and dialogues.

New regulatory mechanisms put bureaucrats and development experts in direct contact with the people. However, these encounters were carefully controlled. In the case of CRBC or Taunsa remodeling, activists noted that consultative meetings were held in the seminar rooms of fancy hotels. Fieldtrips were limited to drive by through a village, and with a brief stop in the village square [*chowk* or *maidan*].

The Sath upset this performativity and the power of the State through an assault on these seemingly ‘mundane’ aspects of state power – the comfortable chair, the ‘objective’ emotionless bureaucratic appeal, or emotions appealing to their benevolence, like a child pleading to the parent (even children can manipulate and use anger to get their way, but in this model of the disciplinarian state such space is rarely afforded). By controlling the space, temporality, language, and rhythm of the encounter between the State and the people, overturns not merely the rhetoric-rational but the embodied-emotional aspects of the conflict.

The emotional and physical distress of State officials is evident when they participate in the Sath. When Sath convened, people sat on the ground and the state representatives given the same place on the ground– as part of the crowd rather than apart from it. Khadim noted:

“Sath is like a people’s assembly. We sit in a circle on the ground on chitai [straw mats], and the World Bank had to sit in the dust [*mitti*].”

Sitting in a circle on the ground created an optic of equality and created physical and emotional distress for state representatives. Officials can be seen sitting on the ground, uncomfortably squirming, having to wait for hours before the community members and activists have had a chance to speak before responding, if at all.¹⁸⁸ Here the Sath overturns this dynamic, dismantling their subjectivity and claiming authority. Another activist noted:

One of the aims is to take them out of their environment. They [Bank staff] would chat with us eagerly and contently when in their offices. But we wanted that these folks step out of their office environment and step into people’s environment. *And it is jarring for them.* They do go to the field, but usually in a very controlled environment, which makes no difference. But in the Sath, the environment is different. Here the people speak their mind openly, in their own idiom. [In some of the Sath], we took them [Bank/State officials] to the areas that were flooded.

¹⁸⁸ The analysis is based on video recordings of various sath, and participant observations in Sindh Sagar Sath in 2012.

Another time We held a Sath, and it started raining. They were running for shelter, slipping, falling... cars stuck in dirt roads.

Cars stuck on dirt roads. No quick drive-by. No escaping the people. By controlling these aspects of the temporality and spatiality of the officials' interaction with the people, the activist attempted to lay bare the State as an emotional being – a machine operated by humans that could experience a range of emotions like shame, anger, frustration, and rage. In other words, the State lost control over the performative aspects of these interactions. In the eyes of community members, this rendered the state more human, less mechanical, and therefore vulnerable.

The activists recount several stories, especially during conversations and interviews about the Sath. I have selected three stories, based on personal observations and these conversations, as narratives that become significant in the activists' accounts of confronting, challenging, and unraveling state power to wrestle some autonomous spaces of deliberation and action.

STORY 1: THE BIG MAN IN ANGER

The Sath began with a theater performance. The short sketch showed the scene of the village facing evictions, people sitting and talking, about their problems and challenges, about the river, about serious matters and light banter when the police and construction crew arises. The play then shifted into an act of resistance, where locals gathered and rose, eventually confronting the State represented by a big man, who suddenly lost all air of confidence when faced by locals and ran away. Joys and celebration at this victory.

As the play reached its end, one of the senior bureaucrats, Muhammad Ashraf, who was accompanying a couple of World Bank officials, became noticeably distressed. He got up and started to speak in a loud aggravated voice, angered by the performance, claiming that they [State and Bank] felt disrespected. The language that you use, he noted, cussing at us, does anyone do it

to guests. He left the arena and stood next to the official vehicles where a contingent of police was standing. One of the Sindhu Bachao Tarla activists went after him to inquire what happened. You were cursing at us [gali dena; using abusive language, cursing] ... The activist apologized, noting that they didn't and that the performance was recorded on a video camera and can be replayed. After a while, Ashraf agreed to sit down.

When recalling this incident to me, Fazal and Khadim, were all smiles. Ashraf Pehalwan, they call the official, a term used to describe a traditional wrestler, to signify a powerful person that is stereotypically also viewed as someone with low intelligence or wisdom.

We started the Sath with a *drama* [theater performance] on our issues. The drama was, in a way, an insult to these big officers. [details]. When we did this performance, the Akhtar Pehlwan felt insulted, got riled up. He said that this is no way to treat us [state officials], you hurl abuses at us, we won't sit in this Sath. [Fazal keeps laughing]. So he got up and left the *pindal* [arena]. He stood outside with the police and the security that had come to protect the foreigners and state officials. Then Mushtaq Gaadi asked, why have you left. He said .. 'o kawra kare tusan mande karde ho'? Mushtaq said that you got riled up because you are hearing people's demands, and you don't like it and don't want to accept the demands, and you are making excuses. He refers to video records by TV channels, to confirm if there are any verbal abuses.... and back in the arena, it was hot summer days, no electric power, people using hand fans.... Then he agreed to sit with us asking that there should be no more insults.

Fazal kept laughing while Khadim continued to tell the story.

STORY 2: THE BUREAUCRAT WHO WASN'T FEELING WELL

Wapda and representatives of a private construction company attended one of the Saths. They were sitting on the ground, distinguishable from the crowd of locals, who wore *shalwar kameez*, by their pants, suits or sports jackets. One of the officials responsible for hiring locals as contract labor was asked why he failed to deliver on this promise. He listened, grinning, and shaking his head to signal agreement as person after person listed the problems they faced due to the construction of Taunsa Barrage. When the issue of employment was brought up multiple times,

he raised his hand to respond and noted: “Yes, we agreed. We promised to deliver this and set a date for September [two months ago]. So, let me clarify – first of all, what had happened was that when I went to Lahore, I wasn’t feeling well ...”

The statement came off as a bad excuse. The crowd burst into laughter and it took few moments before the official could continue. He smiled and looked embarrassed.

The point here isn’t the veracity of his claims, but the fact that such an interaction would not have been possible in a seminar organized by government officials. That the State could not deliver on a simple promise and come up with an excuse was comical, and served to dismantle the façade of power or control that the state tends to build around its mundane rituals and performances of power.

STORY 3: THE ENGINEERS’ WALKOUT

During another Sath in 2012 at Jinnah Barrage, where the second phase of Barrages Remodeling project was in the works, I observed first hand some of this unraveling of State power. The Sath was held at Azam School in Kalabagh town. Fazal led the proceedings and requested the representative of the Irrigation Department, a civil engineer, Nazim Shah, to give a briefing. Shah felt uncomfortable and objected to the proceedings in this manner. He reluctantly started speaking about the need for repairing the Jinnah barrage built about 66 years ago. He described the technical aspects of the project, civil works with the repair of the barrage, electrical work for power generation, and mechanical work for modernizing of the gates. Speaking in Punjabi, intelligible to Siraiki speakers, he sprinkled the description with English terms – feasibility prepared, detailed design, everything is OK, no resettlement, and the need for rebuilding the barrage to withstand floods.

A person sitting in the audience, young educated local possibly belonging to a welfare organization, asked if the Irrigation Department would provide access to technical documents and if the Engineer Shah could give further technical specifications of the plans for construction and the risk of floods. Shah appeared annoyed and said that he could not give technical details because “no one sitting here can understand the technical and specialized language,” He gave an example that even when one builds a house, some specialized knowledge is required. They've done a "feasibility study," it has been discussed and reviewed by a "panel of experts" who "visited" the area and looked at problems that were subsequently "addressed." The project had moved past the “design stage,” and the state would only listen to suggestions regarding the “implementation.” Trust our expertise, Shah said.

Mushtaq responded by noting that the irrigation department had asked them for meetings within their offices when they raised concerns about the potential harms of the project, but SBT disagreed and said that they'd rather hold a Sath openly among the public rather than hold meetings in secret. Folks kept asking questions about the project details, and Shah, visibly distressed, refused to divulge any details yet repeated authoritative words: He said that there is an "approved design level", without specifying what the level is, and that they would "maintain the water level" to the "design level". Mushtaq intervened and compared the Jinnah project with the Taunsa remodeling project, carefully going over the technical details, often pausing to explain English terms in Siraiiki to highlight the difference. He pointed the use of the term ‘repair’ by the Engineer and noted that the technical term for the project is ‘remodeling’. Several new components were added, including a hydel-power plant and even the repair would require additional construction, including cofferdams, closure of gates – these things led to the disaster at Taunsa. He gave a summary of a

technical study by the faculty from the University of Engineering and Technology around the design challenges of both Taunsa and Jinnah remodeling.

"We are not engineers -- mechanical, civil, electrical. But we can see that the remodeling leads to people getting killed." Mushtaq and Fazal continued to refer to their experience at Taunsa, the corruption, design flaws, and reports that claim that there was no chance of flood.

The irrigation department requested to be provided something written from the Sath. Mushtaq noted that this could only be done after consultations with all the people, on which Engineer Shah and his colleagues said that the people gathered there were ill-informed, ignorant (جاہل), and were being misled. At this point, the entire contingent of 11 engineers and bureaucrats from the Provincial Irrigation Department walked out. As they left, a young individual loudly said: Curse all the government departments, the engineers and the state officials.

Fazal reflected on these and similar incidents, by speaking about the impact that the setting could have on the people's ability to speak. Once again referring to the colonial edifice of state power, Fazal pointed to the racist attitude of bureaucrats towards local peoples, particularly the Adivasi and indigenous riverine communities. The consultants, engineers, and state officials, hired at high pays did all their planning in air-conditioned rooms. But despite their claims of consultations, they did not respect locals and did not deem them worthy of a dialogue.

They have a huge budget for this component, but then they hire consultants that they like. They are given grants (and gifts) [*nawaza jata hai*]. Commissions are set. These things happen in Lahore and Islamabad in their fancy offices. Now they do all the planning sitting in air-conditioned rooms, sitting on fancy furniture... so how would they allow participation in these rooms where all the planning is done. How will they allow a common person, an *Adivasi* (indigenous person), someone who "stinks" [using the term sarcastically] in these rooms? They've never asked such folks, never consulted folks.

... This is their disposition [مزاج], the bureaucratic attitude [رویہ], it is beneath their stature [آسایان شان نہی ہے], to hold consultations, that a simple person sits in front of them and gives them some advice. They are engineers, educated. They have a degree [Fazal smiled sarcastically]. And the wisdom of centuries is nothing for them; it's all nonsense.

The Sath, on the other hand, is different from the state held conferences and even the seminars organized by activists in cities. When people from the villages participate in the Sath, Fazal noted, they speak with confidence, and freely because they know that they can make their own decisions. The setting of the Sath matters.

When we hold Sath in these places, the people have a lot of confidence to speak. They think themselves free to reach decisions. Because all of this happens in their atmosphere, in their environment, in their culture, their idiom... and they have a lot of trust in each other. Our people, if you take them to the cities, in hotel rooms, ask them to sit on the furniture, they may not be familiar with that atmosphere. Their confidence suffers a huge blow in such settings, and they are not able to speak their peace. Not like they can speak in their communities, in Sath, which is deeply embedded in our culture.

Unraveling the state's performance of power through this emotional assault, the Sath can establish itself as a social movement space where locals and activists can, both voice their discontent, and make fun of the state officials. The anger and frustration, the felt sense of injustice, can thus be channeled effectively into putting pressure on the state officials, bringing them out of their comfort zone, and straight out laughing at them. Humor, a predictor of intelligence, sociability, and a facilitator of communication, can also be a powerful decolonizing tool, creating space for alternative narratives of the river.

Claiming Ownership over Riverine Resources:

The Sath performs another critical function as it connects the people with their past, sometimes recent past, when they were able to exercise rights over themselves and the river's

wealth. Mushtaq had noted this as an important purpose of the Sath. In practice, this was done by centering the figure of the indigenous fishers. Fishers, boaters, and traditional irrigators gave oral testimonies. Here I describe two speakers, one an irrigator from upstream areas of the Indus, and the second from Wasti Sheikhan. Both of them speak about the gradual changes and shifts in the river use with the construction of dams, barrages, and canals.

The first speaker, a landowner and social activist from a riverine town about upstream of Taunsa barrage, spoke directly to one of the central aspects of British and post-colonial statecraft linked with hydro-infrastructure development, and its impact on local ecology and political economy. Describing the situation in his village a merely 20 or 30 years ago, when he was young, he noted how the conditions of the farmers, irrigators, boaters, and fishers were pretty much the same. He called this “the story of the drying river” as the story of the destruction of the poor, the landless, and the riverine.

When I was young, our *waseb* had very little cultivation. We had lots of forests and three or four types of people living there. Small peasants [kashtkar], tenants [landless; mazaraeen] who used to live with us, mohaney, and then those who had the right to have boats, just like we had the right on the land to till it, they had the rights over the boats. The third we have morr, who catch fish, who do not run boats for transportation, but they have boats, and they catch fish, hunt birds, hunting, in general, is their right. We the farmers, we used to have some livestock or some farming, but all the other resources, the forests, the fish, the birds, the grass, this was the right of the Mohanney and Morr. And about 20 30 years ago we, the farmers, and the fishers and boaters had pretty much the same socioeconomic condition.

The situation started to change with the construction of dams and canals, Mirani notes. As the river dwindled, the ecology shifted, and all the beings related to the river started to disappear. And this shift coincided with a particular type of state formation, in which the British prioritized the community of irrigators, farmers, and peasants at the expense of riverine groups. The changes in the political economy were also tied to legislation and state formation.

After big dams were built on the Indus, with these canals, this was started at the time of the British. When they made the laws, they gave more importance to those who owned land. Those who owned property were given the right to vote .. they were given the official roles - numberdar, tehsildar. All of the rights and offices were given to them. When Pakistan was created -- at the time of the British we didn't feel that much of a difference in resource distribution since there were few people and lot of resources. But when these large canals were built in our area, the *kashtkar* [peasant] became the respected figure of the nation [mulk ka muaziz banaya gaya]. All the colonial laws were molded to suit the *kashtkar* [peasant], the zamindar [landlord], and wadera. The river kept drying. When the water receded, the boaters disappeared. The fishers disappeared. All life of the riverine forests, the birds disappeared, even the forests disappeared. And all humans who were in relation [wabasta] to these beings started to face problems.

The issue of hydro infrastructure is directly related to receding river flows and shifts in control over resources by landed elite. Mirani could deepen what Mushtaq had outlined in his introduction to the Sath – identifying the State as law, courts, judges, lawyers, police as well as the different departments like irrigation, revenue, agriculture and fisheries, all established with the British drive for revenue via taxation and control via legal system. Control over river is complete when not only the river is diverted for irrigation, but the landowners become the dominant socio-political force, and with the support of the State, start laying claim to the riverine forest and the fish.

The *kashtkar* [peasants] have taken over. A similar number of people, who were related [ta'aluq] to the river, with fish, boats, forests, ... all started to face a disaster, displaced, living in poverty, migrating to cities for labor. They are not even recognizable; they have become so wretched. We used to pay them good money to buy fish, or give them grain, milk, ghee, or whatever we had. Someone who had a boat we used to pay them yearly in grain. Now when I look around in our area, there are no boats.... the forests, with animals, birds, they are also being hunted and are becoming extinct. And if there's some forest left, then the local influential [names a bunch of big families and tribes from the area;] have laid claim to these forests. The zamindar have occupied these forests.

The second speaker was one of the young local leaders of the Sindhu Bachao Tarla, Muhammad Ismail, from Wasti Sheikhan mentioned earlier in the chapter. Ismail was the last to

speak, noting how everyone during the day had spoken about their sorrows, and that he would tell the tale of the fishers of Taunsa.

There was a time when we had boats, ships, ...our elders lived their life to the full. [...] After the started to build bridges, canals, our people started dwindling. We were slowly displaced. But wherever we went, our lives are tied to the river, the riverine grass, the fishes... so wherever we end up, we remain tied to the river. But now wherever we sit we face problems. When it comes to fish, there are contractors. They don't let us catch fishes. Even if we put our boats in the river, the contractors come and tell us that we don't have any right to be in the river... they say they have got the lease for the 'pond' area [of the barrage] and we can't even put our boat in this water. Even though they only have the lease to catch fishes. They haven't leased the entire river.

Ismail's reflection immediately raised the question: Who owns the river? The enclosure of the river, through dams and barrages, had destroyed their livelihoods. People displaced, forced to live in smaller areas in precarity.

We were all forced to huddle together -- when there was water everywhere, we were everywhere. And we'd move around and live freely and with plenty of income (rozgar) because we are the owners of these rivers. When they started building these dams, barrages, and canals were built, slowly our income, our lives started dwindling, and gradually, bit by bit we moved and moved and moved, and ended up all huddled in this place. Like birds in a small nest. Now it's been about 40 years since we've been here. We had to build everything from scratch. Saving bit by bit.. you imagine yourself; how long does it take for a poor person to build something. We don't own any land; neither do we have permanent employment.

He referred to the displacement and evictions (covered earlier in the chapter) due to the Taunsa Remodeling project, Zafar's visit, and the formation of Sindhu Bachao Tarla. From claims of river ownership to the threats of displacement, Ismail shifted to the ideas of their rights.

We are now united... and we have decided to keep fighting [...] We will take what is ours, our right [haq], in the manner in which we have the right to take what is ours.

This use of the term *haq* needs some explanation. The literal translation is, "we will take what our haq is... there's a *haq* to take the *haq*. We will take what is our right in a just manner, the manner in just fashion, in which the haq is to be taken. The pledge here is to take their right as it

inherently resided in them as a moral right rather than a political one. This view connects with Mushtaq's analysis of the State and Coloniality as not merely dispossessing people of their resource, but of their sovereignty itself. Another aspect of the term *haq* is that in political discourse it is usually translated into right. But the term *haq* is also commonly used in spiritual discourse, particularly in Sufi mysticism and poetry, but it is also tied to the notion of truth and justice. *Haq* is the divine truth. Ismail, on the one hand, refers to their right to land, compensation, and settlement, and on the other hand, speaks about *haq* in the context of the ownership over the river. Dispossession through river enclosure of the river is, thus, both a denial of a right and of the divine truth that is the individual's sovereignty over themselves and their lifeworld. Ismail keeps referring to being Muslim, faith in Allah, every time he spoke about *haq*; the violation of these rights, snatching rights, is not something Muslims do... those who give pain to other Muslims are not themselves Muslims.

If you can invest billions of rupees in the project, and these projects can go on, then why can't you meet our demands... are we not Muslims... are we not humans.

Strengthening Alliances:

The claims by riverine groups centered them as the 'owners' of the river. However, river infrastructure development can benefit certain groups, in particular, modern irrigators and landowners who benefit from canal irrigation projects. The Sath also provides an opportunity to engage in a dialogue with some of these groups. In particular, various organizations are invited to speak about the challenges they face due to river infrastructure development.

Zafar, who was inviting different folks, emphasized how people all across the world and the country were coming together, particularly around hydro projects. He notes the presence of activists and representatives of people affected by the variety of projects – CRBC, Kacchi canal,

D.G Canal, Muzaffargarh canal. He also pointed to the presence of “political leaders” of various ethno-nationalist movements, from Siraiki Waseb as well as downstream areas of Balochistan and Sindh.

From the Siraiki Waseb, Damani activists spoke about the work done against the various projects. Fazal-e Rab spoke about the CRBC project and listed all the issues from bad design, lack of knowledge of local geography, destruction of rod kahi, the problems of floods, and water privatization. He also reiterated the need to build alliances and strengthen the institutions of the Sath: “To build our own laws and modes of judgment.” He gave the example of the Chashma Lok Sath, and the irrigators’ decision to not pay any water tax (*abiana*). He further spoke about the privatization of water which gave more power to big landlords made chairmen of the local farm-level water management committees.

Hameed Lund spoke about the Katchi canal project, the problems of which I’ve already mentioned about the Damani activism: land acquisition without notice and undervalue, the destruction of existing lift-irrigation from D.G. Canal that would leave 70,000 acres of land barren. He also spoke about the mobilization, seminars, protest rallies, theater performances, putting pressure on the state and managing to stop construction work. He listed some of the successes due to political mobilization: the state under pressure responded by allocating funds to build small water channels across the canal for lift-irrigation. He also mentioned that the state wanted to open a dialogue, but noted that “they don’t want to discuss the issues, they just want to strike a bargain with us: offer us jobs, try to “bribe” us,” using the English term.

