



HUMAN RIGHTS COMMISSION OF PAKISTAN

FISHING FOR NOTHING

THE SITUATION OF FISHERFOLK IN
SINDH AND BALOCHISTAN

FAHD ALI

SHAKEEL PATHAN LABOUR STUDIES SERIES

FISHING FOR NOTHING

THE SITUATION OF FISHERFOLK IN SINDH AND BALOCHISTAN

Shakeel Pathan Labour Studies Series No. 3



Human Rights Commission of Pakistan

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EXECUTIVE SUMMARY

This report provides a detailed examination of the socio-economic and environmental challenges confronting the fishing communities in Pakistan, with a specific emphasis on the Karachi and Gwadar coastal regions.

The study explores the concept of disempowerment, a phenomenon that arises when marginalised groups, such as the economically disadvantaged, are excluded from political participation and economic decision-making processes. This is particularly pertinent in the context of fisheries, where power dynamics often favour more dominant groups, including higher social classes, traditional authority figures, or state officials. These groups frequently control institutions, encompassing markets and traditional management systems of natural resources. They may manipulate these institutions to legitimise their decisions and behaviour, thereby perpetuating their initial social, economic, or political advantages. Regrettably, the economically disadvantaged are usually the most detrimentally affected by these processes.

Pakistan's marine fisheries are confronted with several challenges, the most critical of which is overfishing. The report posits that the only viable solution to this issue is to reduce fishing efforts, implying a reduction in fishing vessels to alleviate the pressure on marine fisheries. The governance of marine fisheries through the current institutional and legislative matrix faces a multitude of challenges. The country necessitates a review of fisheries legislation to address the myriad regulatory challenges confronting the sector. This is particularly crucial in light of the threats faced by the coastal marine ecosystem, including threats to mangroves in the Indus Delta, which provides breeding grounds for several fish types. Overfishing and ecosystem destruction have adversely impacted the coastal communities of small-scale fishers, rendering fishing an unviable economic activity for many.

In Karachi, interviews were conducted in Ibrahim Hyderi, Gizri Village and Mubarak Village. A common issue that emerged was the high level of indebtedness among the fisherfolk, particularly small boatowners and boat labourers. These individuals often

receive their wages in advance as a loan before setting out on a fishing trip, with the amount deducted from their share of the catch later. However, the share is often not large enough to pay off the principal and the interest, leading to accumulated unpaid balances that run into thousands for ordinary boat labourers.

Another significant issue highlighted was the impact of large-scale urban planning and development in Karachi, particularly in the city's southern part, which includes the coastal areas. Much of this development, especially housing colonies, has taken place on land reclaimed from the sea, destroying traditional fisheries that have been a source of livelihood for Karachi's indigenous fishing communities for centuries.

Three focus group discussions were conducted with Fisherfolk Labour Union Tehreek, Haq Do Tehreek and Pakistan Fisherfolk Forum in Gwadar. Gwadar has undergone significant socio-economic transformations in the past two decades, primarily due to the construction of the Makran Coastal Highway and the development of Gwadar port for strategic reasons. While these developments have brought new opportunities, they have also added to the hardship of the fisherfolk. The increased level of securitisation in the region has made it difficult for them to access the sea to earn a living. Moreover, the Gwadar citizens felt that increased securitisation took away their freedom of expression, movement and association to protect their rights. The report also highlights the rise of vocal and organised resistance to the increasing militarisation and securitisation of the area since the last quarter of 2021.

In conclusion, the interviews and focus group discussions reveal a complex picture of the challenges facing the fishing communities in Pakistan, including high levels of indebtedness, the impact of urban development on traditional fisheries, and the socio-economic transformations brought about by large-scale projects like the China-Pakistan Economic Corridor. The rise of local movements in response to these challenges underscores these communities' resilience and determination to secure their rights.

This report, therefore, serves as a critical resource for understanding the

multifaceted issues faced by Pakistan's fishing communities. It underscores the need for comprehensive and inclusive policy-making that takes into account the voices and needs of these communities. The findings and recommendations presented herein should serve as a guide for future research and policy development aimed at addressing the challenges faced by these communities and ensuring their sustainable development.

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INTRODUCTION

Pakistan's coastline stretches around 1,050 km, reaching the Arabian Sea and the Gulf of Oman.¹ The country's marine zone covers more than 30 percent of its geographical area, with the continental shelf area of Sindh and Balochistan being approximately 35,700 square kilometres and 14,500 square kilometres, respectively.

Pakistan declared its Exclusive Economic Zone (EEZ) of 200 nautical miles (nm) in 1976, which encompasses approximately 240,000 km². The fishing policy implemented in 1995 divided the EEZ into three zones, each catering to vessels of various sizes. Zone 1 (coastline to 12 nm) allows small-scale fishing, which is supervised by the provincial administration. Zones 2 (12–35 nm) and 3 (35–200 nm) are for medium and large-sized vessels, respectively, and are under the federal government's jurisdiction.²

Pakistan's fisheries industry has a modest impact on the country's economic growth and social development. According to the Economic Survey of Pakistan 2020/21, the fishing sector contributed 2.01 percent to agriculture value addition and 0.39 percent to the GDP. Between July 2020 and March 2021, fish production amounted to 690,600 metric tonnes, with marine fisheries accounting for 465,200 metric tonnes and inland fisheries contributing the remaining amount. However, this represented a 1.5 percent decline compared to the same period of last year's fish production.³

Despite the decline in production, Pakistan's fish and fishery product exports continue to contribute significantly to the country's foreign exchange earnings. In the fiscal year 2021, Pakistan exported 136,370 metric tonnes of fish and fish products, generating USD 303.606 million. The major export destinations for Pakistan's fish and fish products include China, Thailand, Malaysia, Sri Lanka, the Middle East, and Japan.⁴

The fisheries industry in Pakistan is characterised by a diverse range of species, vessel and equipment types, and management approaches and is divided into three

sub-sectors. The first sub-sector is the marine capture fishery, which includes around 3,600 bottom trawlers from Sindh, 5,550 gillnetters operating in Sindh and Balochistan waters, and approximately 20,000 smaller vessels fishing in coastal waters, particularly the Indus Delta and creek area.⁵

The second sub-sector is the inland freshwater capture fishery, which involves about 56,000 people fishing in reservoirs, lakes, canals, and the Indus River, often in leased waterbodies. The third sub-sector is the aquaculture industry, which is relatively small but expanding, primarily focused on carp but also producing tilapia and trout in the hills. In 2020, aquaculture produced around 162,462 tons of fish,⁶ mainly using traditional semi-intensive polyculture methods, where multiple non-competing fish species are raised in the same pond. Punjab and Sindh are the leading producers in the aquaculture sub-sector.

Pakistan's fishing activities vary across different regions. The province of Sindh has the most diverse fishing activities, including coastal fishing, marine fishing and inland fishing in the Indus River and its associated streams and lakes. In contrast, Balochistan's fishing is primarily marine due to its extended coastline and limited inland waterbodies. Punjab's fishing activities revolve around the abundance of rivers, canals, lakes, and dams. Fishing in Khyber Pakhtunkhwa and Gilgit Baltistan is less economically important due to the colder climate and mountainous terrain. Here, fishing is carried out primarily for local consumption and recreation purposes. Conversely, aquaculture is mainly concentrated in Punjab and Sindh provinces, with a lesser presence in Khyber Pakhtunkhwa.

The fishing industry is a significant source of employment for millions of people in Pakistan, with the majority working in marine fisheries. Roughly 130,000 full-time and 75,000 part-time workers are employed in the industry's four principal fishing harbours, with the Karachi Fish Harbour accounting for 90 percent of the catch.⁷ Unfortunately, workers in the fishing sector face numerous challenges, including marginalisation, low wages and no access to social protection schemes. Despite the hazardous nature of the work, there is no formal occupational health and safety system in place, and the employer-worker relationship remains informal. Workers

are also excluded from labour laws as the fisheries sector is considered a part of agriculture. This leaves workers vulnerable to exploitation and abuse, with limited legal recourse. Additionally, the depletion of fish resources poses a significant threat to the livelihoods of fisheries workers. The reasons for this include overfishing, pollution, reduction in freshwater flow from the Indus River, use of harmful nets and the activities of foreign deep-sea trawlers.