There’s a murmur in the crowd ... Khadim translated: “rishwat.” Fazal added, it’s bribing for now, and then they’ll use force. Hameed: “Fazal is saying that they can do anything – it is true, they can try and use force. This is an old tactic, bring in the police, beat up people. But people are

resisting and will continue... we won't let them continue the construction.” Others spoke about the challenges on the right bank of Indus – the Taunsa-Punjad link canal and Muzaffargarh irrigation canal had rendered large tracts of land unproductive. These older unlined canals cause waterlogging and salinity. So, the locals were demanding the canals be lined with concrete and proper drainage be provided. The waterlogged areas must be drained using pumps.

The control over fish is not unique to Taunsa. While opposing the contract fishing regime was a key concern for Sindhu Bachao Tarla, at this stage they were focusing their energies on the displacement and Taunsa remodeling project. However, they had also invited members of Pakistan's largest political organization of fishers – the Pakistan Fisherfolk Forum (PFF, or Fisherfolk Forum). PFF was active in the coastal areas of Sindh and Balochistan provinces, and the Indus delta in Sindh, since its foundation in 1998. PFF had been a founding member organization of the PNRDP and had been part movement against dams and canals in Sindh with alliances across the country. I have already mentioned some of the work PFF did in the Tarbela dam case in Chapter 2, and the next chapter looks at this social movement organization. Here, I briefly mention the PFF's presence in this and later Sath, as an indication of efforts to build riverine alliances, on issues of hydro infrastructure as well as fishing contract regime.

Mustafa Mirani, who represented Fisherfolk Forum, spoke in Urdu and gave details about the organization, its objectives, and achievements. “The purpose of our tanzeem is to protect all the *mahigeer* [fishers], who are the worst affected people [*qaum*] due to the control over Sindhu darya [Indus river].” He described some of PFF's campaigns and victories: the cancelation of licensing in the marine areas, the problem of trawlers, canceled but reissued; harmful fishnets, banned by the government; contract fishing, two year struggle of Badin mahigeer against the Rangers, forcing the government of Pakistan to take back the wetlands from Rangers; other bigger

lakes, Manchar at Daddu district, Keenjhar, the final barrage at Kotri where there was a contract system up and down the barrage like Taunsa; campaign and success that contracts at Kotri barrage are cancelled. He mentioned the issue of the reduced flows in the river, the problems in the Indus delta, the problem for farmers in the delta as well and noted that the mahigeer and fisher were the worst affected groups. The lakes were dwindling and the poisonous water was drained into lakes, that forced people to migrate upstream and to urban areas. Mirani drew similarities with the issues at Taunsa and pledged to support the locals.

These testimonies of the various affectees of hydro-development, framed as a decolonial praxis based on oral testimonies, shared deliberation, and solidarity politics, then upset both the dominant state narratives and creates a sense of ownership among the activists. By decentering state power and centered the figure of the *Adivasi* fishers, the Sath brought the focus to the river and its peoples.

Ismail summed this up by speaking about unity, working together, yet at the same time, asserting that the fishers were not merely to be viewed as the poor and the powerless, but as the King of the river itself. Ismail noted:

“There was a time when we were the kings. And now no one deems us worthy of *khairat* [charity] We are tied to the river. We are the kings of the river. Our boats, ships, our elders... we lived fully and everyone who had to do anything with the river depended on us. Now they tell us we can't fishes in the river. The contractors don't let us catch fishes. When we put our boats in the water, the contractors come and tell us that we don't have any right to be in the river... they say they have got the lease for the 'pond' area [of the barrage] and we can't even put our boat in this water. We say, you may have the lease to catch fishes, but you don't have the lease for the entire river.”

4.5 Ritualizing River Defense

In a reflection on Spivak's “Can the Subaltern Speak?”, Native American studies scholar Robert Warrior gives the example of the Osage dance society as a place where the indigenous

subaltern and intellectuals can meet each other and communicate (Warrior, 2011). I've argued that the Sath creates a space for subaltern communication, by centering the *Adivasi* as the owner of the river as the basis for building riverine alliances, and through an emotional assault on the state through humor and performances. In closing this chapter, I want to return to the Sath as space where the subaltern and intellectual meet up, through lyrics and rhythms of Siraiki cultural movement. The broader interaction then takes these various elements and deposits these in the cultural intelligibilia, river defense is performed, deposited and transforms existing cultural discourses.

The Sath and other events of Sindhu Bachao Tarla are filled with songs about the river – songs lamenting the loss, urging the river to rise and regain its past glory, and songs to celebrate and revere the life-giving powers of the river itself. While reference to the river is found in folk and mystic poetry of the region, the modern engagement is, arguably, linked to the rise of Siraiki cultural and political consciousness starting with the late 1980s. A full review of this movement and its significance is beyond the scope of this chapter, so here are a few words by Fazal on the significance of the river in Siraiki poetry:

Most of the Siraiki poetry is on the river... you can read Ahmad Khan Tariq, his entire *dhora* [دھورا] is on Sindhu's *beth, bela* [forest], livelihood, *kane, kanp, goond*, [trees and plants], on the animals of the river, on fishes. Ashu Laal has three entire volumes of poetry on Sindhu darya. And you have many other examples. You can take Riffat Abbas, Aziz Shahid, I can keep going on. Our poetry is incomplete until it refers to the river, doesn't show respect to the river, doesn't have a love of the river. We consider all of our things as incomplete without the love of the river.

Ashu Laal, one of the most celebrated contemporary Siraiki poets is the best example of this. Having written two volumes of poetry on the Sindhu, titled *Sindh Sagar Naal Hamesh*, or An Eternity with the Ocean of Indus, Ashu's draws upon oral traditions of storytelling, songs of reverence and mysticism, to speak of the river, to the river and about the people of the river. In

one the first volume, he refers to the death of one of the largest tributaries of Indus river, the Ravi that flows next to Lahore. Identifying it as a casualty of the Indus Water Treaty, Ashu laments that this one might river reduced to a sewage channel. Long gone are the days when the *jat* (a proud agricultural tribe of Punjab) used to dance with their hands raised, and head held high when the entire forest used to dance in the rain. Now the festivities have died, and the monsoon rains can't quench this. The loss of the river, he notes, is not a simple matter:

When the River dies, listen, my friend,
The eyes die, and the heart dies,
The joy of the blue waters dies,
It's not merely a pair of swans that dies,
but the laughter of the entire river dies

These lyrics were recited during the Sath in the evening. Ashu himself was present in some of the Sath and recited the verses. Sometimes these were sung by folk singers. At the Sindh Sagar Sath of 2005, the night of dance and singing was festive night, a celebration, and a night of sorrows and lament. When Ashu Laal was invited to share some of his poetry, he recited verses from the first of two volumes of epic poems titled Sindh Sagar Naal Hames. A dialogue with the river itself, the lord, asking it to rise up again.

Rise o river god, look at your feet they've turned blue ¹⁸⁹
Your hands have turned blue, rise o river god, take care
Rise, Khwaj Khizer¹⁹⁰, and bring with you the heart of water
Bring with you the eyes of water, so that we can remember
Where's the spiritual fortunes worth a million treasures, we can't recall
Where's the intimacy of a thousand connections, we can't recall

Nishat Queraisi, a folk singer, then came to sing some songs, starting with Ashu's poetry itself. An accomplice sat next to him with Ashu's book, flipping pages and holding the book in

¹⁸⁹ Without the blood, or water...

¹⁹⁰ A saint associated with the river, also known as Zinda Pir (or the living saint) with abilities to heal and give fertility to the fishes. Khwaj Khizer is also a name for the river Indus.

front of Nishat, who was sitting down and playing a harmonium and singing. He sang one of the most famous poems by Ashu:

River o river,
Your waters are deep
You are our father-mother,
We, your fish and offspring

A series of other folks singers came and performed. As a female singer was the last one to perform, accompanied by a dhol, a tabla, and a harmonium player. Like others, she started on a mellow note, but the music picked up energy and rhythm. The tabla and dhol players gradually increased the tempo and took over the entire audial space. Few kids from the crowd jumped on the narrow, already crowded stage and started to dance. A young girl of about ten years of age and wearing a shimmering yellow dress was stealing the show. Two boys her age climbed on the stage -- dancing in joy and with energy.

Zafar was sitting behind to the side. He was also moving his shoulders and hands in rhythm, with a joyous smile on this face. A woman walked up and tried to bring her son down from the crowd, possibly dismayed by this over-enthusiasm as the kid moved closer to the singer as he dances. But he was not ready to give up the limelight. The mother stepped aside, conscious of being on the stage, not wanting to stay too long. She said something to Zafar, who nodded and gestured at her to let the kids be. The crowd was cheering as the song picks up. Nishat, the singer walked up on the stage and made a *bid* – circling his hand holding cash over the kid’s head and handing it over to the performers to ward off bad luck. Several folks came to the stage and handed some rupee notes to the kids, all of them had money in their hands that they are waving. The camera zoomed out to focus on the performance and zoomed-in on the faces of some of the women sitting next to the stage. The dancing girl’s feet crumpled the carpet on the stage. Her mother was

sitting on the floor next to the platform. She reached over and uncrumpled the carpet again and again. The young ones kept dancing. The carpet kept crumpling.

The gyrations of young dancers provide a symbolic representation of how Sindhu Bachao Tarla activists and the Sath envision renewing their future by folding the past into it, an imaginary of circular and revolutionary rhythms. For the activists, the Sath is “moment and movement of stories.” A remembering of the time when life was a meshwork of the human and non-human communities wedded to the river – “Godlike who sustained, and was worshipped and loved and feared.” Sath is about the stories of “how we lost the River and so our livelihoods, our histories, and our hopes.”

Sindh Sagar Sath is an occasion of remembering the River, the blind Indus dolphin, the swan, the Adivasi, the fisherfolk and all those who have been made silent and erased in the name of Dams and Development. Our stories are thus a fight to reclaim the past, not only to remember but also in order to analyze past events and learn from them. They remind us of what happened since the River was dam(mn)ed? What was gained and what was lost? Who profited and was empowered? And who was impoverished and made destitute? Our stories are the means to make these facts known and shared.

The construction of dams, the disruption of the river, was then more than just a distribution of water and riverine resources. It is the disruption of a flow of time, a link between the past and the present, and a denial of the possibility for a future of well-being to the local fissures. What is lost is not merely the past, but the ongoing and recurring threat that these barrages and their failures impose on the peoples.

Taunsa Barrage [is] the place which provides a visual link between the past and present. The barrage, which was built in 1958, now requires emergency rehabilitation to prevent its sudden collapse. The past is being repeated in the form of the World Bank-funded (through loan) Taunsa Barrage Emergency Rehabilitation and Modernization Project.

The River is once again being manoeuvred, controlled and diverted. The lands are once again being forcibly acquired and destroyed. The *Adivasis* are once again being displaced, and their homes destroyed, and their living made extinct. Just as the Indus dolphin is once again being killed. And all in the name of the very canals which are being closed.

As folks gathered in Wasti Allah Aali for the Sath, and then again on the day of the river (March 14), each year, they told stories and performed rituals. They formed a ceremonial procession that walked towards the riverbank, marching to the traditional drums, *dhol*, and trumpets, *shehnai*. The procession looked more like a *barat* (wedding procession) or a ritual pilgrimage to a holy shrine than a usual street protest march. The procession danced and marched and sang and chanted to the riverbank, reaching there around sunset and performed further ceremonial ritual towards the Khwaja Khizer, the river saint who is fabled to be the immortal Khizer mentioned in the Holy Quran. In the riverine tracts of Indus valley, the river saint lives at numerous shrines along the river bank and in the river. The *zinda pir*, or the saint who lives, as he is referred to, gives life to the fishes migrating upstream during breeding season. As the living saint of the river Khwaja Khizer is also synonymous with *Sindhu* itself. At sunset a ritual is performed by lighting candles in small earthen pots called *dolis* or oil lamps called *diyas* that are set on the river water, sailing like tiny lit boats with the river waters. The river is also offered food and sweets, *juggari* or *gur* made from sugarcane. This ritual, as activists note, is a quest for "enlightenment from the fading shades of the sky and waters of Sindhu being sieved through the dams and barrages."

This chapter argues that activists engaged in the politics of subaltern representation through efforts to self-organize the riverine fishers, build deep alliances with the irrigators, and synthesize

Siraiki culture and traditional practices. The material effects of the river infrastructure project around Taunsa facilitated the alliances between the irrigators and fishers of the Siraiki Waseb. Unlike the transnational or national alliances of advocacy groups, which may focus on particular issues such as the resettlement policy, the folding of space and time in the projects of river enclosure created direct links between the diversely excluded peoples of the area. The riverine movements in the central Indus floodplains spread from irrigated fields to the river itself helped center the figure of the Adivasi figure in the riverine movements of central Pakistan. If SBT centered the figure of Adivasi, DBT brought together expertise in water activism with the elements of Siraiki nationalism. The movement synthesized these strands using a variety of strategies, collective protests, and, most importantly, the Sath.

The synthesis created the conditions for Sath, as a subaltern praxis, to decenter state power, claim local sovereignty and control over riverine wealth, and build deeper alliances by sharing oral testimonies about the loss of riverine peoples and the landowning groups. The Sath, in its performative and discursive elements, made ideas of river defense stick at Taunsa drawing form elements of water advocacy, indigenous rights over the river, and Siraiki cultural claims over the region's resources and history. Daman and Sindhu activists worked to overcome tensions and rivalries induced by the differential material impacts of hydro-development and the divisive institutional practices of the State and Bank. They confronted powerful actors and built a sense of power among local communities, and created the space for articulation river defense ideas and performances, discourses, and deliberations on the idea of protecting the river and the way of life it affords to the peoples of the Siraiki Waseb and the Indus Valley.

5: SINDHU DARYA AND INDUS DELTA

5.1 Fishers Beyond the River

“This is Sindhu *Darya*,” said Muhammad Ali Shah, the Chairperson of Pakistan Fisherfolk Forum (PFF), pointing to the dry river bed below Kotri Barrage near Hyderabad city. We were travelling from PFF’s headquarters in Ibrahim Hyderi on the outskirts of Karachi, Pakistan’s largest city, to the small fishing town of Phuleli near Chotiari Dam on the eastern fringes of the Sindh province. Hour two of our five-hour journey and we reached the final dam on the Indus River near Hyderabad, where the river runs dry for nine months a year and carries industrial and urban waste that flushes to the ocean after the monsoon rains.

"They have built dams and diverted all of the water, and nothing is left. And then they build all these walls to imprison the river," Shah pointed to the embankments around the barrage, gesturing with his hands as if enclosing the river.

"They have imprisoned the river," Shah noted, "The river asks us to fight for its freedom."

We were on our way to Phuleli in the southern part of the Sindh province, to launch PFF’s yearly campaign for the Indus River. PFF had been running these campaigns since 2009, starting on March 1 and building up to a big rally on March 14, the Day of the River. PFF’s rallies are the largest on the day in Pakistan, and over the years have been one of the significant examples of river defense mobilization in the Global South. Each year’s campaign focuses on a particular theme – protection of the river, against dams, for the rights of the fishers. The 2018 campaign signaled a

shift, as PFF demanded the government to give personhood rights to the Indus River or Sindhu Darya.

Our encounter with the river that day was brief, as we traveled across the Sindh province from one fishing town in the large metropolitan city of Karachi to another fisher's village near the eastern border with India – both places far from the Indus River. The day started in PFF's central office in Ibrahim Hyderi, a coastal fishing town of ancient residents of Sindh in the outskirts of Karachi city. In Ibrahim Hyderi, PFF had been fighting against industrial fishing, the encroachment of fishing ports and coastal islands, and issues of neglect and marginalization of low-income neighborhoods of large metropolitans of the Global South – problems of access to health, education, and clean water, pollution, and poverty. Karachi was a city of migrants, and waves of migration minoritized the Sindhi ethnic groups and pushed the fishing communities to the fringes.¹⁹¹ Our day ended at Phuleli, near Chotiari Dam in district Sanghar, where PFF had fought against the adverse impact of this small dam that had turned an entire ecosystem of interconnected wetlands into a single large reservoir. They also fought against the illicit and legal enclosures of fishers, with the contract fishing regime that give wetlands for the benefits large *wadero* or landlords, denying the fishers access to these commons. PFF also had strong roots in other parts of the Sindh province, and their most notable battle was against the occupation of wetlands and coastal areas by the Pakistani paramilitaries during the early 2000s.

¹⁹¹ Karachi become a city of migrants, an unplanned monstrosity that expanded as waves of settlers and migrants arrived for economic opportunities and to escape the violence of many wars and conflicts -- the partition of British India in 1947, displacement due to wars with India and the independence of Bangladesh in 1971, and the past four decades of U.S. led imperial wars in Afghanistan driving waves of Pashtun and Baloch migrants into the city. Arguably the most influential ethnic group is the *muhajir* community – a term that means "migrant" but is used to refer to the Muslim families migrating from various parts of post-Partition India. Later waves of migrants included the Pashtun ethnic group moved into the city as cheap wage-labor or escaping the imperial wars and climate-induced disasters in northwestern Pakistan and Afghanistan– the city currently boasts the largest Pashtun population in any urban center exceeding those in Kabul in Afghanistan and Peshawar in the Khyber-Pakhtunkhwa province. A sizable number of Baloch ethnic groups have steadily migrated in from the Makrani coastal areas of Balochistan to Lyari town, with surges in migration tied to the Baloch separatist movement.

Founded in 1998, PFF organized the coastal and inland fishers of the southern Sindh province, starting in coastal villages of Karachi and spreading across the Sindh province. PFF is a large organization with 70,000 members and a hierarchical structure comprising of local units, district bodies, and a central committee headed by an elected Chairperson. Over the years PFF has launched a variety of campaigns to tackle various issues facing the fishers of Pakistan such as problems of industrial fishing in the sea, exploitative contract fishing policies, illegal occupation of wetlands by the military, *wadero* (feudal landlords) and political elites, imprisonment of fishers at the Indo-Pak border, and pollution and destruction of biodiversity in the delta.

My focus is on another aspect of this movement — the turn towards the defense of Sindhu. The yearly River Caravan were rooted in earlier mobilization around issues of the fishers of Sindh province, against a variety of river infrastructure projects and for the protection of the Indus Delta. PFF drew from the cultural idioms of Sindhi ethnonationalism, shaped historically by the uneven development of the region caused by unfair distribution of Indus waters. The group fused the political mobilization of fishers and Sindhi peoples with advocacy against river infrastructure development and the conservation of the deltaic ecosystem, ideas received from environmental and transnational advocacy groups and synthesized with existing cultural and political ideas. It was inspired by the fight of the indigenous peoples and fishers across the globe, in their defense of nature and rivers. But these were no easy ideas to synthesize and introduce to the fishers spread across the delta and the lower Indus valley. PFF's turn to river defense, in its demands for personhood rights for the Indus River, is a novel and unique demand in the context of water politics in Pakistan. This chapter describes why the fishers of the delta were asking the state to recognize the Indus River as a legal person, and how the idea of river defense took hold in the southern Indus Valley.

5.2 Southern Enclosures of Indus

The historical enclosure of the Indus River influenced PFF as a riverine movement that operated with new and old ideas of riverine resistance. This section provides an overview of the different sets of enclosure related problems and the major strands of political and cultural challenges to the enclosure. The following three subsections correspond with three types of enclosure impacts: the distribution of Indus waters and the ethno-nationalist politics, the challenges of over-irrigation and resistance to new drainage canals, and the cumulative impact on the Indus delta. The PFF, operating in this longer historical context of river enclosure, was aligned with the Sindhi ethnic struggles around water distribution. But they also focused on the exclusions caused by the project-specific impact of large drainage canals, and the cumulative impact of the Indus enclosure on the Indus Delta. These multiple engagements proved crucial as PFF transformed the politics of water and introduced new ideas of river defense.

5.2.1 Indus Flow & Old Riverine Politics

Unlike areas of upper and central Indus floodplains in the Khyber Pakhtunkhwa and Punjab provinces (corresponding to Tarbela and Taunsa case studies), the politics of water in the Sindh province has a century-long history, grounded in the resistance to the development and diversion of the upstream irrigation system. When the British shifted from indirect rule over the Sindh province to direct rule by conquest in 1849, the early administrators marveled at the Indus river's busy ports and the wealth of the delta.¹⁹² But when the British became the driving force behind

¹⁹² Major-General M.R. Haig, *The Indus Delta Country: A Memoir Chiefly on Its Ancient Geography and History* (London: Kegan Paul, Trench, Trubner & Co, 1894); Alexander Burnes, *Travels into Bokhara; Being the Account of a Journey from India to Cabool, Tartary and Persia; Also, Narrative of a Voyage on the Indus, from the Sea to Lahore,*

modernizing irrigation across the Indian floodplains, the plans for utilizing the river as aquatic highways were abandoned in favor of hydro-infrastructure development.