The Pakistani government has taken some steps to improve the working conditions of the fisherfolk in Pakistan, mainly through legislation, policies and programmes. For example, the Fisheries Ordinance 1980 provides a legal framework for regulating fishing activities in inland and marine waters. The ordinance defines different categories of fishing licenses, sets limits on fishing gear types and sizes, prohibits destructive fishing methods such as dynamite or poison fishing, and establishes closed seasons and areas for conservation purposes. However, this ordinance has been criticised for being outdated, inadequate and inconsistent with international standards such as the Voluntary Guidelines on Securing Sustainable Small-Scale Fisheries prepared by the UN Food and Agriculture Organization (FAO).⁸ Therefore, there is a need to revise and update this ordinance to address the current challenges and opportunities facing the fisheries sector in Pakistan.

The government has introduced and implemented various policies and programmes to improve fisherfolk communities' socio-economic conditions. For example, the National Policy and Strategy for Fisheries and Aquaculture, introduced in 2007, lays down a national policy with a sectoral approach, specifically focused on the fisheries and aquaculture sector. The overall objective of the policy is to increase the contribution of the fishing and aquaculture sectors to national economic growth, poverty reduction, food security, national fish supply, and improvement of the marketing of fish and aquatic products. However, this policy has not been fully operationalised yet due to a lack of resources, political will and stakeholder participation.

Another example is the Benazir Income Support Programme (BISP), a social safety net programme initiated by the government in 2008. The programme provides cash

transfers to poor women from various segments of society, including fisherfolk. The programme also offers complementary services such as education, health, insurance and skills development to enhance their human capital and economic opportunities. Unfortunately, these steps have not been sufficient or effective enough to address the complex and interrelated problems affecting fisherfolk communities' livelihoods, rights and dignity. There is a need for more comprehensive, integrated, participatory, gender-sensitive, human rights-based approaches that recognise the specific needs, challenges, opportunities, aspirations, and contributions of small-scale fishers in Pakistan.

An important to understand is that fishing in Pakistan is not considered a state-recognised 'labour' activity. This has important implications. Fisherfolk cannot form unions for their rights and collective bargains. They have generally resorted to making broad-based or cross-class fisherfolk organisations that speak on various issues affecting small to large-scale fishing vessels and workers. One of the implications of fishing not being recognised as a distinct labour activity is how it is recognised in the labour force surveys. This makes it challenging to use these surveys to extract information specific to fisherfolk.

The establishment of the Pakistan Fisherfolk Forum (PFF), a registered civil society organisation that works to advance fisherfolk and peasants' social, economic, cultural and political rights was an important step taken in 1998. The PFF has a network of more than 100 local organisations across Sindh and Balochistan provinces, representing more than 300,000 fisherfolk families. The PFF advocates for policy reforms, conducts awareness campaigns, organises capacity building training, provides legal aid and emergency relief services, promotes alternative livelihoods and sustainable fishing practices, and mobilises fisherfolk communities for collective action.

A HUMAN RIGHTS-BASED FRAMEWORK FOR SMALL-SCALE FISHERIES

Three primary reasons have influenced the adoption of a human rights perspective in the policy initiatives for small-scale fisheries. The first is institutionalising human rights approaches to development in the UN system, focusing on implementing the Right to Food.⁹ The second factor is the recognition that small-scale fishers tend to be marginalised and often include disadvantaged groups who face obstacles to participation in decision-making.¹⁰ By adopting a human rights framework, it is possible to address the underlying causes of these inequalities that stem from uneven power relations and the neglect of states and other influential non-state entities to protect and enforce the rights of all individuals. The third motivating factor is the rise of civil society-led movements. These movements aim to recognise and secure the traditional and communal tenure systems of indigenous peoples and small-scale producers and resource users. This is in response to state and private-sector-led efforts to strengthen private property rights or state ownership and private leasing arrangements in various sectors such as livestock, water, energy, and fisheries.¹¹