Sindh had historically relied on the Indus River for agriculture, rather than rain as in other arid and semi-arid parts of the subcontinent, ensuring that the province was safer from famine in the 19th century (Haines, 2013, pp. 65–66). While the British had justified investments in irrigation as a way to address food insecurity, a justification latter used by the Pakistani state, the colonial and postcolonial state were undoubtedly driven by desires for revenue (ibid). The Britishers were interested in the supply of cash crops and modernization of revenue collection, and did not show interest in protecting the pre-existing political economy of the deltaic region. They instead sought to introduce high-yield variety of crops, enclosing land and water as in other parts of the Indus Basin.

The early period of the enclosures of the Indus waters laid the foundation of a long-standing water dispute between upper and lower riparian provinces of the Indus basin, which is now known as the Sindh-Punjab controversy. The water dispute shapes the Sindhi political consciousness. The roots of this controversy go back to the early 20th century when the British devised various irrigation development projects in the Indus basin. With the India Irrigation Commission formed in 1901 to resolve inter-provincial disputes, the upper riparian provinces like Punjab were required to seek permission from lower riparian provinces like Sindh. The historical decision sets the fundamental principles followed to date, though in practice, the infrastructure development goes against the spirit of the principal of lower riparian control over Indus Waters.

with Presents from the King of Great Britain; Performed under the Orders of the Supreme Government of India, in the Years 1831, 1832, and 1833 (London : J. Murray, 1834), <http://archive.org/details/travelsintobokha03burn>.

The earliest inter-province controversy surfaced when the British planned to build a variety of projects in the Indus valley, including the first irrigation dam on the Indus River at Sukkur in northern Sindh and the Sutlej Valley Projects in the British Punjab province on one of the large eastern tributaries of Indus river.¹⁹³ Sindh demanded that the Sukkur barrage be given priority instead of the upper riparian projects, lest the further development of upstream projects would give the right to water to Punjab and even the eastern areas beyond the province on the doctrine of prior use.¹⁹⁴ In 1919, the Cotton Committee was appointed to mediate, followed by the 1919 Government of India Act that gave the British Viceroy of India the right to resolve such disputes. The British government, weighing revenue concerns against political cost, deemed the Sukkur Barrage project as more important than the alternatives proposed by the Punjab province upstream and started building the barrage in 1923.¹⁹⁵

The Sukkur Barrage project fed the first large modern irrigation system in the Sindh province and created a sense of right over the Indus waters among the Sindhi landlords and elites, who were crucial for the propagation and stabilization of British colonial rule (Haines, 2013). The development of Sukkur barrage and the land colonization increased the cultivated area of Sindh by a million acres by the early 1930s, with the cultivation of cotton and wheat increasing three- and five-folds, respectively (ibid). Areas irrigated by new canals saw an increase in population, wealth and revenue, which particularly befitted the landowning class – the *wadero* (landlord) who owned vast swathes of land and exercised influence even beyond their property, ruling over the

¹⁹³ Readers may recognize that this dispute mirrors the later dispute between India and Pakistan at the time of partition and ongoing basis under the remarkably limited Indus Water Treaty of 1960. See Chapter 2

¹⁹⁴ The two doctrines of prior use and lower riparian rights. see Pisani [CITE]

¹⁹⁵ Paliyo, R. B. (2011). *Sindh-Punjab Water Dispute: 1985-2003*. Hyderabad, Pakistan: Center for Peace & Civil Society.

landless tenants, or *hari*, and small landowners, *zamindar*. The patterns of water conflict reemerged in subsequent periods of water disputes between Pakistan and India at the time of partition, and between Sindh and Punjab provinces of Pakistan.¹⁹⁶ A full account of the Sindh-Punjab water conflict is beyond the scope of this chapter, but it is important to note that the conflict around these projects was central to the infusion of river politics in the Sindhi nationalist and popular political imaginary.

Arguably, no other project influenced water politics in Pakistan as much as the planned second mega-dam on the Indus river –the controversial Kalabagh Dam. Ethnic-nationalist movements were on the rise in British India during the 1920s and 1930s, so the emergence of a wider Sindhi nationalist political consciousness was interlaced with the water dispute. With the strong centralized government and military rule of the first couple of decades after Pakistan's birth, the Indus Basin Project was pushed ahead without considering the claims of Sindhi nationalist, adding to their grievances. The first democratically elected government of Pakistan during the 1970s had a Sindhi Prime Minister, Zulfikar Ali Bhutto of the Pakistan People's Party. The post-Indus Basin Projects were put on hold to ensure that all the provinces were on board before moving forward with further development. However, the overthrow of the democratic government by the military dictator General Zia ul Haq saw a turn towards mega-development – a strong alliance with the US and its imperialist agendas during the First US-Afghan War of the 1980s also saw development loans pour in with the World Bank eager to invest in mega-dams after the "success"

¹⁹⁶ I have already discussed the water dispute at the time of partition and its "resolution" under the Indus Water Treaty (IWT), in chapter 2. Readers may recall that these treaties and projects were given the go-ahead under military rule, which had centralized power and control over resources in Pakistan (Jalal, etc.). The dams and canals under the Indus Basin Projects continued to stoke the water dispute, with some projects, become key to the ongoing dispute. This includes the Chashma-Jhelum Link canal that diverted water from Indus river eastwards to irrigate the British-era canal colonies and the controversial Kalabagh Dam which was slated to be the second mega-dam on Indus after Tarbela.

of Tarbela dam.¹⁹⁷ The idea of the second mega-dam on Indus river, the Kalabagh dam, became a rallying cry for the military government.

The 1980s saw the emergence of an anti-dam movement in the Sindh province opposing the Kalabagh dam, which built on the broader movement against the dictatorial military regime known as the Movement for the Restoration of Democracy (MRD). One of the key figures of the MRD and anti-dam movement was the Sindhi intellectual and political leader, Rasool Bux Palijo, whose work influenced many PFF activists as well. Rasool Bux Palijo started his political career in the late 1960s during a vibrant period of student politics and fought against military dictatorship and religious extremism through his career. He founded Awami Tehreek, a Sindhi nationalist and socialist group that worked to promote and protect Sindhi culture and historical awareness, and synthesized a Marxist brand of class politics with the decolonial politics of Sindhi nationalism grounded in renunciatory spiritual traditions of the Sufis of Sindh. Working against the three dictatorial regimes of General Ayub Khan during the 1960s, General Zia ul Haq during the 1980s, and General Musharraf in the 2000s, Palijo's organization centered the struggles of the landless *hari* and the issues of water.

Imprisoned for ten years during the Zia regime, Palijo worked against the Kalabagh Dam from his prison cell and on his release, made the issue mainstream when he became the Convener of the MRD movement. The broader alliances of pro-democratic forces extended beyond the Sindh province, as anti-Kalabagh and the pro-democracy positions became synonyms among Sindhi nationalists, Pashtun nationalists in the KPK province (then NWFP), and even Baluch leaders in Baluchistan province most of which lies outside the Indus basin.

¹⁹⁷ Chapter 2 discusses in detail that while the Tarbela dam is widely celebrated by the Pakistani State and the Bank as a success, the World Commission on Dams had a more critical take on the cost of the dam for the various affected peoples.

During the early 1990s, with the democratic government in place, the interprovincial dispute was resolved with the passing of the Water Accord of 1991, which distributed the Indus system water between the three provinces. From this point on, the political elites of Punjab province, which at the time were pro-military establishment pressed the issue of Kalabagh dam, but Palijo continued to mobilize against the dam even approaching the PM Bhutto and wrote to the World Bank, stating that the Bank was intervening in political matters.¹⁹⁸ Terming the Kalabagh Dam as an attack on Sindh, Palijo pointed that this was a conspiracy to steal river Indus from Sindhi peoples.¹⁹⁹ Eventually, the World Bank withdrew funding from the project, and three provincial governments of Sindh, Balochistan, and Khyber Pakhtunkhwa passed a resolution against the project. The project continues to resurface, particularly during the dictatorial military rule or pro-military governments.

The politics around democracy and dams in Sindhi generated an identity discourse that links the Indus river, *Darya*, with the land and its people, *Sindhu Desh*. However, this idea of *Darya-Des* was restricted to the use of riverine resources in irrigation – around the interprovincial disputes over water allocation. For Sindh's nationalist, left-wing, and progressive activists, the issue of Kalabagh and other dams and river-link canals (such as the notorious Chashma-Jhelum link canal labelled as the 'robber canal') were merely a continuation of the underdevelopment of the Sindh province -- an historical grievance centered around resource allocation that had generated a river-linked ethno-nationalist identity (Gilmartin, 2015). It envisioned a future where the *Darya* returns to the people of the *Sindhu Desh* (country), instead of the use of Indus waters for the benefit of the military, Punjabis and the feudal elites of the Sindh province.

¹⁹⁸ (Palijo, n.d.)

¹⁹⁹ (“HYDERABAD,” 2004)

5.2.2 Drainage Overflows & New Riverine Movements

At the time of PFF's founding, the state and the banks were building new types of riverine infrastructure projects to address the problems of over-irrigation in the Sindh province. The Indus Basin had been dealing with the century-old problem of waterlogging and salinity – the problem of over-irrigation and under-drainage that raised the underground water level and at times lifted the subterranean mineral deposits to the surface, diminishing land productivity. These problems had existed elsewhere, for instance, in the case of CRBC discussed in chapter 3. However, in Sindh, the problem was particularly acute due to the soil composition, the low gradient of land, and the fact that the canal irrigation system used many drainage channels to supply water. Wapda surveyed the irrigated lands of Sindh in 1981 and found that 42 percent of the total area of IBIS was waterlogged, and in Sindh, half of the total irrigated area suffers from waterlogging and salinity.

When I first visited PFF's office in Ibrahim Hyderi, I was mostly interested in PFF's work against the National Drainage Project (NDP), as part of my focus on resistance to river-infrastructure development. This large-scale investment by World Bank and ADB sought to address the problem through the construction of large infrastructure and introducing new water regulatory bodies, from the provincial Irrigation Development Authorities to water boards and farmers' association for on-farm management. NDP was, in some sense, a continuation and evolution of earlier programs launched by the British and Pakistani state – in particular, the Salinity Control and Reduction Programmes (SCARP) projects that had limited success in some areas. During the 1990s when neoliberal schemes had rebranded Structural Adjustment Programs (SAP) as Poverty Reduction and Sustainable Development (Goldman, 2006), the World Bank pushed the ambitious NDP project with a sweeping scope of institutional reforms and infrastructural

investments to avoid losing "economically productive" land into "waste" (c.f. Gilmartin 2015). The neoliberal agenda was pushed through schemes of privatization of water pricing and introducing new techno-bureaucratic institutions that would work with farmers' association for water distribution. The story of elite-capture of these 'local' and 'participatory' institution requires a dissertation in of itself, but it suffices to point out here that World Bank conducted an internal investigation and found out that the scope of these reforms under the NDP was "ambitious" and "unsuccessful."²⁰⁰

PFF became involved in these projects because of their impact on the fishers of Sindh. PFF mobilized against both the project-proximate impact of the NDP project and its broader impact on the river basin as part of the Pakistan Network for Rivers, Dams, and People (PNRDP). They had mobilized against the displacement caused by the construction of the Chotiari dam (see chapter 2), and the problems associated with two large drainage channels, the Left Bank Outfall Drainage (LBOD) and the Right Bank Outfall Drainage (RBOD) on either bank of the Indus river. Much like the Chashma Inspection Panel, PFF filed a Request for Inspection with the World Bank to investigate the Bank's culpability in ignoring the social and environmental harms of the LBOD and NDP project and felt similarly disappointed with the limitations of these new institutional forums (see chapter 3). The problems of these projects continued to be on PFF's agenda.

²⁰⁰ As per the World Bank, the main objectives of the NDP Project were to improve irrigation and drainage efficiency and ensure sustainability. The project had several components including planning and research, carrying "saline effluent from the drainage network to the sea", introducing institutional reforms to introduce new pseudo-bureaucracies, area water boards, on-farm water management directorates and farmers' organizations, and, most importantly the "investment component" with the goals to "improve drainage and water management infrastructure, and to protect inland wetlands, which finances completion of ongoing projects, rehabilitation and remodeling of completed drainage projects, and new projects which conform to or support the overall strategies of the project." World Bank. (1997). *Pakistan - National Drainage Program (NDP) Project* (p. 1). The World Bank. Retrieved April 20, 2018, from <http://documents.worldbank.org/curated/en/361321468763175565/Pakistan-National-Drainage-Program-NDP-Project>.

The issue of NDP and drainage came up at my first meeting with Muhammad Ali Shah, at PFF's office in Ibrahim Hyderi. When I walked into his office, he was on the phone with a journalist speaking about the RBOD project and its impact on the Manchar Lake, Pakistan's largest freshwater lake to the west of Indus. Some excerpts of the one-sided phone interview with the journalist from my filed notes:

Yes. They say that there are water shortages and therefore we need to build more reservoirs and dams. However, if about 100 MAF water is being used for irrigation right now, then about 40% of this, that is, 40 MAF goes to waste. This is the same amount of water that 5 or 6 mega-dams stores in their reservoirs. So, instead of making a new dam isn't it better to prevent this wastage... We should reduce wastage so that we... [pauses and listens].

Yes.... Yes... Secondly, our agriculture system relies heavily on chemical fertilizers and pesticides. So, the drained irrigation water contains all kinds of poison. Also, this water drains into the ocean or a lake, then it will surely.... [listens]... yes... yes....

RBOD carried the agricultural waste, saline and poisonous, into one of the largest lakes in Pakistan at Manchar – designated as a Ramsar site.²⁰¹ Manchar Lake lies on the path of the trans-Siberian annual bird migration. As per local accounts, the lake had a population of about 50,000 people during the 1990s. Indigenous fishers spent entire lifetimes fishing, cooking, eating, sleeping, mourning, and celebrating life on their house-boats and in small islands. Freshwater, fish, birds, and weeds were plenty and nutritious. RBOD was supposed to take the drainage water to the ocean – about 100km south of the lake. However, phase 1 merely carried the water to Manchar and dumped it there. Initially, some of the locals welcomed this development as the government

²⁰¹ The Ramsar Convention on Wetlands is an international treaty signed in 1971 in Ramsar, Iran that focused on wetland conservation, especially wetlands that are significant for waterfowl habitat. The convention came into force in Pakistan in November 1976. Apart from Manchar, the Taunsa Barrage and the Indus Delta are also designated as Ramsar sites.

officials promised that the channel would bring fresh water even during difficult dry years when the water levels would naturally fall.²⁰²

Within a decade of the construction of RBOD, problems started to surface. The aquatic grass started to die, fishes disappeared, and the water turned bitter with a foul smell. When I visited the lake in December 2017, it painted a harrowing picture. Stretched as far as eyes could see, the lake seemed like a water-desert. Most of the indigenous fishers migrated to other places. About a couple of thousand remained, but most of them were now living on the lakeshore, providing cheap labor for local landlords. A few species of resilient fish had survived, but these tended to go for a meager rate.

"They do say that the second phase of RBOD will carry the water to the ocean. However, that would create a problem for the coastal fisher. It is like they create problems and then provide solutions that require a large investment, which then creates new problems. Why not address the origin of the problem itself? The problem is with these dams and the irrigation system itself. The experts keep saying that the country needs more dams because we are wasting water that drains to the ocean. These 'irrigation' experts do not know a thing about the river hydrology or ecology."

The second phase of the RBOD project could have another disastrous effect, as evident from the case of the Left Bank Outfall Drainage (LBOD). Built as part of the NDP project, the sought to carry agricultural waste from the irrigated fields all the way to the ocean. The project included a Tidal Link canal, built in a south-west direction against the natural south-east gradient. It is now providing the rising seawater a convenient channel to move inland. The government built some weirs near the coast to prevent sea intrusion, but the cyclone of 1999 damaged these as seawater crept inland in the LBOD channel, reaching areas that were previously untouched by sea intrusion. The problem became a repeated nightmare for the locals – in 2003, heavy rains for five

²⁰² Interview, Ayaz Ali Mirani, Sher Mohammad Mirani, December 10, 2017, Manchar Lake

days caused backflow from the Arabian sea, causing a massive flood that displaced almost 50,000 people. In 2011, over a million people were displaced in the Badin district. LBOD drainage water mixes with small wetlands, called *dhand*, that used to serve as nurseries for fishes. Local water supplies that had been dwindling due to upstream diversions in the Indus irrigation system, started to turn brackish and toxic due to creeping seawater and dumping of agricultural waste with the drainage canals.

Over the years, PFF had contested the LBOD, RBOD, and Chotiari dam projects, along with PNRDP allies. The group worked with other advocacy groups to challenge the Bank, invoking the Inspection Panel mechanism against the NDP project.²⁰³ Their experiences were similar to the cases of WCD for Tarbela and ADB's Inspection Panel at CRBC outlined in chapters 2 and 3. While the mobilization against these river infrastructure developments was important in spreading awareness among PFF's members and forming alliances, these transnational alliances were not primary factors that led to the emergence of ideas of river defense. One of the critical elements, was PFF's work on the Indus Delta, consolidating ideas from international environmental groups with PFF's extensive grassroots presence in the deltaic communities.

5.2.2 Decaying Delta: Cumulative Problems

If disputes over irrigation water development and problems of drainage created problems of productivity, the decline in the Indus flows below Kotri signaled the decay of the Indus Delta.

²⁰³ PFF was one of the requesters, along with Zafar Lund's Hirrak Development Center, Pakistan Institute of Labour Education and Research, Action Aid, International Rivers, Creed Alliance, and several American, European and Japanese advocacy groups.

The defense of this decaying and, to use PFF's terms, the dying delta was a central feature of the group's political work against river enclosure.

The Indus Delta historically spread over a vast area, about 13,900 square km.²⁰⁴ As per British colonial era maps of 1833. At the small town of Banoo in present-day Sajawal district, the Indus river split into distributaries, eventually forming 17 major creeks that spread from the western Phitti creek that reaches Ibrahim Hyderi to the eastern Sir creek that goes across the border to India, over a coastal line of about 200 miles. This area has a rich and diverse ecosystem due to the peculiar mix of the river system and the ocean. The river drains the Himalayas and Karakoram in the north of Pakistan, and the Hindukush, Suleiman, and Kirthar ranges to the west. It used to carry up to 400 million metric tons of nutrient-rich silt and on average 170 MAF of water per year to the Arabian sea – twice the water flows of the Nile and ten times that of the Colorado River. Given the low average rainfall in much of the river basin, the river flows vary widely with the seasons with the highest flows during the summer months with contributions from the glacial and snow melt and the monsoon rains. During these months, the silt used to be deposited across the deltaic region and along the coast, adding coastal land by about 30 m/y or adding about 80 square km of land each year on average.²⁰⁵ But the high-wave energy of the Arabian sea, highest of any major delta, has cut through this land and created various tidal channels lined with salt-tolerant mangrove forests. With the seasonal variations in river flows, seasonal seawater intrusion into the coastal areas and tidal channels was common and gave rise to one of the world's largest mangrove forests that created diverse aquatic ecology.²⁰⁶

²⁰⁴ About the size of the Connecticut state in the USA

²⁰⁵ Birwani, Z., & Iqbal, N. (2003, February). Deteriorating Indus Delta. *Dams, Rivers & People*, (1), 11–12.

²⁰⁶ The delta has formed in an arid climate under conditions of high river sediment discharge ("400 million metric tons of sediment per year), a moderate tide range (2.62 m), extremely high wave energy (14! 107 ergs/s per meter of coast and a root mean square wave height of 1.84 m), and strong monsoonal winds from the southwest in the summer and

The reduced water and silt flows have led to rapid shrinking and destruction of Indus Delta ecosystem, arguably among the worst impacts on any major delta in the world. The Indus Delta is currently in an abysmal state and suffers from sea intrusion, coastal erosion, and the destruction of animal and plant life. Only two of the historic 17 creeks are active, in that the Kharochan and Khobar creeks receive water for three months a year and distribute riverine water, silt, and life over an area of 1067 square km. The current active delta has shrunk to 8 percent of its recorded size at the end of the 19th century (Siyal 2018). By the 1970s, the Indus Basin Irrigation was already diverting most of the river flows into upstream canals (Memon & Thapa, 2011). A study of the world's 14 largest deltas shows that the rate of loss of Indus deltaic land was at an alarming 200 square km per year between 1992 and 2000,²⁰⁷ a higher rate of loss than in the preceding period of 1972-1990 (Coleman, Huh, & Braud, 2008).²⁰⁸ Given the ongoing development and further upstream diversion, one can only surmise the degree of destruction caused during the first two decades of the 20th century.

The reduced flows have caused severe problems for the human and non-human communities of the Indus delta. The rising seawaters face less resistance from the river system, as reduced flows don't push back against the ocean, with the sediment deposits reduced to virtually none.²⁰⁹ The adverse impacts on mangrove forests have exacerbated the problem. The mangrove

from the northeast in the winter. The resultant rather coarse-grained delta, which has acquired a lobate shape, is lacking in luxuriant vegetation and is dissected by numerous mangrove-lined tidal channels in the lower deltaic plain. Estimates of delta building over the last 5000 years indicate an average progradation rate of approximately 30 m/y. Morphology of the Indus River delta lies midway between that of a fluvially dominated delta, with tributaries that protrude into the basin of deposition, and a wave-dominated system, with little tributary expression along the coast, except where characterized by beach and dune deposits." (Coleman 2008: XX)

²⁰⁷ That is losing an area larger than Washington D.C. each year

²⁰⁸ Interview, Dr. Altaf Ali Siyal, Professor, USPCAS-W Mehran University of Engineering and Technology Jamshoro, Sindh, Pakistan.

²⁰⁹ *ibid.*

forest, once the largest of any arid region in the world and the seventh-largest overall, declined from 1,034 sq. km in 1990 to merely 633 sq. km in 2005, with dense mangroves covering merely 362 sq. km of the tidal floodplains (Siyal, 2018). The eight different species of mangroves supported a diverse nutrient ecosystem that's fertile ground for a variety of fishes, shrimps, crabs, and birds. With the decline in mangrove forests, these communities are severely stressed. The loss of delta is attributable both to global climate change and reduced flows in the Indus river system as the river has been dammed and diverted.

The loss of land, forests, and river flows harmed the human communities of the Indus delta. Historical records based on accounts by travelers and British colonial administrators paint a picture of a diverse deltaic economy depending on fishing, livestock herding, and vibrant cropping relying on moisture and rich soil from seasonal river overflows. Since the decline seemed to have reached a critical point over the past four decades, many of the older folks in the delta can provide accounts of the fertility and productivity of the Indus delta region. Surveys conducted by academics, civil society groups, tell us of the miserable conditions of the deltaic communities, and I was also able to witness and collect oral testimonies as I traveled from Ibrahim Hyderi in Karachi to the once-vibrant port of Keti Bandar, to the villages along the Kharochan creek in the part of the delta that is active, i.e. receives freshwater during the high flow months of summer monsoon, and to the coastal Islands that are formed as the ocean creeps in.

Historical records show the prosperity of the deltaic region. Keti Bandar was once a vibrant municipality, generating so much revenue from trading activity that colonial records show that the town lent money to Karachi when the city was facing some financial trouble (Hasan, 1989). People of Keti Bandar reminisce about the fame of their bazaar that supplied goods for this busy trading post, famous for the supply of the red rice of the delta and for particular milk-based sweets, which

appear a bit out of place as livestock raising is no longer an option. Currently, large tankers bring freshwater from Karachi and with limited water supply through municipal pipes or a defunct desalinization plant. As Ahmadullah Bukhari explained water in riverine creeks started to dwindle by the 1970s, and the problem became acute since the 1990s, which brought on poverty to the area that was rich in resources and nutrition.

When folks talk about the delta of older times, they repeatedly emphasize the wealth of the region. People here were rich. They might have lived in wooden huts, but the sea provided a rich bounty, and the channels and creeks were full of sweet water of the Indus. The fishers proclaim that even during their lifetime, they could be half a mile away from the coast in the ocean and still drink the water from the river.

Similar testimonies collected by PFF and through my interviews with deltaic communities at Ketī Bandar, Jaati, and Kharochan gave a sense of the wealth and riches of the Indus delta. Scholarly knowledge about the Indus deltaic ecosystem gives credence to these testimonies as we know that the high monsoon flows of the Indus river would push the salty seawater out of the narrow creeks and water channels, and deposit silt with rich nutrients that would allow for cultivation of rice, bananas and a variety of local grains (interviews.. Zulfiqar, local landlord). Fish and aquatic fowl were plenty, and fishers claim that they never had to eat small fish, that they'd feast on the famed *Palla machli*, which is an endangered species now. Different kinds of seaweed were also part of the diet. As we move inland, the delta also provided for raising healthy and strong livestock, with the local cows smaller in size than the *zebu* cows of central Indus valley, was famous for producing twice as much milk. Some refer to the idea of canals of milk, referred to as a feature of *Jannat* in the Quran, to speak about the delta as a heaven on earth. The milk would be stored in boat-shaped containers, made into yogurt, churned into butter, cooked into *khoya* for milk-sweets, and treated as sacred produce. "We won't sell milk, but would give it for free to travelers so that it won't go to waste," [Bukhari, interview]. The region was also famous for the

production of honey from wild bees. Apart from driving home the point about the richness of the people of delta, purely in terms of nutrition rather than income or monetary wealth, the availability of *palla*, honeybees, and a variety of indigenous fish, flora, fauna, and fowl serve as environmental bioindicators.²¹⁰

Unfortunately, much of this has been lost to rising seawater and reduced flows in the Indus river. At Keti Bandar, the ocean has crept in, and the town had to be relocated three times during the past 50 years.²¹¹ The active delta has also been reduced effectively, as only two of the 17 creeks now receive water in the monsoon season. Part of the problem is reduced flows, and part of it is the embankments – what Shah sb calls the imprisonment of the river. These embankments ensure that the river doesn't go in older channels, which would allow for the distribution of water and silt over a wider area, preventing coastal erosion and sea intrusion, and recharging freshwater aquifers. The destruction of mangroves has severely depleted the fish stock, and the central delta's agricultural mudflats are suffering from seawater intrusion as the aquifers don't get charged, and seasonal floods don't reach these areas. These problems have reduced cropping intensity, especially harming the famous water-intensive crops of the region, such as red rice, and bananas. Lack of water has destroyed the livestock herding at a large scale as well (Memon and Thapta, 2011, 2016).²¹²

²¹⁰ For the idea of using certain species, particularly honeybees, bioindicators have been gaining popularity in environmental literature. C.f.

²¹¹ Interview: Ahmadullah Bukhari, 2017-12-13. See also Salik, K. M., Hashmi, M. Z.-R., Ishfaq, S., & Zahdi, W.-Z. (2016). Environmental flow requirements and impacts of climate change-induced river flow changes on the ecology of the Indus Delta, Pakistan. *Regional Studies in Marine Science*, 7, 185–195, who substantiate this claim: “For example, sea intrusion and erosion (which is about 20 m per year) in the Indus Delta has resulted to the town of Keti Bandar replaced west-wards thrice since 1952 ([WWF-P, 2008a](#), [WWF-P, 2008b](#)).”

²¹² Memon, J. A., & Thapa, G. B. (2011). The Indus Irrigation System, Natural Resources, and Community Occupational Quality in the Delta Region of Pakistan. *Environmental Management*, 47(2), 173–187. Memon, J. A., & Thapa, G. B. (2016). Explaining the de-facto open-access of public property commons: Insights from the Indus Delta mangroves. *Environmental Science & Policy*, 66, 151–159.

Since PFF's constituents had been active in the deltaic communities, they've known about the variety of these problems. Bukhari at Keti Bandar, Talib Ketchi, Ayub Shan and Muhammad Ali Shah in Ibrahim Hyderi, Thehemore in Jaati, described the worsening situation on the ground, causally linked to reduced water and sediment flows in the Indus River. However, these changes are a lived reality for the local community members, slowly unfolding over time, with uncertain and ambiguous connections to the river infrastructure development upstream.

5.3 Indus Delta and Sindh *dharti*

PFF's work draws upon Sindhi nationalist claims over the *darya* but transforms it by centering the concerns of the fishers and Indus delta. The figure of the *mahigeer* or fisherfolk itself is a hybrid identity tied to both an occupation group, traditional tribes (*mallah qaum*, for instance), and ancient ties to the land, *dharti*, and the river, *darya*. While many of PFF's members belong to the *mallah qaum* and some to other indigenous groups, the collective identity of the fisherfolk extends beyond the traditional *qaum* and is irreducible to occupation or class identities like the fisher.²¹³

Indigeneity is not a criterion for becoming a member of PFF, but PFF is not a union of those involved in fishing since it distinguishes between those historically linked to fishing communities, and the urban labor that opportunistically engages in the fishing profession. The identity of the fisherfolk is grounded in the sense of historical continuity, an autochthonous discourse where historical figures of fishers and their struggles gave birth to these communities.²¹⁴

²¹³ In many places, as Chotiari and Phuleli mentioned earlier in this chapter, the term *mallah* which is a cast group is used synonymously with *mahigeer* which is the pseudo-occupational term, there's a conscious attempt to raise slogans for *mahigeer* by the PFF activists.

²¹⁴ Consider for instance an event organized by PFF to celebrate the history of fishers and their heroes, the historical figure of Morrero (مورڑو) is remembered to claim Karachi as a Sindhi city, of the fishers. The article doesn't claim

PFF doesn't claim the term 'indigenous' (*Adivasi*) but uses the term 'ancient residents' (*qadeem bashinde*), even though they acknowledge that certain riverine groups, like the Kihal and Morr, are Adivasi. The distinction is that the connection to the land is not in the sense of a sovereign nation recognized through colonial era treaties, as in the case of some aboriginal or indigenous peoples in the European settler colonies of Americas, or even as tribes to be governed by custom, the form of colonial indirect rule in India and Africa (Mamdani 1996) that is still exercised in the Baluch and Pashtun tribal areas of Pakistan. The historical and cultural affiliation with the land is grounded something before the dispute around irrigation water – if we use the terminology of Sindhi nationalist, then the shift is from the idea of Sindhu *desh* or homeland to the idea of *dharti* or territory/land to which the fishers belong.

To shift the Sindhi nationalist discourse around water as a resource to be distributed fairly between the different provinces, PFF transformed the *delta* from a scientifically defined category to a politically interpreted territory linked with the *darya* and the interests of the people of the *darya* – the fishers. The Indus delta started to appear on the political map as the ecological and sociological destruction started to become evident, both in the lived experiences of the people and in the scholarly studies.

that the fisherfolks were the indigenous or 'original' inhabitants of the coastal villages but establishes them as the historical or *qadeem* [literally ancient] residents of the city. This view actually resonates well with Sindhi nationalist claims, that don't use the ethnic identity on blood-based parameters but include those who settled in the Sindh province during the various waves of migration and became part of the Sindhi culture. This view acknowledges the historical mobility of fishers, boaters, herders, and even agriculturalists that were open to seasonal and long-term migrations. At this even, PFF had invited Rasool Bux Palijo, who argued that the hero Morrero was the ancient founder of Karachi and to deny his existence is the denial of the existence of the history of the Sindhi people. The event was organized at a time when Morrero's grave that is 'imprisoned' in a military base was inaccessible for local people to visit and to celebrate his birth anniversary. Moriro was a brave hero, an advisor to the Dalowra King, who fought the alligator king that ate six of his brothers to bring back their corpses. The recognition of Morrero at this incident was an indication that the current descendants of this ancient hero were also facing evictions and displacement, would continue to resist. PFF. (2009). Karachi ke qadim bashindo ke tareekhi haqooq. *Fisherfolk*, (Apr-Jun 2009), 13–14.

PFF had been actively campaigning for the State and political groups to solve the problems of the people of the delta, but their understanding of the complex causes of the disaster and its link to the Indus Basin Irrigation System came through engagement with the scientific communities and conservation groups.²¹⁵ A shift came in 2003-04 when PFF started to gain visibility among environmental advocacy groups due to its deep roots in the deltaic communities. PFF facilitated visits by academics, journalists, and conservationists to conduct socio-economic surveys in the Indus delta. They focused on a media awareness campaign by holding seminars and conferences. Distinguishing these seminars from other efforts by NGOs and advocacy groups, PFF's publications and interviewees emphasize that they centered the voices of the people of the delta and always invited political parties to these seminars as well.

We used to bring journalists, to highlight the issue. I tell you that in the history of Pakistan, as I see it, many experts have worked on water and the delta. But the voice of the Delta and the issue has been brought to light by the Fisherfolk. Because all the work that has been done, the person who has highlighted this by Shah sb, all the other water experts haven't delved this deep. Shah sb has dived deep into the issue of the delta, has studied the problem, and has provided solutions – this depth is not with the experts. I think this is a big success of the social movement, that a social movement has made this without any support.²¹⁶

PFF had always worked with mainstream political parties, especially with the Peoples Party of Pakistan, to lobby for policy changes. But they also were interested in tapping into the historical grievances of Sindhi nationalist parties around the issue of water distribution, which by the 1990s was an important source of an association with the Indus river in the Sindhi political consciousness.

Framing the issue of Delta itself shows the influence of modern environmental sciences. Zubeida Birwani, introduced in chapter 2, belonged to Ibrahim Hyderi. She was a founding

²¹⁵ Some of the groups that PFF collaborated with included: Friends of Indus, WWF, IUCN, European Union funds, etc.

²¹⁶ Interviews, Abdullah Bukhari, Keti Bandar, Jamil Junejo and Talib Ketchi, Ibrahim Hyderi

member of PFF who later left to work in the NGO sector and worked tirelessly on the protection of mangroves and the Indus Delta ecology. In her university days, she was involved and trained by nationalist political groups, in particular, the Sindhiani Tehreek – a women's front of the Rasul Baksh Palijo's Awami Tehreek. She noted that the early work by Sindhi nationalist didn't refer to the issue of Indus delta, and it only became relevant when PFF and other groups highlighted it.

"This is a relatively new issue and became prominent when we started working on it. For instance, the famous book that presents the case on Kalabagh dam by Ibrar Qazi hardly refers to the issue of Indus Delta. But this was our role, with IUCN as we learned about the coastal ecosystem issues, and we understood, even comprehended that the issue of delta and water through this information. Otherwise, the issue of displacement, when people used to say that Kharochan [an area near the delta and coast] was destroyed, we didn't understand what the root of the problem was. But our elders used to tell us, the indigenous community used to know – but there was no vocal representation of these people."

PFF Chairperson, Muhammad Ali Shah, also noted that historically, Sindhi nationalist group were not against the adverse impact of dams on river and delta's ecology. Part of the reason is lack of awareness, while some could actually be attributed to the interests of large landowners who demanded irrigation development in Sindh. Even alliances like the PNRDP, which had many notable members of Sindhi civil society, and even the son of Rasul Baksh Palijo as the Sindh convener for a while, were against particular projects, like the Kalabagh Dam, based on historical grievances around water allocation. But for PFF, the issue of the river, and the "anti-dam" nature of the movement started with their work in the Indus Delta in 2004.

PFF gain visibility and knowledge by working with environmental advocacy groups. One of the founding members of PFF, Bukhari from Keti Bandar, mentioned that the first six years of mobilization PFF did not have a lot of resources, and it had focused on tackling the most common and evident problems of the Fishers. These ranged from the demands for water, health, education, and improved fisheries policies to counter illegal occupation of wetlands and coastal areas by the

military, paramilitaries, and politically influential landlords. But by 2004, the PFF had spread to the far reaches of the Indus Delta, with popular and widespread mobilization across the Sindh province, winning major victories against the military occupation and the contract fishing regime in particular. This work not only created a strong organizational presence, and create a sense of empowerment and identity amidst the fishers of the Indus Delta, it also attracted attention by broader advocacy and civil society groups. Some groups like Action Aid, Oxfam, IUCN, and other European conservation groups started to work with PFF to address the issue of the Indus Delta.

PFF thus led a two-pronged strategy, and mobilized its political organization, the *tanzeem*, and continued to work with the fishers while establishing a semi-independent non-profit organizational structure for managing the donor-funded project. Internally, the PFF distinguishes the two structures as it's *tanzeem*, or the political organization, and *management*, or the non-profit organization. The former deals with the issues of the fisher as an organization of the fishers, and the latter follows a donor-funded model of advocacy and, to a limited degree, service delivery.

By 2003-4, PFF was organizing seminars to highlight the issue of the destruction of the Indus Delta, water scarcity, and socio-ecological destruction. But unlike civil society seminars of a similar nature, that focused on issues of conservation and poverty, PFF was linking the issues of the delta's destruction with the fights against the paramilitary occupation of land, or the illicit enclosures of wetlands.

The group organized the first seminar of this nature in Badin, the main town in one of the deltaic districts, on March 8, 2003, titled: "Issues of Fisherfolks and the Destruction of Indus Delta." ²¹⁷ These seminars brought together the people from the delta, water activists, experts,

²¹⁷ MahigiroN ke Masail aur Indus Delta ki barbadi: Badin mein Seminar Ki report. (2003, April). *Fisherfolk Newsletter*, (Feb-April 2003), 4-8.

political representatives, and broader civil society members working on issues of socio-ecological problems of the region. Locals provided oral testimonies about the prosperity and wealth of the Delta, with its sweet water lakes, bounties of fish and birds, the scenic beauty of lakes that also provided millions of tons of fish and prawns and different type of week that was dried up and used for local handicrafts. A report in PFF's newsletter noted the destruction of this plentiful land as the water in the river started dwindling, and resources started becoming bare. "As lakes started drying up, hunger and poverty increased, people started to suffer from various diseases and were forced to migrate out." The discourse then shifts seamlessly from the destruction of delta ecology to the Ranger's occupation of the lake. In a context where the fishers were already struggling due to the lack of water, the Ranger's occupation of the first wetland, Shakoor lake in 1983 and subsequent expansion to controlling eight large lakes by 2003, spelled further bad news for the local fishers. The Rangers worked with the contract systems and gave the lease to private contractors, who like in other areas would fix the rate of purchase of fish and prawn catches to ridiculously low rates. They bought twelve kilograms of prawns at 300 PKR (about a dime and a half per kg), subsequently reducing the rate to PKR 250, PKR 200, and finally to PKR 140 (less than a dime per kg). The contractor sold these in the market for about PKR 300 per kg (about 2 dollars). Reports of the seminar show other speakers talking about the various development project, like LBOD, RBOD, the problems of water pollution, and PFF mobilization against the Rangers in Badin and the Contract system across the province. These seminars then provided an opportunity to knit together PFF's struggle against a variety of issues, and the visible enemies, like the Rangers, and the more obscured causes, like the long-term cumulative impact of river infrastructure development on the Indus Delta.

PFF organized these seminars at a time when studies of the socio-economic challenges of the Indus Delta were rare among academic and international environmental organizations like WWF and IUCN. No one was paying any serious attention to the fishers of the Indus Delta. For PFF's members, this was a lived experience, and the issue had been a prominent one since its foundation. The communities were aware of the adverse impact of the declining river flows but were not necessarily aware of why this was happening. PFF's had this dual strategy of organizing seminars with experts and mobilizing the masses on multiple fronts (Junejo, interview). The newsletters, published in Sindhi and Urdu, were widely circulated and discussed among the local units. Local community members and PFF's unit members participated in these seminars. Through this work, PFF raised awareness among the fisher community and put the Delta and deltaic communities on the agenda of the civil society actors, nationalist parties, and political representatives.

Another transformation in the discourse was to make the Delta itself a party in the debates around water allocation and distribution. Reflecting on the nature of the Water Accord of 1991, and the Sindhi nationalist position around the issue, Muhammad Ali Shah noted that the Accord allocated 10 MAF of the total 175 MAF average annual flows of the Indus river for the delta. This number was an arbitrary allocation, and later studies conducted by the Government and IUCN suggested average daily flows of 5,000 cusecs, rather than meeting a yearly quote met during the high-flow monsoon season. But beyond the issue of the quantity of the water, there were matters of the distribution of this water across the delta. The current flows are limited to two out of the 17 historic creeks, and this is only partly due to reduced flows. Fixing the river channel or river training through the construction of levees and embankments is a necessary step towards building dams and diversion canals (see chapter 4 on 'river training' in the case of Taunsa barrage).

Increased flows merely go through the existing channels, whereas the rejuvenation of the delta requires flowing through older creeks and overflowing to deposit moisture and silt across the deltaic floodplains [Siyal interview]. Overall, this meant that making Delta a party to the 'water dispute' required not only providing an overall quantity of water but minimal daily flows and restoring old distributaries.