In recent times, human rights have become increasingly important in international development policy. They are sometimes used as an alternative or addition to approaches that concentrate on national economic growth and local livelihoods. The ‘rights-based approach’ to development maintains that human rights are crucial to achieving development goals. This is because international human rights standards emphasise the importance of individual freedoms and capabilities, which are key aspects of development that cannot be measured by economic indicators alone.¹²

When applied to natural resource management, a human rights-based framework focuses on the institutions and power dynamics that control resource allocation and access. These factors are crucial for the livelihoods and well-being of people and are sometimes referred to as environmental entitlements.¹³ Granting the poor access

rights to natural resources as part of their right to a livelihood creates a legal and moral obligation that cannot be easily dismissed. This allows for the defence of these rights through advocacy that refers to both domestic and international legal frameworks.¹⁴ This approach also highlights other factors besides access to resources, that can negatively impact the health and well-being of communities that depend on natural resources.

Examining human rights issues in the fisheries sector is especially relevant considering the recent adoption of human rights principles in international norms. For example, since 2007, the FAO and its civil society partners have increasingly incorporated human rights into their policy support and governance advice for the small-scale fisheries sector.¹⁵ Likewise, international agencies such as the International Labour Organization (ILO) and the International Maritime Organization have advocated for the rights and protections of seafarers and fishers for many years through targeted work within countries and establishing international standards. These efforts have led to international agreements such as the ILO Work in Fishing Convention (2007; also known as C188).¹⁶

The Work in Fishing Convention is a far-reaching and comprehensive instrument for labour in the fishing industry. It provides recommendations for a wide range of concerns, including minimum age, medical examinations, manning and hours of rest, crew list requirements, fishers' work agreements, repatriation, recruitment and placement, payment, accommodation and food, medical care, occupational safety and health, and social security.

The Convention covers all types of workers involved in fishing, regardless of their formal or informal employment status and the scale of the fishing operation they work in. While it has only been ratified by a few countries, and its implementation is limited, it sets forth a framework of essential terms and conditions necessary to ensure decent work in the fishing industry.¹⁷ As such, it can serve as a valuable foundation for analysing labour concerns in the sector and exploring ways to surpass the minimum requirements.

Pakistan is one of the countries where decent work in fishing remains an elusive goal. According to the ILO's NORMLEX database, Pakistan has ratified several ILO conventions related to fundamental principles and rights at work, such as those on forced labour, freedom of association, collective bargaining, equal remuneration, discrimination, minimum age and worst forms of child labour. However, it has not ratified C188 nor implemented its provisions effectively.¹⁸

SMALL-SCALE FISHERIES AND POVERTY

The issue of poverty in small-scale fisheries in developing countries has been widely researched and documented in academic papers and reports for several decades. This section, which relies heavily on Béné (2003),¹⁹ presents key findings from relevant research that shows the intricate interplay between poverty and the fishing sector.

As early as 1974, the FAO highlighted that ‘the people engaged in these activities and their families continue, with few exceptions, to live at the margin of subsistence and human dignity’ (FAO, 1974, as cited in Copes 1989).²⁰ Similarly, a technical paper for the FAO starts with the sombre observation that ‘the fundamental problem of small-scale fishermen around the developing world is their persisting absolute and relative poverty.’²¹

Despite widespread reports of poverty in small-scale fisheries, there have been few attempts to analyse the structure of poverty in this sector. This lack of research has led to misconceptions about the relationship between low income and poverty in fisheries, particularly in developing countries where subsistence fishing is common. Additionally, there is often confusion between the endogenous and exogenous causes of poverty in fishing communities. This confusion hinders the development of effective solutions to address poverty in fisheries.