The PFF synthesized new ideas of environmental advocacy into the existing politics around resource distribution around ethnonationalist lines in the political spectrum of Pakistan. It adopted a two-pronged strategy of raising awareness among its members and fisher communities, on the one hand, and holding seminars to link up civil society and political groups with the deltaic communities, on the other hand, to transform the Indus Delta into a politically contested terrain. The destruction of the delta was self-evident and a lived experience for its constituent members, beyond the various policy and scientific research studies I have mentioned. Since PFF had been organizing among the adversely affected communities, when the scientific and environmental discourse around Delta became somewhat mainstream in expert circles, PFF was able to name the causes behind the plight of the deltaic communities. With its large organizational base that empowered fishers by fighting and winning visible enemies, PFF helped fishers and deltaic communities claim the Indus delta, not simply as scientifically defined territory that didn't map onto any political or administrative imaginations in the Sindh, as a viable and contested political terrain. The term "Indus delta" is now used in the Urdu and Sindhi political speeches, banners, and discourse along with ideas of Sindhu *desh* or *darya*.

The transition from the seminars and the political concerns around the Indus Delta, to the ideas of river defense and the yearly River Caravan, came through PFF's political work among the fishers of the region. The next section takes us back to the journey to Phuleli and the launch of the

2018 campaign for the defense of the river, to give a sense of how PFF's political work on local issues and their fight for the rights of the fishers created the grounds for their fight for the right of the rivers.

5.4 Fighting Enclosures of Wetlands

Our destination was the small settlement of Phuleli on the bank of the Chotiari dam reservoir northeast of Karachi, as far as the road goes before the harsh desert separates Sangarh district from the eastern border with India. The journey was about 5 hours long, with almost 300 km to cover. We crossed the Indus river from the west at Kotri barrage and continued eastwards moving further and further away from the river. I wondered why this place was picked to start this year's campaign. When I asked Shah sb, he briefly mentioned the long history of struggles against dams and displacement and the contract system in Phuleli.

When founding PFF in 1998, Shah sb and other activists had already been working with local communities at Phuleli who faced displacement and ecological destruction due to the construction of the Chotiari dam. The project started in 1995, as part of the National Drainage Program (NDP) along with LBOD and RBOD, and the government survey noted that the project would displace about 500 households. However, locals pointed out that the number was close to a thousand households, including 387 pastoralists, 221 fishers, 242 tenants, and 147 landowners. Landowners bemoaned the lack of compensation under the Land Acquisition Act. The government promised to resettle tenants and landless people on alternative land but failed to deliver. It paid minimal compensation to pastoralists for the loss of grazing lands and wholly ignored the fishers.

No environmental impact assessment was carried out.²¹⁸ The reservoir consolidated several hundred smaller lakes destroying a complex ecosystem that supported a variety of aquatic plants, grass, fishes, birds, and more. Now the 100 square mile reservoir is primarily used to irrigate about 150,000 acres of land in the southern district of Mirpur Khas, where feudal landlords and the military hold large tracts of land. The social and economic disaster was so extensive that major funders like the World Bank withdrew its support from the project, although on the technicality that this was not suitable for the NDP mandate to introduce efficiency in management rather than build new infrastructure. However, PFF and PNRDP were able to force the government to make a new resettlement action plan that provided some restitution to the local communities.

Enclosing Wetlands for Fishes

PFF built a strong presence in Sanghar district by campaigning against the project-proximate issues of displacement and harm to the local ecosystem, but by far, their most crucial campaign focused on the Contract Fishing regime. The Contract system allowed the provincial fisheries departments to give wetlands, in part or as a whole, to private contractors on lease. Private contractors could then exploit the enclosed resources as they pleased, with minimal enforcement of insufficient labor and environmental regulations. The system effectively transferred control of natural and public resources to the political influential landowning elites. High stakes result in collusion and corrupt practices with adverse social and environmental consequences. The contractors set the wages and paid abysmal rates to the fishers, often less than 10-20% of fair

²¹⁸ Resettlement Action Plan; Mangrio, M. (2004, July). Chotiari dam ke mutasareen ke masail aur mutalbat. *Fisherfolk Newsletter*, (June/July 2004), 20–21.

market price even though fishers provided all the labor, boats, and nets.²¹⁹ In some places, indentured fishers work as bonded labor, paralleling the situation that currently exists in many parts of Punjab.²²⁰ Overfishing and use of illegal nets also led to a reduction in fish stock, and as per local reports, several types of fishes are now extinct.

PFF's campaign against the contract fishing regime benefitted from different waves of democratization in Pakistan, with successful periods of democratically elected government more responsive to their demands for shifting to a licensing system. The Contract fishing regime dated back to the British colonial era, and the non-democratic military governments continued this practice in the post-colonial era. When the country had first democratically elected provincial governments, the Sindh Assembly passed legislation to abolish the contract system and introduced the Licensing regime that gave more control to local fishers. However, the military government of General Zia-ul-Haq, the U.S. ally in the first American-Afghan war of the 1980s, reversed the decision. Once again, the democratic government restored the license system in 1991, which lasted

²¹⁹ "Under the contract system, the contractor used to determine the price. It was a usual practice that one part would go to the person catching the fish, and three parts to the contractor... If the catch were about 10,000, then 20% would go to the fisherfolk and 75 to 80% goes to the contractor. The contractor does not invest in the nets, boats, or the people who work on it. The contractor only gets his share." Interview, Muhammad Jumman Mallah, Kotri village, district Jamshoro, December 10, 2017); "The first contract was on Shakor Lake, and it sold for 12,000 rupees, and we used to get PKR 100 for a 12kg box [of prawns]. Now the contract would go for millions of rupees, and the contractor only gets PKR 150 [per 12kg]. At that time a boat cost 15,000 and now the same goes for 70,000. When law enforcement agencies themselves reach the height of exploitation, to the degree that we cannot even use the wood from lands as fuel. (Nabi Baksh Mallah, District Badin)

²²⁰ "One canister has a catch of about 15-20 kg, of shrimps, they used to pay about 50 rupees, 100 rupees for this whole canister. Moreover, the mahigeer did not have the right to take a couple of kg for his use at home. And they had to go fishing each day -- a very oppressive system for them. They were almost like bonded labor." (interview, Ahmadullah Bukhari, Keti Bandar, December 13, 2017). In parts of Punjab, around the barrages, in particular, the conditions of the fishing communities are even worse. Speaking about the Contract system that is still in place in the province, Amna bibi from Basti Sheikhan, District Muzaffargarh says: "The rates are all set by the contractor, and they do not even give us cash in return for the catch. All of our people here are in debt of 4-5 lacs. The contractors open a کھاتا (credit account) at the store, and we can take flour, sugar, oil, and other things. When our children fall sick, we ask them for money for medicine. So, if they wish they can give us 50-100 rupees, otherwise they do not. We work all day and all night, winters and summers, but do not get any benefit, not even a single rupee. All the benefit goes to the Contract system."

till 1998 when the military government of General Pervez Musharraf, now an ally in the second American-Afghan war of the 2000s-2010s, turned back to the Contract fishing regime. PFF's fight against this regime started as a battle against this authoritarian military enclosure of wetlands. Their first major victory came when General Musharraf came under pressure due to a general rise of peasant mobilization against the military occupation of land, and asked the paramilitary forces to return the occupied wetlands back to the local governments. This major victory fueled the subsequent mobilization against the contract regime, which lasted about a decade. Eventually in 2011, the democratically elected government passed a bill to abolish the contract system.²²¹

PFF becomes a Powerful Actor in Local Politics

The abolishing of contract fishing and win against the Rangers created a certain reputation for PFF as a major political actor in the local political-power hierarchy. The campaign against the Contract system was about a decade long and successful as the government of Sindh formally abolished the contract system in 2011. While a detailed analysis of this campaign and its impact is beyond the scope of this chapter, it is worth remembering that mobilization and success had a remarkable effect on the fishers' consciousness. For the first time, they were able to build an organization of their own and take on the powerful actors.

Since its foundation, PFF had built a vast network of local units, district bodies, and a central committee. They were able to launch coordinated campaigns across the province and garner support from provincial and national allies. Protests were held simultaneously across the Indus delta – in Karachi, Ibrahim Hyderi, Keti Bandar in Thatta, Sajawal, Badin, Hyderabad, and

²²¹ Chandio, R. (2011, January 14). Contract system of fishing abolished. *The Nation*. Retrieved from <https://nation.com.pk/14-Jan-2011/Contract-system-of-fishing-abolished>

Sangarh. The campaign in Sangarh took on large *wadero*, and those in Sajwal and Badin had to go against the powerful Pakistan Rangers, the paramilitary forces with a track record of violence and a habit of illegally occupying government land, lakes, schools, hospitals and other public resources. The win against the Rangers in Badin was a historic moment in the broader campaign against the enclosure of wetlands and built the momentum needed for the abolition of the contract system itself. Currently, PFF continues to fight against the illegal occupation of lakes by certain influential elites.

PFF activists take great pride in mentioning this genealogy of resistance. In Sangarh, they trace their fight back to the *Hur* rebellion against the British colonial rule in the Sangarh area. Led by the brave local activist Pir Baksh Mallah, the Fisherfolk struggle of the 2000s was, ironically, against influential *wadero* and feudal landlord who were allied with the current spiritual and political leader of the Hur – Pir Pagaro. They claim that these areas saw the most massive mobilization in parts of Sindh since the 1980s campaign of Movement to Restore Democracy launched by Benazir Bhutto against the military dictator General Zia who took power in a military coup and hanged her father and the first democratically elected Prime Minister of Pakistan Zulfikar Ali Bhutto. Benazir Bhutto, who became the first woman Prime Minister of Pakistan, was later assassinated in 2008 with some blaming General Pervaiz Musharraf, the military ruler at the time. This idea of resistance against the powerful, not just the *wadero* but the military rule, as a form of decolonial struggle, was linked to a sense of local ownership and pride. Resistance became a legitimate and effective means for the local fishers to gain power.

I learned about PFF's reach and power first hand during our trip to Phuleli. When we reached our destination, a large crowd of about two to three hundred people, mostly young men and some children, had gathered on the southern side of the lake to welcome us. As we stepped

out of the car, the crowd started to chant various slogans – *Aya Aya, Mahigeer aya* (here come the fishers), Muhammad Ali Shah, *Zinda baad* (Long live Muhammad Ali Shah). They showered us with flower petals and put floral necklaces around our necks. Shah sb seemed to be a much-revered and celebrated leader. They escorted us with some motorcycle riders in front of us as we drove to the other side of the lake and reached Phuleli, the village where we were staying. The last half mile was on a steep sandy hill, so we parked our car and walked to the village. A large *dari* (woolen matt) was spread next to a *baiithak* – the guest sitting area, with traditional *ralli* or colored patterned quilts and *gao takya* or round pillows. Another group of around 30 odd people, mostly village elders, were waiting for us there and offered another warm welcome. There was a constant influece of villagers aafternoon and evening, who were coming to meet Shah sb.

This form of hospitality and welcome is not unusual in Pakistan, but in political terms, such reverence was historically reserved for the landed and moneyed elites and political representatives belonging to mainstream political parties. The idea that the leader of a social movement organization had this type of social capital is evidence of the power built by PFF in these areas. This power is not merely demonstrable in such ritual or ceremonial welcomes but has altered the shape of local political conflicts as well. Another anecdote from this trip helps to demonstrate this claim.

Before reaching the sizeable welcoming crowd, we had a brief encounter on the roadside with the son of the local *wadero* – the influential landlord who is supported by the Pir Pagaro, the spiritual and political leader of the Hur and an influential Sindhi and Pakistani politician. The *wadero* saw our car approach and waved at us from his four-by-four truck, stepping out to speak with Shah sb. The conversation was brief – he was informing Shah sb about a dispute over control over a small piece of land adjacent to the reservoir embankments that had become permanently

flooded due to seepage from the reservoir. Some local fishers had acquired control over this piece of wetland, which the *wadero* claimed to have recently bought from its colonial-era owners. The dispute got heated, with two sides attacking each other with guns. The *wadero* feared that the fishers would have PFF's support and asked Shah sb to ensure that PFF stayed out of this local dispute.

Later as we sat with the villagers in open *kachehri* (sitting, gathering), many villagers came and spoke about various political matters. There was conversation about the upcoming elections, whether they would support the candidates that the PFF favored, but despite the outcome of the specific incident, it was evident that PFF was influential enough in this region to impact political conflicts that were historically, and even currently in many others parts, shaped by the whims of the powerful elites – the landlords, military, and politicians.

One younger activist and president of the PFF's local unit spoke about the power that PFF had built over the years by organizing and campaigning for local fishers. Tajul Mulk spoke about the heavy-handed control of local areas by feudal landlords and a corrupt system of governance, that left the fishers without power, a dignified life, and a sense of self-worth. Mobilization against the contract system and the wins changed that.

When we were younger, the feudal used to speak, and the fishers [*mahigeer*] had no worth. They used to say that if you give respect to the fisherfolk, then they will not know their place... The feudal used to sit on the seat and everyone else on the floor, in the dirt. But now, after we have control over our livelihood, we have restored our dignity. We also used to be afraid of the police, but that has changed. We can speak to them as well.

Another local activist commented on the conflict, which he saw as an individual dispute that did not concern PFF. He noted that the idea was not to influence local politics in the same manner as existing politics worked. The intention was to work towards the collective benefit of the fishers. If these fishers were genuinely interested in building people's power, then they must

join the organization and work with a collective view, instead of just focusing on convincing the Chairperson to take their side. Even if PFF decided to help them, this decision would have to come from local PFF units.

So, these [haji sb] are fishers, so they are our community, but they stand on the sidelines when we are campaigning. Why is that? They should join us. ... Their dispute [with the local *wadero*], is a minor issue. He will leave their land, leave them alone if PFF stands with them. But they do not stand with us... We cannot take on these individual issues from our organization platform. I take up this issue with the people here, then they will complain ... The Chairperson (Shah sb) cannot solve this issue. Whatever the problem is, it will come to the district body. The decision power is with the district [body], and the Markaz [center] will comply with the decision. Any situation can take a turn for the worst, so if the issue gets out of hand, then the *markaz* [central body of PFF organization] will support us. At the first level, we have a unit, meaning a village, then a district body, and then *the markaz* [central body]. The *markaz* [in case things get out of hand] will devote the entire fisherfolk power on the issue if needed. Like it happened in Jaati, and the whole Sindh province erupted. So, whatever they are discussing [with Shah sb, Chairperson PFF] it will have to come to the district. It's okay. Let them talk. ... Politics should be based on collective interests. I don't have any interest in this. I am a teacher and draw a salary from the government. But even then, I stand with the community [mahigeer or fishers] and support them. If there's some injustice at a personal or individual level, then we'll support them. But these [haji sb] are not with us. The members [of PFF] are our constituting parts; we are nothing without the members. We can support them in their private matters as well. If someone bothers our members, we won't let them go. But this is a land issue, their personal matter [and they don't support us politically], so why would I support them. Isn't that right?²²²

This account shows that PFF's work is not only grounded in local concerns but had also transformed the landscape of contention by building a strong organization presence and a sense of ownership among fishers. The major wins, be it against the contract fishing regime, illegal occupation of wetlands, or the removal of paramilitary forces from the control of lakes in Badin district further south, have not only given a sense of power to PFF's member, the organization is recognized by other powerful actors as a political significant and influential actor.

²²² Ayub, a local teacher and Gen Secretary PFF, Sangarh.

Furthermore, there is a strong sense of a collectivity where PFF members and leaders are keen on mediating conflicts of their community members, but as long as these members are pursuing collective agendas. This form of impact on local politics is evident in other areas as well; for instance, local community members would approach members of Sindhu Bachao Tarla with concerns around police, courts, or bring to their attention to issues of corruption. However, there is, in my estimation, a difference in the degree of influence, based on PFF's successes around issues that are not related to river infrastructure in general. In the next section, an account of the rally shows how PFF built on their organizational power in the local context to link with broader ideas of river defense, even among communities that live far from the river.

5.5 From Rights of Fishers to Rights of River

The evening set in firmly as the sun gave way to the full moon rising over the dunes in front of us. We sat on *traditional rulli* spread over straw-mats, or *thaat*, forming a circle. Local community members kept dropping by to greet Shah sb, about a hundred folks came, and some stayed to hear about PFF's new campaign. Shah sb began by asking Ramzan, the president of district Sangarh unit of PFF if he wanted to tell people about the rally and the campaign. Ramzan deferred to Shah sb. About fifty people were sitting with us, and all of them fall silent as Shah sb started describing the purpose of the campaign and the rally.

Shah sb spoke in Sindhi, and I usually had difficulty following conversation in Sindhi language. However, the context of the speech and our prior conversations made it easy for me to follow along. He began by speaking about the river, Sindhu darya, and how it gave life to the land and the people, even though we sat hundreds of miles from the river bank. Folks in the audience nodded their heads in affirmation. Then he talked about March 14 and the International Day of the

River, its significance for the riverine communities across the globe. He reminded people that PFF had been celebrating this day each year since 2009 and mentions the various caravans, long-marches, and campaigns that begin well before the Day. In preceding years, the campaigns started two weeks ahead of the Day of the River, with Caravans from various PFF units all across the province. In 2014, The Caravan was a mix of walking and driving about a thousand miles northwards to hold the final rally in Islamabad. For 2018, PFF had planned a week-long campaign that comprised of protests, rallies, and seminars organized by local units. The campaign at Phuleli started with a rally by the lake reservoir, to be followed by a large rally at Kotri barrage on March 14.

The 2018 campaign was a bit different though, Shah sb continued. He explained that PFF was launching a campaign to demand personhood rights for the river Indus itself. He started to explain what this meant. As more folks arrived and settled down, Shah sb repeated what he had already said. Another group of people came and joined us. This time Shah sb asked Ramzan to speak. He began talking about the plans for the rally, the history of the International River Day, and the importance of Sindhu darya for all fishers of Sindh. However, when he started to explain the idea of *personhood*, he hesitated and looked at Shah sb, laughing and asking him to explain this part. "It's better if you explain this." Everyone started to laugh

Shah sb spoke about humans and the fishers. "We know that humans have the right to exist [*jeene ka haq*], and to exist, we need several things. We need clean water, food, livelihood [*rozgar*]. So, the right to exist then translates into more specific rights."

In the same way, he continued, the river also has a right to exist. And to ensure the existence of the river itself, the river must be allowed to flow to the ocean [*darya ko apne mehboob samund tak behne ka haq hai*]. The right of the river is being taken away from it, by building dams and

walls in the river. “All around us they’ve built security check posts, *nake laga diay hain*” – Shah sb referring to the paramilitary and military check posts that have spread all across the province and country, dating back to the 1980s with the impact of the First US-Afghan war and rapidly increasing during the 2000s with the Second US-Afghan War. “And they’ve also built *nake* in the river itself. The river doesn’t flow, as you know. It is polluted. And PFF, we will fight until the river returns to its natural state. It is the right of the river to flow to its final destination. It is the right of the river to be free of pollution. It is the right of the river to be free, its right to exist.”

Shah sb then explained that the idea of personhood or rights of the river was not new, even if this was the first time PFF was framing the issue in this manner. PFF had been fighting for the rights of the fishers, the delta, and the river for almost a decade. The fishers, delta, and the river were interlinked. He mentioned that the river is a sacred entity in the local cultural and indigenous traditions, even referred to the history of river worship in the region. He also mentioned to the various indigenous people's movements across the world. "In New Zealand, the Adivasi people fought several decades for their river. Finally, the government recognized the rights of the river. In India, the High Court gave personhood rights to Ganga."

Shah sb's speech hit all the points that he had discussed with me in our various conversations and interviews. He mentioned the New Zealand case and spoke about the potential for similar mobilization in Pakistan. Shah sb was adamant that while PFF was inspired by the Indigenous people's movements, the fishers of Sindh were not strictly indigenous peoples. In the PFF campaigns, at times they had sought funding from international advocacy groups who advised them to make the claim of indigeneity (Junejo, interview), but the fishers of Sindh and other areas don't fit the U.N. criteria of indigeneity or ILO's definitions.

Shah sb's speech in the meeting was precisely about the significance of river defense in a place that was far from the current banks of the Indus river. For the fishers of Phuleli, the idea of the right of river and its personhood is tied to the basic notion that historically their broader community, the land and the lakes they live on, were birthed and nurtured by the Sindhu. Reframing the rights of the fishers to the fight for the Delta, and to the rights of river followed this simple logical construction. The discourses of the reverence for the river did not conflict with any orthodox views around Islam, which still holds a central place in the lives of the locals.

River Rally at Phuleli

The next morning was the day of the rally at Phuleli to signal the start of the campaign. After breakfast and some conversations, we walked over to a nearby *dhaba* to pay condolences for a PFF activist who had lost their mother. Walking back to the *baithak*, I saw Ramzan, PFF's district President, had arrived with a large banner and the turquoise flags of PFF [Insert images]. He opened up the banner to show it to others, and reads it out loud – it announced the launch of the campaign for Personhood of the Indus. Others were fixing the turquoise flags on bamboo sticks. We heard noise coming from the NGO run school couple hundred yards away, and about 300 odd school children, young boys, and girls were ushered out to join us. They were excited about this activity and seemed familiar with protests. They chanted slogans. *Aya aya, Mallah Aya* – Here We Come, the Mallah. Someone said they shouldn't use the term *Mallah* which can mean fishers or boaters but is also a caste. *Aya Aya! Mahigeer Aya* – Here we Come, the Fishers.

The kids lined up in rows, girls up front, and Ramzan and Liaqat opened the banner and took it to the front where Shah sb and some others stood. They asked me to join them, and took some pre-rally pictures are taken. I stepped to the side to take some pictures and record videos of

the rally. The rally started with the banner upfront, the PFF flags raised high, and loud slogans were chanted. We walked towards the lakeshore through the main village, about 500 meters downhill, and about halfway, we stopped. The front row and the girls stepped forward to create a gap. I saw a large group of village women approaching us from the front. They had gathered ahead separately. With the formation rearranged slightly, we marched forward again. I walked around and estimated that there must have been upwards of six hundred people at the rally. It looked like the entire village had come out.

We marched to the lakeshore. Luqman started walking next to me and spoke about the turnout. He asked me go to the front of the rally, and showed me a bag full of rose petals that he had saved for us, 'from last night when you and Shah sb arrived.' We'd use these rose petals in a ritual ceremony at the lake. Another young person approached me – he was a member of the local PFF unit, and we had spoken briefly that morning before the rally started. They've had bigger rallies, they said, but that's usually when they go to Sangarh town. Do women always come out in such large numbers? Yes, the women have been at the forefront of our struggle, they said. That didn't always use to be the case – women's mobility is limited, especially when non-community members and male outsiders are present. But PFF has been attempting to change that culture. I recalled that Shah sb and Ramzan had made it a point the night before to ask the exclusively male group also to mobilize among the women.

The rally marched on, slowly, reaching the lakeshore, and then walking along with it for a bit, until we reached a plain and dry patch of land where everyone settled down on the ground. Ramzan MCed the event, thanking everyone for coming, and then speaks about the PFF's struggle. Shah sb was invited to speak to the crowd, where he once again touched on the key points that he had articulated to the male members the night before – the idea of rights of the fishers, the right to

exist, and the rivers right to flow to its final destination, to be free of toxins, and to be freed from all the walls and dams built into that were killing it.

I asked Liaqat if this idea of personhood – that the river can also be given rights, just as humans, made sense. He thought for a few minutes and said, that while the concept was new, it made sense to give the river protection and rights, just as the fishers had rights.

This is a new idea for us, the first time I heard it. But it makes sense to us. We began with the fight for our [fishers'] freedom- the freedom of fishers from the contract system. After gaining our own freedom, Shah sb tells us that we should also fight for the Delta, and Sindhu *darya*. We see what they've done to the delta, and to the river. It is not hidden from us. So, fighting for the river makes sense. It is a fight to free the River.”

When Shah sb ended his speech, we walked to the lakeshore. Some folks stepped inside the water. Some brought big plastic bags full of red rose petals, and people took handfuls of flower petals. Luqman handed me some from a small bag that he had been carrying. "I saved it from last night," he reminded me again. We threw the petals into the river – showering it with love. "We must pray now. We must do *puja*," Shah sb said. The term he used is often associated with Hindu religious tradition, which may not resonate with majority of Pakistani who are fed an official and orthodox narrative of existential enmity with India and non-Muslims, particularly Hindus and Jews. But this diddiment appear to phase any one at the rally, pointing to the fact that in Sindh ideas about religious tradition, spirituality and sanctity are more fluid than in other parts of the country.

The ceremony was brief and subversive. An homage to the times when rivers flowed freely in this land and were revered and feared as sacred beings. I wondered whether these movement rituals would result in broader cultural shifts, but that's a question for another study. Here in this march in Phuleli, the fisher community at large seemed indistinguishable from PFF's organization.

Younger members of the community stepped in to take responsibility when their elders passed away or were too old to be active in protests and the day to day organizational activities.

5.6 Caravans on the Day of the River

PFF's yearly campaigns synthesized older nationalist claims on Sindh's land and resources (*dharti*) and new concerns around deltaic socio-ecosystem (*delta*) by drawing on its widespread organizational setup. The previous sections have outlined the key aspects of PFF's river defense work – their roots in the fishers' communities, building power by winning against landowning elites and military-bureaucracy, challenging large infrastructure, and fighting for the Indus delta's health. PFF had been working on these issues in the long-term and over a large area using seminars, protests, media campaigns, and awareness-raising campaigns among its constituents and wider fisher communities. By mid-2000s, PFF brought together these strands, that operated at the different scales, and drew from transnational riverine movements to launch campaigns for the defense of rivers.

Caravans of Riverine Movement

As an organization, PFF is well integrated into the transnational riverine movement more so than SBT or Samat. Since its founding, PFF has been a constituent member of the World Forum of Fisher People²²³ and marks November 21, the World Fisheries Day, each year with protests,

²²³ “The World Forum of Fisher Peoples (WFFP) is a mass-based social movement of over 10 million small-scale fisher people from across the world. WFFP was founded on 21 November 1997 in New Delhi, India, by a number of mass-based organizations and in response to the increasing pressure being placed on small-scale fisheries, including environmental destruction and ocean grabbing. The International Secretariat of the WFFP is currently located with Masifundise Coastal Links in South Africa.” <https://www.righttofoodandnutrition.org/world-forum-fisher-peoples-wffp>; 8/30/2019

rallies, and cultural events. Since 2005, the PFF started to celebrate the International Day of the River, which had emerged out of the “Curitiba Declaration” of the global movement against dams and for rivers and riverine peoples. By this time, PFF had had major successes against the paramilitary occupation of lakes and the contract fishing system. In 2006, PFF helped organize the World Social Forum in Karachi. These campaigns and connections make PFF an important member of the global riverine movements and the 21st-century alter-globalization movement.²²⁴

PFF’s yearly campaign around the river evolved from seminars and protests into multi-day events, building on its prior work among fishers and the deltaic communities. In 2003 and 2004, PFF organized seminars to raise awareness on the impact of reduced flows in the Indus River on the Indus *Dharti*. A report published in PFF’s newsletter: *Aik Udaas Dharti Ki Kahani* – The story of a saddened Land, covered the 2003 seminar in Karachi.²²⁵ In 2004, PFF organized a conference in Badin in the heart of the inactive Indus Delta, hailed as the First Conference of the Affected People of the Indus Delta. The conference brought together people from Keti Bandar, Kharochan, Jaati, and other parts of the active delta, and invited civil society organizations, Sindhi nationalist parties, and mainstream political parties.²²⁶ By 2005, the yearly celebration of the International Day of the River became a central part of PFF’s work. Similar to the work in 2003 and 2004, the

²²⁴ For Boaventura de Sousa Santos and many others, the World Social Forum is an institutionalized expression of this period of anti-globalization or alter-globalization movement (Santos & Rodríguez-Garavito, 2005). If that is to be taken as an indicator, then PFF’s involvement in organizing the WSF of March 2006 in Karachi suggests its strong role in this global movement. PFF worked with other Pakistani NGOs, activist and advocacy groups to host the World Social Forum in Karachi, the sixth forum that was held simultaneously in India, Pakistan, etc... and attracted about 60,000 people from 48 different countries. All this momentum and activity had created broader alliances, and PFF was also able to tap into resources from advocacy-oriented NGOs, like Oxfam and ActionAid, and channeled these resources into its various struggles – including the fight for the Indus Delta and the River itself.

²²⁵ Nawaz, M. A. (2003, April). Paani ka aalmi din aur Indus Delta ki kahani. *Fisherfolk Newsletter*, (Feb-April 2003), 12. Sheikh, A. (2003, April). Aik udaas dharti ki kahani. *Fisherfolk Newsletter*, (Feb-April 2003), 9–11.

²²⁶ PFF. (2004, July). Indus Delta ke mutasareen ki conference. *Fisherfolk Newsletter*, (June-July 2004).

PFF held seminars in major cities and towns, often paired with ceremonies on the river or lakes as the one at the 2018 Phuleli rally.

Eyewitness accounts of these river ceremonies describe a gathering of the Fisherfolk on the dry river bed and invoke the idea of the life and death of the river. One account links the death of the river with the river infrastructure development project and criticizes the state and the Bank for denying their culpability in the demise of the river.

“The river is in pain; it is left dying due to the diversions and cuts upstream. And the people are raising their voice for the river, but the government continues to claim that any water flowing to the ocean is a waste and must be saved in reservoirs.”

The account distinguishes PFF from the other actors in the water politics of Sindh by claiming to be the only organization in Sindh that celebrated the Day of the River on the river -- in the fishing village of Matka near Kotri barrage, a thousand people gathered, with women and children in large numbers. They chanted slogans "Water for Indus Delta, Water for drinking, Water for River Indus," "We reject all Dams," "Long live fishers unity, long live Pakistan Fisherfolk Forum"²²⁷ Political party representatives, Sindhi intellectuals, and academics, and other activists attended. Local and national media covered this event. Some international media groups also reported on it. The speakers described the plight of the delta and its people, criticized the dams, and referred to the global movement against dams. They pledged to link up with this global movement. Interviews with PFF's leadership and members also give evidence of this sense of connection with the global struggles of other fishers and riverine peoples.

²²⁷." Darya-e Sindh ke kinare Fisherfolk ka ijtima'. (2006, March 14). *Fisherfolk Newsletter*, (April-June 2006), 10.

Starting in March 2009, PFF launched successive campaigns around the International Day of the River in the form of caravans for the defense of Sindhu (darya yatra).²²⁸ The first caravan started on March 1 at Kharochan, deep in the belly of the dry river near the coastline, passed through the Indus Delta with multiple stops and events along the way, and culminated in a large rally on the Kotri Barrage on March 14. In subsequent years, PFF strategically selected the goals and titles of the campaigns, plotted the routes of the Caravans, and organized various activities that built up to the 2018 demand for the Personhood rights for the Indus River.

Table 2: Major river campaign events from various years

Year	Representative event	Campaign title/theme
2003	Seminar on World Water Day, March 22	Indus Delta and Water Shortages
2004	Conference of Affectees of Indus Delta	Peoples' Right to the River and Water
2006	International Rivers Day, Gathering	Impact of Dams on River Indus
2009	Caravan from, Kharochan to Al-Manzar	Water is life; Right to Water; Rivers must flow free
2010	Caravan	Sindhu Yatra March
2011	Rehabilitation work for 2010 floods	
2012	Launch of a year-long campaign	Keep Rivers Free
2013	Caravan – Kotri Barrage to Islamabad	Keep Rivers Free
2014	Local campaigns; March 14 rally	Restoration of Delta; Keep Rivers Free
2015	Caravan, marches	
2017	Caravan and March	Protect Our Rivers and Delta
2018	Local events; March 14 big protests	Personhood Right for Sindhu Darya

Adopting New Ideas of Rivers

The yearly caravans deliberately introduced new ideas around the rights to water and, eventually, the rights of the river but also insisted on locating these in the existing cultural and

²²⁸ PFF's own terminology around these yearly River caravans varies, using the political term 'long march' and interchangeably using the Urdu terms *کاروان* borrowed from Farsi or Persian that is also the root of the English term Caravan, or *قافلہ* qafila borrowed from Arabic, or the term *yatra* (*یاترا*) borrowed from Sanskrit words. These terms have different connotations, some tied to spiritual pilgrimages, others to trade, and some even to military expeditions. The use of multiple terms, used interchangeably may not be deliberate, but serves to highlight that these caravans are envisioned to have political, cultural, spiritual, intellectual, and economic dimensions.

political idioms. The first two Caravans of 2009 and 2010 aimed to broaden the issue from the problems of the people and ecology of the Indus Delta to bring in ideas prevalent in global movements for water and rivers. The organization selected themes such as "water is life," "the right to water" and "free-flowing rivers" and circulated a communique to introduce this 'new philosophy of water' to PFF's members, allies, and the media.

An essay, available in English, Urdu, and Sindhi and widely circulated among PFF's member, noted that water was not a mere chemical object understood by a scientific formula, but the true essence of water was found in the verses of Sufi and Sindhi poets who spoke of the life of the river. The author referred to the classical poetry of the 18th century Sindhi Sufi, Shah Abdul Latif Bhittai, Greek philosophers, the Bible, Hindu spiritual traditions around Ganga, and Quranic verses on rivers and streams of heaven (*Jannat*). Insisting that "the natural flow of the river is God's blessing," and therefore must be protected.²²⁹ Instead, the state and international capitalists, via the World Bank, had imprisoned the rivers, all to the benefit of large landowners, urban residents, factory owners and to the exclusion of fishers, indigenous peoples, and the riverine and deltaic communities

“[The state and IFIs] have imprisoned rivers, diverted rivers, changed the ecology of water by introducing [modern] irrigation systems for agricultural development, hydropower to produce electricity, dams for storage and reservoirs, displaced millions who depend on the rivers and its natural resource the riverine community; destroyed river ecology, and deltas, forests, and displaced millions living on the banks of rivers.”²³⁰

The development paradigm increased in Pakistan's debt, while the modern irrigation system created the problems of waterlogging and salinity, water scarcity, and the "death of the

²²⁹ Concept Note and Invitation for International Rivers Day, 2009;

²³⁰ Shah, M. A. (2009). Dams ki mawjudgi mein dariyaoN ki bahali mumkin nahi. *Fisherfolk*, (Apr-Jun 2009). (Shah, 2009)

delta, mangroves, and fishes.” As an organization of the fisher, riverine communities, and the people of the Delta, PFF believed that “water is life” – a self-evident truth that founds the basis of the struggle of riverine communities across the globe. Instead of water as commodity, the “new philosophy of water” considered waters as a fundamental right, a collective natural resource that belonged to people. To imprison the river was not only a crime against humanity and nature but a grave sin – the communique noted. The essay linked the safety of the people to the safety of the river and ended with the demand that the state decommissions one large dam -- a step to guarantee the rights of the fishers to live freely and the right of the river to flow freely:

The river must fully alive by flowing from its origin to its end in its full joyous glory so that the river remains safe, the riverine people remain safe, people’s livelihood, and the riverine ecology is safe [protected]. To follow this new philosophy of water and restore the river at least one dam must be decommissioned. And a social movement must begin to put this philosophy in place. Because all across the world, movements for the restoration of rivers and decommissioning of the dam are going on, due to which several dams have been decommissioned.

These essays signaled PFF’s call to action to start a new type of riverine movement for the defense of the river. The speeches of PFF’s leader and the proceedings of River Caravans demonstrate how the new and old ideas were synthesized in the discourse and practices of the movement. Video recordings, newspaper reports, and the PFF’s internal documentation of the first two caravans demonstrate how the discourse founds the basis of the speeches, slogans, and conversation throughout the river caravans.

Shifting Ethnic Discourse of the River

In the discussion on the Indus Delta in this chapter, I’ve noted that the PFF adopted the notion of the Delta, as a hydrologically understood classification of land, and transformed this into

a political category by building a sense of belonging and affiliation with the territory among the fishers of the Sindh. The innovation built on existing ideas of Sindhi ethnonationalism that were grounded in historical grievances around the distribution of the Indus Waters. Influential Sindhi nationalists, like G.M. Syed use the term *desh*, or country, for the Sindhi homeland and contest the upstream diversion of the Indus flows. PFF, on the other hand, focused on linking the river (*darya*) with the Sindh *Dharti* -land, introducing the English term *delta* into this nationalist discourse. An overview of the interaction between nationalists and PFF during the river caravans demonstrates how this shift plays out in the public sphere.

Video footage of the 2010 long march, titled “Sindhu Yatra March,” shows the caravan starting in Kharochan, where the river meets the ocean. A large crowd of about two thousand people gathered next to the river. Most of these looked part of the local communities, men women, and children, and many were carrying the flags of PFF that were fluttering in the strong wind. The main banner for the rally was written in Sindhi and translated to: "Caravan for the Restoration [*bahali*] of Sindhu *darya* and the Indus Delta.”

On the one hand, the use of the term *Sindhu Darya* (سندھو دریا), the ancient name of the river (Sindhu) and the Urdu/Sindhi term for the river (*darya*) signaled a connection to the historical struggle around the river. On the other hand, the term *Indus Delta*, written in Sindhi script (انڈس ڈیلٹا) with the modern Latin name of the river (Indus) along with the English term (*delta*) pointed to the influence of new environmentalism and hydrological notions of territory.

The contrast in the PFF and Sindhi nationalist position is evident in their interactions throughout the caravan. In subsequent days, as the Caravan marched through various towns, PFF’s local unit members and broader allies joined them. Some groups are recognizable from their flags – these include flags of mainstream political parties, like the Pakistan People's Party, or the

nationalist groups like the Red and Black flag of Rasul Bux Palijo's *Awami Tehreek* or the blue, white and red of *Sindh Taraqi Pasand Party*. A group of young activists of *Awami Tehreek* held banners and chanted slogans to demand the release of Indus water for *Sindhu Desh* (homeland or country).²³¹

PFF's slogan focused on *darya*, *dharti*, and *delta*. When speaking about the people impacted by the dam, while the issue is still around the lack of water and damming and diversion of *Sindhu* river in Punjab and upstream areas, the emphasis is as much on the fishers as on the *Sindhi* peoples, as much on the destruction of the "Indus Delta" as on the problems of *Sindh dharti*.

The recording of the speeches through the caravan and the final Day of the River also demonstrates this difference. For PFF Chairperson Muhammad Ali Shahs, the focus is on the freedom of the river – “If there are no dams on *Sindhu*, then the river will be free [liberated, *azad*] and there will be prosperity [*mauj-masti*, leisure-pleasure],” he noted in one speech. “The livelihood of *Sindhi* people depends on the restoration of *Sindhu darya*,” he observed in another location, in between clips of the march, with people chanting “Destroy the dams, Save *Sindh*”, “We March, We March – For the River, We March; For the fisher, We March; For *Sindh Dharti*, We March.” In another clip, Shah sb can be seen standing on the truck loaded with a sound system and water coolers for the marchers, speaking passionately in his powerful style of oration:

We won't accept the construction of dams by the state [*riyasat*]. This long march is against any and all dams built on *Sindhu darya*. These dams have destroyed *Sindh dharti* [the land of *Sindh* province]. *Sindhu darya* is the birther of *Sindh dharti* [*Sindhu* river gave birth to the *Sindh* land/territory]. *Sindhu darya* is the mother of *Sindh dharti*. That is why we won't tolerate any dam on *Sindhu darya*, not at all. We will not tolerate it at all.

²³¹ The idea of *Sindhu Desh* was popularized by the *Sindhi* intellectual and political leader, G.M Syed who started his political career during the *Khilafat* Movement days of the First [European] World War – referring to the demands for the autonomy of the *Sindh* province, which continued to shape the *Sindhi* nationalist politics after the creation of *Pakistan*. The slogan for water for *Sindhu Desh* harkens back to the *Sindh Punjab* water controversy.

On the final day of the Caravan, many prominent Sindhi nationalist leaders and political groups were invited to speak on the stage. Ayaz Paliyo, Rasul Bux Paliyo's son,²³² emphasized the crimes against Sindhi people when the Pakistani state and the Sindhi elites aligned with the state agreed to the development of Tarbela and the Indus Water Treaty. Others spoke about the lackluster support by political representatives, as the federal government, Punjab, and Wapda were proposing plans to build mega-dams like Kalabagh and Bhasha dams. In contrast, while the PFF chairperson addressed the issue of dam and national politics of water distribution, he also emphasized the context of local struggle of the Deltaic communities and fishers, and the broader significance of the International Day of the river... "when communities, fishers, indigenous people, all around the world march for the protection of rivers, for the protection of Delta, against all dams."²³³

If you read the history of this land, if you study the science of this land, then you will know that it is a fact, we have experts and intellectuals sitting here, they can verify that the dharti (land), Sindh dharti was born from the Sindhu darya.