There are two contrasting interpretations of the relationship between poverty and fisheries. The first interpretation is that fisherfolk are inherently poor due to the nature of their profession. This view is based on the perception that poverty is endemic to fishing communities and that fisherfolk will always be poor, no matter what they do. This view has led to the implementation of numerous development and poverty alleviation programs over the past four decades, based on the assumption that there is a causal relationship between being a fisherman and being poor.

The second significant interpretation commonly conveyed in the literature about fisheries and poverty is that fisheries, due to their open-access nature, offer a livelihood to the most deprived people, such as the landless, through fishing activities. This is the perception of small-scale fisheries as an employer of last resort or as a safety valve for the poor. The FAO notes the existence of this potential safety valve mechanism, where open access to inshore and inland fisheries serves as an insurance and safety mechanism against shocks for poor people who have lost their means of survival in other economic sectors or regions.²²

The ‘last resort’ dimension of open-access fisheries is of utmost importance and relevance to the poor, who often have limited access to land and resources. Contrary to conventional wisdom, the open-access nature of fisheries is a key mechanism that allows people to enter the fisheries when other economic or institutional avenues are limited or impeded. This approach highlights the positive impact of open-access fisheries on poverty alleviation. Acknowledging the poverty of households involved in fishing activities, it is crucial to note that they are not necessarily poor because their livelihood is fishing. Instead, they are often already poor and landless individuals who are able to subsist by fishing. In other words, the adage ‘They are poor because they are fishermen’ can be reversed to read ‘They are fishermen because they are poor (and landless).’

This perspective has been echoed by several authors, including MacKenzie (1979), who noted that the common perception of poor fisherfolk must be inverted to recognise that poverty often drives individuals to fish as a means of subsistence.²³ However, the open-access nature of fisheries, while viewed as a safety valve for the poor to enter the sector, is also seen as a potential cause of economic and biological over-exploitation of fish stocks. Over-exploitation results in lower catches, further impoverishing the already vulnerable and landless fishing communities.

The notion that ‘fishermen are the poorest of the poor’ continues to be widely accepted among policymakers. This viewpoint stems from two distinct lines of reasoning that, despite originating from opposing premises, ultimately arrive at the same conclusion.

The endogenous origins of poverty in fisheries

The first of the two approaches to understanding poverty in fisheries is to view it as related to the low level of natural resources, with its origins and causes rooted within the fisheries sector. This perspective, referred to as the ‘conventional wisdom on poverty in fisheries’ by Copes (1989), suggests that poverty in fisheries is an endogenous issue.²⁴ This ‘conventional wisdom’ can be traced back to Gordon’s 1954 paper on fisheries economics, where he discussed the open access nature of fisheries and its impact on low-income among fisherfolk in Canada.²⁵ He argued that the ‘common property nature’ of fisheries led to rent dissipation and, as a result, low income for fisherfolk.

Hardin (1968) later built on this argument in his famous paper ‘The Tragedy of the Commons,’ where he predicted that the pursuit of individual interests in a society that believes in the freedom of the commons would ultimately lead to ruin.²⁶ While Hardin’s argument has been used mainly to emphasise the biological consequences of the tragedy (over-exploitation of resources), he also predicted the economic dimension of it.

The logic behind this approach is simple: the open access nature of fisheries allows more and more people to enter the fishing sector, which leads to the over-exploitation of resources, dilapidation of the rent, and ultimately the impoverishment of the fishing community. This approach posits that poverty in fisheries is related to the level of resource exploitation, where over-exploitation leads to low catches, low income and poverty. This is reminiscent of the Malthusian perception of poverty, where a lack of resources due to population growth leads to poverty and famine.

There is substantial evidence from around the world that small-scale fisheries are often subject to over-exploitation, either by the communities themselves or by external actors such as industrial fleets. This over-exploitation can have a significant impact on the livelihoods of fisherfolk. For example, Kurien (1993) showed that the introduction of modern trawlers in Kerala, South India, in the 1970s led to the over-exploitation of local fish stocks, negatively impacting the local population in

terms of income and food supply.²⁷ The author's examination of Kerala's artisanal fisheries provides a clear illustration of the almost irreversible dynamics that link the over-exploitation of resources to the degradation of living conditions for dependent communities.