Performances of River Caravans

Throughout the long-march, PFF incorporated performances that symbolically emphasized the plight of fishing communities, particularly the women who are traditionally responsible for bringing water for household consumption. The clip cuts to several PFF women standing on the front of the rally, handed small clay pots (*matka* or *gharra*) that are traditionally used by women to fetch potable water. As the water recedes in the river and aquifers, the distance women have to travel has steadily increased, often walking for a couple of hours in one direction to receive

²³² Rasul Bux Paliyo was present in some of these events, though he had been less active in the public sphere due to his old age. He recently passed away.

²³³ Video footage of PFF's 2010 Caravan and Day of the River.

water.²³⁴ At the rally, they carry the clay pots on their heads and walk a few miles, before stopping and breaking the pots on the street – a symbolic act of rebellion and resistance, and chant slogans demanding the release of water in the river, and for ‘releasing’ the river from imprisonment by the dams.

The ritual ceremonies at the river banks, as performed at Phuleli, were also performed in this caravan, as the procession crossed the Sajawal bridge in Thatta. The video footage shows a large mass of PFF caravan crossing the bridge – it seems that others from the Badin and Thatta district have joined them. They stop in the middle of the bridge to throw water petals in the river. The river channel had some water, but this was seawater that had traveled upstream with the high tides.

Shah sb had a poetic way of speaking about this ‘sea intrusion’: "The river is the oceans beloved. When the lover doesn't reach the beloved, the ocean starts to walk inland in search of the beloved." The interpretation is steeped in the mystical poetic tradition, particularly in the writings and songs of Shah Abdul Latif Bhittai and his seven love stories with strong renunciant rebellious women as the protagonists who defy social and natural laws in search of their lovers, often imprisoned by the ruler or their own families, these tales speak about the ordeals. The poetry recitations, folk music, and theater performances at PFF's event often draw from the verses of the Shah, Shah Abdul Latif Bhittai, to connect the modern struggles of the river and the riverine people with those of these classical figures of folklore.

²³⁴ Interviews, PFF members, Ruqayya Usman

Other traditions are also drawn upon – the metaphor of *Karbala* known across the Muslim world is used to refer to the denial of water to the people of the delta.²³⁵ A popular new interpretation of an old song has become the PFF anthem: *Jaag Mallah Jaag* – wake up fisher, wake up! Your land and water are being stolen. The song builds to a crescendo, and as the energy rises people get up to dance, with the final lines, repeated as in the state of trance or *haal* in Sufi traditions of attaining gnosis – *Jaaga Jaaga, Mallah Jaaga* – Awake, the fisher (mallah) is Awake now.

These discourse and performances, synthesis of new and old ideas of river defense, and the shift in the politics of Sindhi nationalist are evident in the large event held on March 14 at Kotri Barrage. PFF's chairperson, Shah called upon the fishers and the allies, to pick up the struggle for the sake of the land and the river, and to take the caravan further upstream, all the way up to Tarbela dam until that dam is decommissioned, and all the way to Islamabad so that no more dams are built.

"We have marched from the empty belly of the river, from the delta, all the way up here to Al-Manzar [Kotri barrage]. Now I call upon all of you to bring out the people for Sindhu darya. If you read the history of this land, if you study the science of this land, then you will know that it is a fact, we have experts and intellectuals sitting here, they can verify that the dharti (land), Sindh dharti was born from the Sindhu darya. I request that we unite and come together to save the river Sindhu darya... to restore it.

²³⁵ The grandson of Propher Muhammad (SAWS), Imam Hussain (AS) in the desert of Karbala, was denied water by Yazid's forces. This constitutes a powerful narrative and grieving ritual every *Moharram* significant for *Shi'a* tradition of Islam and resonates widely with Sunni and other traditions of Islam as well.

Spreading the Riverine Defense Upstream

The PFF announced its intent in March 2010 to launch a river-wide campaign with a large Caravan traveling upstream along the river and going all the way to Islamabad. Muhammad Ali Shah laid out a plan for the next stages of the campaign. The strategy was geared towards building alliances, spreading from the Delta and the fishers to Sindhi people, and then to the upstream areas beyond Sindh. The end goal of this campaign would be to travel all the way upstream to Tarbela and ask to decommission the Tarbela dam. Shah noted that the 2010 Caravan was merely the first stage of the campaign to defend the Indus river. He urged Sindhi nationalists and allies to start the second stage by traveling along the Indus River to the Sukkur and Guddu Barrages. The third stage would take the movement to Tarbela dam.

To start the second phase and [we'll] march all the way to Guddu barrage [in Northern Sindh...and then we will march to the Tarbela dam. I urge the nationalist parties and civil society groups to bring out a hundred thousand Sindhi peoples and if a hundred thousand [lac] Sindhi people march all the way to the Tarbela Dam, then [the state] will have no choice but to free the Sindhu darya from Tarbela dam and decommission the Tarbela dam.

The final and fourth stage would be to take the rally to save rivers to Islamabad. The only way to save the Indus river was to build a mass movement that takes the fight to the centers of state power, to the doors of the investment banks and the World Bank, to those who are destroying the river, the delta, and Sindh.

Until that time when Sindhi people come out in hundreds of thousands to rally for the river, for Sindhu darya, for all the five rivers [of Punjab], to save the rivers, to save the Sindh province, until we go to Islamabad in hundreds of thousands, in large numbers, we won't be able to get our rights. Today on March 14, the Day of Rivers, we have thousands of fishers of Sindh that have gathered here. They've decided to save the Sindhu darya. And if you agree with us, if you have decided then stand up, and raise your hands [camera pans to the crowd, and everyone had stood up and are raising their hands in the air,], so we pledge that we will fight to free Sindhu darya ... [all the speakers on the stage also gather around the podium,

close to Shah sb] Let's form a wide alliance and come together to protect the Sindhu darya.

The plans for a Caravan to Islamabad took a couple of years to materialize, primarily because, in the summer of 2010, Pakistan experienced historical levels of flood in the Indus River that wreaked havoc across the country and directly impacted the deltaic and riverine communities.²³⁶ Consequently the 2011 and 2012 campaigns focused on outreach and awareness work that targeted urban and upstream groups. At a seminar, PFF's General Secretary, Saeed Baloch, who is also a rights activist, emphasized the need for guaranteeing the right to water, which was the basis for the right to livelihood, food, and the existence of the people of the Delta. "If people in Islamabad and Karachi have the right to water, for which these rulers are taking out loans to build dams and reservoirs, then so do the people of the Delta and Sindh *qaum* (nation)."

The two-week long Caravan from Kotri barrage to Islamabad began on March 1, 2013, with the central slogan or theme of "Save the Indus River." The death of the river, attributed to lack of water due to dams, diversions and pollution, started at Kotri barrage and made a slight detour to the shrine of Shah Abdul Latif Bhittai at Bhit Shah, where a cultural and musical event was organized. The Caravan consisted of several buses and cars with a core group of about 200 people that traveled and the number grew along the journey. Thousands attended the various protests and rallies across the country. The Caravan stopped at various shrines, such as the shrine of Shah Abdul Latif Bhittai near Hyderabad, and Pir Zarki Sarkand, Sachal Sarmast, Zinda Pir in

²³⁶ PFF's *management* wing, the one dealing with NGOs and donor-funded projects, had been involved with some community-based projects around building livelihoods and disaster preparedness, largely keeping these activities separate from the PFF's *Tanzim* or political organization. In 2010, the scale of the disaster and the impact on riverine communities directly impacted PFF's membership base. At the same time, the fishers and the boaters were proved to be a critical resource in the disaster rescue, relief and rehabilitation projects. But in terms of the river campaigns, the work was delayed until 2012,

Sukkur, and Khwaja Ghulam Farid at Kot Mithan in Punjab. Tracing the sacred geography of the river, the Caravan also stopped at the various irrigation dams (barrages) of Sindh and Punjab provinces – Sukkur, Guddu, and Taunsa. The speeches and rallies emphasized the role of Sindhu *darya* to birth the Sindh *dharti*, and the problems of building large dams. PFF's activists reported that they received warm welcome from the various communities of fishers along the way as they made their various stops.

In Punjab, the PFF met up with the Siraiki activists and Sindhu Bachao Tarla. PFF had been part of the various Sath and events organized by Sindhu Bachao Tarla over the years, and also had links with people like Khadim Hussain, Mushtaq Gaadi, Fazal Rab (see chapter 3 & 4). Sindhu Bachao Tarla had also visited PFF and the Indus delta in prior years, and PFF had sent some teams in Punjab to organize local fishers in local units. During the 2012-14 period, PFF also opened up a local unit at Tausna, with activists of Sindhu Bachao Tarla.²³⁷

During the 2011-2013 period, PFF and SBT had jointly participated in a campaign for debt cancellation, particularly targeting the debt incurred by the World Bank loans for the costly construction and maintenance of the Indus Basin Irrigation System. The 2013 Caravan sought to build alliances of the deltaic fisher with the wider communities of the Sindh province and brought together fishers of Punjab, who joined the 2013 Caravan under the banner of SBT to travel to Islamabad. Khadim of SBT noted that about 100 odd people from Taunsa barrage [two buses] joined the PFF Caravan. But outside of the fishers of Siraiki areas and few socialist and progressive allies, PFF's agenda of decommissioning dam to protect rivers did not gain wider traction in the

²³⁷ This relation didn't last long and ended on a sour note. Part of the problem was with the fact that without a local *tanzeemi* unit, PFF had started a donor-funded project around contract fishing, which didn't gain momentum. Sindhu Bachao Tarla activists faced the question of whether to subsume their local group into a PFF local unit or to continue to organize on multiple fronts. Despite these tensions, the ties between the core activists of PFF and SBT remained strong. Interviews with PFF members Ayub Shan, Muhammad Ali Shah, and SBT members, Khadim Hussain, Shakoora Ahmed, Fazle Rab Lound

Punjab province, as the public opinion and political groups in Punjab have historically been in favor of building more dams in Pakistan while crying foul when India attempts to build dams in the upstream areas. PFF's activist report that they had the goal of media outreach, and held seminars in some cities in the Punjab province, to create awareness around the issue of the deltaic people among the civil society.

The 2013 Caravan to Islamabad was a historic march of the fishers of the Indus Delta, the Sindhi people, the fishers of the Siraiki region, and the country at large. The PFF carried on in subsequent years.²³⁸ In 2015, the campaign centered the claim that the Indus deltas must be made the fifth stakeholder along with the four provinces in the discussion around the distribution of Indus water. The campaigns of 2016 and 2017 followed along these lines, for the protection of the river and the delta, with the goals of raising awareness and building wider alliances that could help ensure sufficient release of water in the river and the decommissioning of mega-dams.

By the fall of 2017, PFF decided to launch a new campaign to demand not only the Restoration of the Indus Delta but Personhood status for Sindhu darya. I've already described the launch of this campaign at Phuleli, and how this new idea resonated with the local PFF members. In the next section, I'll briefly comment on certain aspects of this 2018 campaign and its broader impact on riverine resistance in Pakistan.

5.7 The River Reborn

The riverine movements of indigenous peoples and environmentalist groups that are demanding rights of nature influenced PFF's strategies and campaigns. When I first met Shah sb

²³⁸ Tragedy struck the 2014 campaign as PFF's women leader Tahira Ali Shah lost her life in a road accident while rushing to a protest with her husband, Muhammad Ali Shah.

in his Ibrahim Hyderi office in December 2017, he brought up the case of the Whanganui river that was given rights as a living entity after a long struggle by the Maori tribe with the New Zealand government.²³⁹ He also mentioned India, where, for a brief period lower courts granted Ganga similar personhood status, only for the Supreme Court of India to revoke this decision. Over our various conversations, he and other members of PFF spoke to me about legal cases in Argentina and the United States, where lawyers had used various animal rights laws to contest for the rights of nature. Of course, the examples of Bolivia and the Ecuadorian constitution came up frequently.

For social movement scholars, the decision to use a certain frame, the rights of nature, or nature as a person, is usually a decision made in terms of its mobilizing capacity. Similarly, we can think of certain political opportunities, or availability of resources, diffusion of new ideas from other places. Many of these analytical lenses can tell us *something* about PFF's mobilization. For instance, there is certainly a diffusion of environmentalist ideas as PFF worked to raise awareness around the destruction of Indus delta. The campaigns for the 'rights of fishers' also speak of diffusion of other ideas. Ideas of river defense and new opportunities to mobilize with environmental issues influenced PFF.

The idea of river defense emerged amidst southern movements in a variety of cultural, historical, and material conditions. In many places, claims of indigenous sovereignty recognized by national constitutions allowed for negotiations for rights of nature – as in the case of Ecuador or New Zealand. In other places, like Pakistan, the nature of non-settler colonialism and state formation has not created a distinct and politically relevant category of indigeneity that the fishers and riverine communities can use. In this way, they had to adopt a different route that both align

²³⁹ Roy, E. A. (2017, March 16). New Zealand river granted the same legal rights as a human being. *The Guardian*. Retrieved August 30, 2019, from <https://www.theguardian.com/world/2017/mar/16/new-zealand-river-granted-same-legal-rights-as-human-being-similarly>,

with and transforms existing political discourses around the river. I have argued that this is the case when the idea of *dharti* is used not in the sense of an indigenous people's territory, but rather a land where the fishers are some of the most ancient settlers. The link of fishers with land expands the Sindhi political discourse around the provincial claim on the river Indus, steeped in the decolonial politics of the early 19th century. A critical factor in this shift was the awareness of the cumulative effect of river infrastructure development in the Indus Basin over a century, on the human and non-human communities of the Indus Delta. With PFF's caravan the *delta* itself becomes a political concept rather than a scientific entity. The *delta* as *dharti* then brings to center the very idea that the delta is a land that is formed by a free and healthy river. PFF's campaigns and caravans then draw these links between the freedom of the river with the health of the delta, tied to the freedom of the fishers themselves.

Based on my observations in the 2018 rally and video and documentary archives of the various rallies and campaigns, it's clear that the links between dams and the health of the river have spread among the PFF's membership base. Simple metaphors of the imprisonment of the river, the *darya* as the mother-birther of *dharti*, and the idea that the river has the right to be free, just as fishers do, resonate with the fisher community. A sense of ownership of the Fisherfolk organization and empowerment due to various victories created a sense that while the goal for decommissioning dams is a difficult one, it is within the realm of possibility. The idea of river defense for the poor fishers and deltaic community is not only made legible through the analysis, discourses, and performances of PFF in these river caravans. It became centrally linked to their demands for their right to exist and prosper.²⁴⁰

²⁴⁰ Insert interview quotes from the March 14 rally, Noor Muhammad, other participants and members, etc.

After the 2018 rally that I attended, we stopped briefly at the PFF office in Hyderabad to recharge before heading back to Karachi. The office was full of activity as the PFF was preparing press packages for various newspapers and television channels – mostly targeting Urdu and Sindhi media. Shah sb received a phone call– it was by a senior editor at the major English newspaper, DAWN, founded by the founder of the country Muhammad Ali Jinnah and read widely by the intellectual elites, state bureaucrats, and the consultants and development professionals hired by IFIs. They wanted a press release from PFF and some pictures. Shah sb was busy with meetings and asked me if I could translate the Urdu version into Sindhi, which I agreed to do so.

The next day Dawn published an editorial titled "Rights for rivers."²⁴¹ "It might sound like a new thought to some," the editorial began before crediting the PFF for advancing this idea "in a rally to mark International Rivers Day in Hyderabad," an idea that is "worth taking a closer look at." After giving a legal history of the idea, the editorial discussed PFF's demand for personhood right to the Indus, "coming from a group that has its livelihood directly tied to the river." The key ideas from PFF's discourse are summarized – the river has been 'imprisoned' by infrastructure development, heavily polluted, too long looked like a natural resource to exploit for economic growth. The editorial ended with the note "Granting rights of personhood is one tool being used around the world for this purpose; given local adaptation, it is an idea worth exploring for Pakistan as well."

Back in Hyderabad, we left for Karachi after a long day of travel and marching. Shah sb looked tired – the day was unusually hot for March signaling the onset of a hot summer. As we crossed the bridge over Sindhu, grey clouds appeared on the sky and it started to rain. Shah smiled,

²⁴¹ Editorial. (2018, March 16). Rights for rivers. *Dawn*. Retrieved March 16, 2018, from <https://www.dawn.com/news/1395573>.

turned to me and said: "This was a good day for the river. Even the sky is showering it with love."
I am not sure which outcome mattered to him more – the editorial or the rain.

The Pakistan Fisherfolk Forum is arguably the most significant river defense movement in Pakistan that had a humble beginning in social work among the coastal fishing communities of Karachi. Founded in 1998 as a social movement group representing the fishers of Pakistan, PFF built a massive organizational structure with 70,000 members across the Sindh province and other parts of the country. Moving from the coastal areas inland, the PFF won significant victories fighting the illicit and licit enclosure of Sindh's wetlands and aquatic resources by the capitalist, landed, and military elites of Pakistan. The group also contested several river infrastructures projects, particularly mobilizing against the project-proximate impacts of drainage canals on the fishing communities. The challenges to the enclosure of the water bodies of southern Pakistan, the PFF built an impressive organization while fighting the 'visible' causes of distress for its constituents -- the infrastructure projects and the fishing regimes. The sizeable organizational structure and visionary leadership built PFF's 'strategic capacity' as the group fought on multiple fronts.

However, PFF's path to river defense came through a synthesis of the long-standing conflict over water distribution, articulated in Sindhi ethno-nationalist claims, and the new understanding of the cumulative impact of river infrastructure development on the Indus Delta. PFF synthesized old and new discourse through awareness-raising and advocacy campaigns. From 2003 to 2009, PFF's work on the Indus River primarily relied on seminars, protests, and ritual ceremonies in various locations. By 2009, PFF consolidated these different strands of action into

a coherent multi-year strategy centered on River Caravans leading up to the Day of the River celebrations on March 14.

For the ideas of river defense to talk hold, the PFF's creative use of ideas received from transnational groups and recaptured from the everyday practices of the fishers, helped PFF transform the existing discourse of water and river politics in Sindh. In so doing, PFF transformed the term "delta" from a hydrological classification of land to a politically contested territory, moving beyond long-standing Sindhi nationalist political claims around water distribution. The emphasis was no longer restricted to concerns of irrigation, largely benefitting the rural landed groups. The social movement of the southern fishers of Pakistan fought for their territories, including the Indus Delta, as a significant part of the land (*dharti*) of the Sindhi people particularly. They linked the rights of the fishers to the rights of the river and demand that to liberate Sindhu from the shackles that are the enclosure of the Indus River.

6: CONCLUSION

This dissertation wrestled with the question of why and how ideas of river defense take hold among riverine activists and communities along the same river. The idea of defending rivers is a new phenomenon that emerged out of the exchange of ideas, information, resources, and strategies in the social movement arena in response to broader political and cultural shifts at the turn of the 21st century. The river defense movements of Pakistan were influenced by the global anti-dam movement and the rise of non-profit advocacy campaigns that challenged dam builders in new and old state arenas. However, the waves of successful challenges, resource mobilization, political opportunities, and exchange of ideas in-of-themselves do not explain why river defense emerged in some places along the same river and not others.

Ideas of river defense emerged in the context of anti-dam and riverine resistance in response to unique and unfolding aspects of human-river relations, when human control over rivers had directly caused the ‘death’ of rivers, variously interpreted as the decline in the health of human and non-human riverine communities and the overall state of a river socio-material existence. In other words, ideas of defense of rivers and nature differs from pre-existing reverence for rivers and nature – a reverence that is often associated with sacred or secular traditions of religiosity and spirituality. Our awareness of the age of the Anthropocene has made us reconsider human social organization as a particular type of destructive force that matches the geological and cosmic forces of previous eras. Whether viewed in secular terms or religious, some humans are now playing gods with nature, non-humans and other humans. The death of rivers by modern social formations calls for the defense of rivers.

In this context of the death and defense of rivers, the study attempted to consolidate insights from recent studies of water politics and nature-human interactions, and reworked the classical theory of political economy, namely the theory of enclosures. The theory of enclosure has been variously developed and heatedly debated in the study of the consequences of changes in land-use patterns as a model for the study of changes in human-nature relations at large. The theory particularly attends to the dialectic of altered human-nature relations and the state-societal interactions. Extending the theory to the case of rivers, this study examined the particular material, cultural, and political dimensions of river enclosures and used this theoretical lens to study three riverine movements along the same large river, the Indus River in Pakistan.

To understand why and how ideas of river defense take hold in some places along the same river, I've attended to the material consequences of different projects, the overall 'enclosure' effect in terms of the political and cultural dimensions of the state, in particular to the national and transnational bureaucrats that governs rivers, and the historically and geographically specific contexts in which riverine movements emerges. In concluding this dissertation, I draw attention to three schematic findings of the influence of materiality, political institutions, and cultural production in state and non-state arenas to highlight the factors and conditions that create a stronger likelihood for the emergence and spread of river defense movements, and how activist realize the potential for river defense through their strategic and creative praxis.

6.1 Types of River Enclosure:

This study has extended the ideas around the enclosure of the land commons to the study of the enclosure of the Indus River, focusing on the separation and mixing of land and water through river infrastructure development. Studies of historical enclosure of the land commons trace

the socio-economic, political, and cultural impact of the denial of access to land that was previously accessible to land users through legal and customary arrangements. Scholars have debated the historical peculiarities of land enclosures and generated transhistorical theories about the role of the enclosure movement in transforming society at large, with privatization, proletarianization, the entrenchment of the market economy, socio-economic disembeddedness, and the countermovement that responded to these changes and generated the welfare state model. However, the intention here was to introduce water in the mix of things and to consider what does it mean to enclose a river and deny access to the water commons to certain sections of society with prior access to riverine resources.

With attention to the particular material demands of controlling water, the study has presented a preliminary framework for the analysis of river enclosures. The empirical analysis is based on the study of a large river basin, developed over a century and a half, with attention to three types of river enclosure technologies. These are mega-dams for *stocking* water in large reservoirs, irrigation canals for *channeling* the river stock and flow, and the *reducing* water from certain areas, particularly the delta. Each type of these enclosure alters land and water use through new forms of mixing of these elements through the construction of large riverine infrastructure. These three technologies have distinct material impacts that generate particular kinds of deprivation and exclusion, which influence the formation of riverine resistance.

The first type of river enclosures *stocks* river flows and primarily generates problems of displacement and land loss. The immediate impacts are felt in the upstream areas, where the water stock is created, with a one-time shock of land dispossession and displacement. In essence, the river no longer exists in the form it used to in the reservoir area, where valleys are flooded, and the land is 'enclosed' in a way that prior use is no longer possible. Large dams are the main

technology used to generate water stocks. These dams also create other effects – they can produce methane and can adversely impact downstream human and non-human communities as well (McCully 2001). In general, dams and stocks are used in tandem with the diversion and disappearing forms of enclosures discussed below. In this sense, the downstream communities are also impacted by the consumptive and non-consumptive use of the stock of water. The impact of consumptive uses is most evident with reduced flows in downstream areas. The non-consumptive uses, such as hydropower dams, don't reduce the overall quantity of flows but introduce new seasonal variations, which can also impact the lifecycles of human and non-human communities. In general, stocks have an independent effect in the project-proximate or upstream areas, and a cumulative effect as part of the broader integrated system of river enclosures.

Dams generate socio-material impacts that directly and immediately impact the upstream communities and depending on the pre-existing social and cultural local structures and the broader political opportunity structure can influence forms of riverine resistance. At the Tarbela dam, the land under the reservoir included a variety of communities, including landowners, tenants, landless, fishers, and tribal groups. However, when the dam was built the state relied on landownership as the primary criteria for resettlement, with many riverine, landless, and tribal groups displaced with little or no restitution. Early political mobilization also framed the issue in terms of land. While the downstream communities were also impacted, the effect cannot be solely attributed to the dam alone, and the existing political mobilization or opportunity structures discouraged and repressed alliances between upstream and downstream groups.

The second type of enclosure *channels* the river flows, creating new and productive uses of land while denying certain communities existing land and water usage. This type of river use is most similar to the historical enclosure of the common lands elsewhere, where the prime drive of

the enclosure was to increase productivity and create a community of rational farmers with clearly demarcated land ownership patterns. Unlike the case of England, where the Enclosure Act envisioned fencing land and draining it to make it productive, the enclosure of the Indus basin land was premised on additional irrigation into areas that did not previously receive perennial canal irrigation. The stock and flows were diverted to make land productive, generate a reliable stream of revenue, and create new communities of rational irrigators based on utilitarian principles of water allocation and land cultivation (Gilmartin, 2015).

Canal irrigation enclosure shifts a river's hydrological cycles from regular inundation-based irrigation to perennial irrigation in areas where water was previously not available. The case of the Chashma/Taunsa area demonstrates the social and material impact of redistributing water by diverting the Indus canal flows. In these types of enclosure, the redistribution of river flows causes shifts in hydrological and hydro-social formations, which generate *overflow* and *underflow* problems. Problems of waterlogging and salinity, floods, droughts, and disintegration of viable pre-existing modes of irrigation can generate an adverse social and ecological footprint. Overall, these forms of enclosure seek to alter irrigation practices and create new communities of irrigators for the sake of productivity, but at the expense of traditional irrigators, pastoralists and increases environmental risks. The variations in project designs and geological and hydrological features of a particular river system, along with existing social arrangements, determine how these impacts are experienced.

Beyond the issue of land displacement, this variety of adverse impacts form recurring shocks and disintegration of social structures, with consequences for riverine resistance. In the case of central Pakistan, the irrigation enclosures destroyed traditional rod kahi (spate-irrigation systems), increased flood risk from the mountains and the river, and introduced new forms of cash

and monocropping systems. Resistance to the second type of enclosure is grounded in concerns with loss of traditional irrigation systems, flood risk, ecological problems, and the disintegration of social institutions with the introduction of new socio-hydrological systems. The problems seem to be recurring, stemming from the drive for a year-long supply of water, resulting in water management, drainage, and flood mitigation challenges for the state and communities. In this context, riverine resistance had to deal with ongoing and emergent challenges, mobilizing over large areas with uneven distribution of benefits and costs, and to wrestle with countering the slow disintegration of cultural and social systems directly linked to water management and irrigation practices.

The third type of river enclosure *reduces* the river flows to certain areas, as a necessary effect of stocking and diverting river flows elsewhere. While this type is connected to the first two, it has its distinct effects. The most evident case is the adverse impact on the deltaic region or any area that previously used to receive water but no longer due to the stock and diversion. In a sense, the disappearance of the water in delta creates the most visible impact in terms of the disappearance of river itself. While *stocks* change the shape of a river and *diversion* redistributes river flows, the cumulative impact of the disappearing river flows in downstream areas can create drastic changes that unfold slowly over long durations. In this case, a single project like a mega-dam or one or two-canals may not be the sole cause of the damage. Apart from problems of water scarcity and ecosystem harm, the coastal communities also suffer from sea intrusion.

The disappearance of water and the river creates the most potential for the defense of a river movement, as the river literally disappears in many major deltas. However, historically, deltas are spread over a large area, and the impact of upstream infrastructure development takes a long time. The temporal and spatial displacement of the adverse impacts, from the mountains and

irrigation fields where water is stocked and diverted to the coastal deltas hundreds of miles away, also creates a certain ambiguity and uncertainty about the causes of the river's disappearance. While in the first two types of enclosures, i.e. dams and canals, the cause of adverse impact and benefits are easily identifiable, in the case of the delta this requires certain labors of linking the complex and ambiguous causes with actual river infrastructure development. Therefore, it can be suggested that while deltas have the most adverse impact in terms of river infrastructure development, these are also less likely to result in any significant challenge to river enclosure or to the defense of river in the absence of a direct causal relationship with infrastructure development.

The three types of river enclosures that stocks, supply, and reduce flows, are usually interconnected, often designed with intended and unintended consequences that are spread over large durations and long distances. However, I've made a preliminary attempt to suggest that these different types of river enclosures have distinct impacts, which generate a certain potential for ideas of river defense to emerge and spread. Briefly stated, areas where the 'rivers' are visibly disappearing or 'dying' are more likely to generate movements of river defense. This simplistic, materialist formula seems to be consistent with the cases presented, where river defense emerged in the Indus Delta but not in the mountains at the Tarbela dam. Simple materialist formulas won't explain the case of emergence of river defense in central Pakistan, nor in other parts of the world where river defense movements have focused on mega-dams, such as the Narmada Bachao Andolan movement in India that centered on the Sardar Sarovar Dam and the Movimiento Rios Vivos that focuses on the construction of HidroItuango. In order to explain this, we have to consider the pre-existing communities, their cultural relation to rivers, and the broader political

opportunities represented by national and transnational recognition of certain communities and their claims to nature.

6.2 The Enclosures and the State:

Unlike the enclosure of commons lands that envisioned a limited role of the state and furthered the market-based transaction in land and labor, the river enclosures are investment-intensive, technologically challenging, and generate a tendency for centralized control by the state or other powerful actors. In the case of the Indus Basin, the colonial and postcolonial states assumed total control over the land and river, and the development of river infrastructure envisioned centralized control over the country's resources under large water bureaucracies and a key role of global investors and development experts, primarily represented by the World Bank. The system of governance, with the modern state as the primary controller over river flows, was based on balancing the interests of the global capitalist system, represented by the interests of colonial and postcolonial global and national elites, and the state's concerns for the welfare and public good. The entire enterprise required centralization of control over land and water resources and the state's claim to legitimacy over such authority deriving from the promise of both the technical capacity to tame rivers and provision of benefits to the nation.

The state has to deal with several problems, the 'unintended' or 'unconsidered' aspects of altering river flows generated by the different types of enclosures described in the previous section. The fact that colonial and developmental states distribute resources unevenly, resulting in uneven development, which can generate ethnic grievances, is widely recognized in the scholarly and popular understanding of development and underdevelopment. The failure to address the moral economic concerns of the adversely affected communities, particularly riverine fisher, traditional

irrigators, and tribal or indigenous groups, added to already existing ethno-nationalist grievances that existed in Pakistan. This finding can be generalized to many other cases where existing grievances of resource allocation map onto the inequalities of class, race, ethnic, or gendered social structures. The late 20th century promises of reforms and regulation, with both supply-side changes with additional requirements for environmental and social protection plans, and the demand side with new accountability mechanisms, failed to deliver and tended to focus on individual grievances, prioritizing landowners over fishers, landless tenants, and traditional irrigators.

The enclosure state also faces another threat to its claims of legitimacy beyond the issue of redistribution of national wealth and natural resources. The state then has a difficult task of governing the social and hydrological flows and overflows associated with rivers and water. Historically, the claims of the state and development models, in general, are legitimized through claims of technological capacity and scientific knowledge that allows state and experts to control nature. But we have new awareness of human impact on nature, recognition that these are complex systems, and that that trope of “unintended consequences” no longer offers a viable defense for powerful actors that externalize the harms of these development projects. In this context, the state’s legitimacy is now threatened as the limits of existing forms of governing nature and environment are becoming self-evident.

Ideas of river defense then emerge at the cracks in the fissure of the state’s claims to legitimacy. Here, certain marginalized groups are more likely to question the state’s legitimacy since their claims are not legible to the state. In strict terms of variable causality models, the dominance of landowners and ethnic groups that are generally ‘pro-state’, tend to reduce the likelihood of the emergence of river defense, whereas the presence and active mobilization of traditional irrigators and fishers, with some ethnic identities that channel historic grievances of

underdevelopment into new ideas of river defense. The interaction of grievances on class-based formations (landless, landowners, fishers), water use patterns (riverine, inundation, perennial), and identity-based grievances helps explain where riverine movements are more likely to emerge.

However, it must be noted that these identities are not pre-determined; neither are these stable categories. In fact, the very impact of the river enclosures and mobilization takes the material conditions, or the potential for mobilization, and channels it into existing ethnic and identity-based groups, transforming these very categories in the process. Historical enclosures of land generate new legally legible categories around land ownership and water use patterns. For instance, when the land was being acquired to build a dam or a canal, local landowners, tenants, and pastoralist groups accessed the land through mix of tribal, customary, and legal arrangements, yet many did not hold deeds to their land. Similarly, the creation of a large dam or a barrage can displace existing riverine communities, many fishers, and boaters, and also invite 'outside' wage-labor classes to work in the occupation of labors. In this context, the mobilization of landowners around land allocation issues at Tarbela, fishers in the Delta, and the fishers and traditional irrigators was mobilizing class, ethnic, and indigenous identities that were not salient in pre-mobilization or pre-enclosure periods. In the case of fishers, or riverine groups in general, the lack of representation on state-arena was a prime motivator for the formation of social movement groups SBT and PFF, and these communities arrived at river defense through the process of mobilization and by synthesizing old and new ideas of reverence for rivers, rights of fishers, new notions of indigeneity and an authentic relation to nature, and scientific evidence-based understanding of the harms of river infrastructure development.

In particular, the study has shown that concerns for the river emerged in tandem with the political reinterpretation of territorial defense (Siraiki Waseb in central Pakistan and Sindh Dharti

and Indus Delta in southern Pakistan), where free-flowing rivers were viewed as the life sources for the land and the people of these lands and their way of life. These interpretations used evidence, both in the sense of local knowledge about hydrology and scientific studies of the harms of river infrastructure development, to question the very foundation of state's claim to legitimacy over river control. In effect, this creates a new stage of decoupling of "science" and "rational" authority, as imagined by theorists of state and modernization, and as claimed by colonial administrators, postcolonial bureaucrats, and development experts. This finding is consistent with the broader decoupling of the scientific community's recommendation regarding human-nature relations, most notably in terms of global warming, and the failure of systems of governance to address the challenge. The details of how these activists and communities work with new scientifically validated concepts, local wisdom, and retrieve existing cultural reverence for rivers, have been provided in fair detail, particularly in the description of the Sath and the River Caravans in chapter 4 and 5.

6.3 Two Paths to River Defense

Out of the three social movements discussed, two became river defense movements. These movements represent two distinct paths to river defense. The first emerged as a cultural movement for autonomy that united a multiplicity of interest and identity groups and generated ideas of river defense. The second emerged as a union-like model of grassroots organizing with a large hierarchical political organization of the fisher communities. Both these groups reworked existing and emergent ethnic identities to incorporate new discourses of indigeneity linked to the river, and modern scientific evidence that links river infrastructure with floods, water shortages, and ecological harm.

The first path to river defense movement appears in central Pakistan as a cultural movement of the ethnic identity-based assertion of autonomy over water and land resources, as a historical right of the Siraiki people. It brings together concerns for traditional forms of social organization, spate irrigation system, and the indigenous fishers and riverine people of the Siraiki Waseb – envisioned as the homeland of the Siraiki people. The river features prominently in the poetry and cultural representations of the Siraiki movement. However, the Siraiki cultural and political movement is heterogeneous and multiple visions of development underly different strands – some groups support the development of dams and irrigation canals, and such views also have resonance among the desires of landowners and irrigators who view canal-based irrigation as a means to better income and wealth. The activists of Sindhu Bachao Tarla and Daman Bachao Tarla took new ideas of water activism and river defense, influenced by global and southern movements against dams and river infrastructure, and synthesized these with elements of Siraiki cultural movement. The organizational form is multiple, with focus on grassroots groups that represent particular class and identity hybrids tied to certain territories of land and river – such as daman and Sindhu itself. The larger identity of Siraiki ethnicity ties these diverse groups together and created space for forging deeper alliances and generating discourses that tie Siraiki autonomy to the centrality of Adivasi riverine communities and traditional relation to land, streams, and rivers. The use of Siraiki poetry in protest, and the institutionalization of the Sath, as a neo-traditional participatory space of deliberation and justice opposed to state-centric arenas of courts and grievance redressal committees, created the space of the ideas of river defense to emerge, as I have demonstrated in detail in chapter 3 and 4.

The second path to river defense comes from union-like organizing among the fishing communities in the southern Indus Delta region. Here, the PFF began as a movement of fishing

communities of Pakistan as part of the transnational mobilization of fishing communities under the World Forum for Fisher Peoples. The founding members of PFF were primarily based in coastal fishing towns who mobilized on a variety of issues centered around social welfare, the illicit enclosure of wetlands by the paramilitaries and local elites, the legal enclosures of wetlands in the shape of contract fishing regimes, and issues of illegal and harmful fishing practices offshore. PFF aspires to link the fishing communities across Pakistan, in and outside of the Indus basin and can be viewed as a hybrid union and non-profit organizing group. It has a heretical democratic structure, with centralized leadership and a large membership base.

PFF's path to river defense began early, with its participation in resistance against the harms of various river infrastructure projects. However, with time, PFF focused more on the long-term and accumulated impact on deltaic communities. In this, the large organization based allowed PFF to spread awareness about the harms of river infrastructure development, build local power among fishers so they could claim their rights in a historical and political context of sheer political and socio-economic marginalization. With many wins against powerful actors, and a sense of fishers right to the river and the wetlands, PFF incorporated discourses and rituals of river defense by organizing large river caravans each year leading up to the celebrations of the International Day of Rivers.

Both of these riverine movements did not emerge in isolation and were undoubtedly influenced by each other, other class and ethnic-based mobilization in the country, and the transnational and southern movements of indigenous and riverine peoples. While these groups strategically engaged on state-centric arenas, forged alliances with national and transnational actors to amplify their voices, and launched campaigns with clear and deliberate goals, they also invested in building representative forums among their constituents that provided opportunities for

amplifying silenced voices, synthesizing local and trans-local knowledge, and experimenting with new forms of activism and retrieving spiritual practices of river reverence to transform the politics of river defense in Pakistan.

6.4 Rivers of the 21st Century

The idea of river defense emerged in the context of dying rivers and the rise of riverine movements. The transnational alliances of riverine movements in the late 20th century were not only spaces of pooling resources, discussing strategies, or creating united fronts against powerful actors – these were also convergences of different ideas of human-river relations. While some ideas of river defense drew from ancient reverence for rivers and the existential everyday dependence of certain communities on rivers, others come from new scientific discoveries and advancements in knowledge of the human impact on declining deltas and dwindling rivers. The old and the new generated a synthesis of new ideas of river defense.

The broader struggles of indigenous peoples and riverine movements elsewhere also influenced riverine activists in Pakistan, as they responded to new opportunities afforded by new regulatory and accountability mechanisms. However, the Indus riverine movement operated in the historical context where certain socio-material, political and cultural aspects of the Indus enclosure were salient – the varied adverse effects spread over time and space, the centralized bureaucratic state linked with operations of empire or a world system, and the ethnonationalist identities that emerged in response to nation-building project. The emergent transnational shifts influenced the existing contours of political contests and the local cultural production centered around Sindhu.

The death of the river calls for the defense of rivers. This study of ‘river defense’ is distinguishable from other approaches to the study of environmental movements, or nature as a category in general. At the very basic level, it attends to the materiality of the rivers, from the point of view of the state and societal conflicts, but considering how rivers are enclosed over time. Rather than comparisons that focus on technologies (mega-dams), large social movement groups, or national and transnational regimes of political control, I’ve sought to center rivers in the analysis. Rivers are not only generative of life but also of creative ideas and cultural artifacts. It is easy to view them as ‘living’ beings because of their vitality, fluidity, and shifting characters.

Historically, rivers were seen as powerful sacred and spiritual beings. For instance, in the poetry of the Sindhi Sufi, Shah Abdul Latif Bhittai (1689-1752), the river was a symbol for the trials and tribulations on the path to *Ishq* – the love of the divine beloved. When Sohni, one of the seven heroic figures of Bhittai’s work, *Shah Jo Risalo*, sought to meet her lover Mehar, she had to swim across the ferocious Indus River, full of perils and demons, relying on a clay pot and her faith. Two centuries and some decades later, the poetic expression of the river has shifted from the fear of its ferociousness to a lament for its death. The Siraiki poet Ashu Laal bemoans the loss of a dying river, with these verses from *Sindh Sagar Naal Hamesh*, An Eternity with River Indus.

When the River dies, my dearest listen
The eyes die, and the heart dies.
The recognition of our being and our living dies.
The slumber of blue water dies.
It is not just a pair of swans that dies
But the laughter of the River dies.

In the end, the question of river control, enclosure, and river defense is a question of the legitimacy and sovereignty, of political institutions, and the spaces for cultural creativity and deliberation to deal with distinctively 21st-century problems that existing social-political arrangements have failed to solve. The creative synthesis of old and new ideas, scientific and

secular traditions, a new concern and reverence for rivers is not merely a call back to an idealized past, nor the onward march to an idealized future. It is merely a desire to tap into the circular and rejuvenating energy of natural systems. As the old saying goes, one can never step into the same river twice. Regenerating global rivers, while attending to the energy, water, and food needs of riverine and non-riverine communities, may require stepping into the river once more and to flow with it.

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