The exogenous origins of poverty in fisheries

The second major school of thought takes a different approach, where the fishery sector is not considered in isolation but rather in relation to other sectors of the economy. Within this approach, poverty in fisheries is explained through the concept of low opportunity incomes, where the lack of alternative incomes outside the fisheries sector drives or keeps fisherfolk's incomes at low levels due to labour transfer between sectors. Cunningham (1994) makes a key contribution to this view and argues that assuming an open-access fishery and perfect labour mobility, even if the fishery sector generates an economic surplus in the short term, there will be pressure to enter the fishery, resulting in a wage re-equilibrium between the fishery and non-fishery sectors in the long-term.²⁸

This approach argues that poverty in fisheries is often due to a lack of alternative employment opportunities, particularly in rural and remote areas where small-scale fisheries are usually located. This argument has been widely used to explain the occurrence of poverty in fisheries, especially in developing countries. Smith (1979) and Panayotou (1982) have highlighted the lack of alternative employment as a critical factor contributing to low living standards in small-scale fisheries.²⁹ Panayotou concluded that the main reason for the poverty of small-scale fisherfolk is the lack of sufficiently attractive alternatives. Within this approach, the roots of poverty stem from outside the fisheries sector, and the low income of fisherfolk is not related to the exploitation level of resources or the dissipation of rent but rather to the economic situation outside the fishery.

Gordon and Cunningham's studies, based on standard neo-classical economics, initially focused on explaining the origins of low income in fisheries. However, their rationales have since been redirected and used to explain the occurrence of poverty in

fisheries, particularly in small-scale fisheries in developing countries. Although these two approaches do not recognise the exact origin of poverty in fishing communities, they have often been treated as a combined single phenomenon where the internal mechanism of the tragedy of open access is presented together with external low-income earning opportunities to explain poverty in fisheries.

For example, Bailey & Jentoft (1990) wrote that fisheries resources are generally open access, with no boundaries or restrictions on who may become a fisher or how the resource may be exploited.³⁰ They argue this is the essence of Hardin's tragedy of the commons and reflects what has occurred in many underdeveloped countries. They also conclude that labour mobility indicates the close connection between fisheries and other sectors of the national economy and that problems of fisheries development cannot be solved by reference to the fisheries sector alone. Instead, they suggest improving economic opportunities outside the fisheries is the only way out of this conundrum. Similarly, the FAO noted that unconstrained labour mobility and open access presuppose poverty in fisheries will continue to persist as long as there is poverty elsewhere in the country.³¹

The confusion and mixing of different interpretations of the nature and structure of poverty in fisheries has likely hindered the development of an appropriate research framework and contributed to the persistence of the view that there is an immutable relationship between poverty and fishing. In other words, the general idea was that fisherfolk are poor simply because they are fisherfolk.

The central role of socio-institutional mechanisms in fisheries

There are various ways to measure poverty. Some methods use monetary and economic measures, while others use concepts such as access, entitlements, capabilities, and freedom to bring an institutional and political perspective to poverty. Several frameworks are used in the literature, including sustainable livelihoods, vulnerability, social well-being, and field-based, bottom-up and participatory tools to address social exclusion. These approaches and concepts demonstrate that poverty is a multidimensional issue.

The primary lesson derived from multidimensional poverty, particularly from the application of Sen's concept of entitlement to natural resources,³² is the acknowledgement that the relationship between population, production, resource availability, and poverty is not straightforward.

Drawing on Sen's analysis of famine, there has been a growing awareness that to comprehend poverty in relation to natural resources, it is essential to shift our focus away from the resources themselves and towards the role of politics in determining access, control and redistribution of these resources. This perspective is supported by further discussions on the subject by Devereux (1996), Gasper (1993), Gore (1993) and Swift (1989).³³

The control that social actors, whether individuals, households, or groups, have overfishing resources is determined by their position within their society or community. Factors such as ethnic group, religious affiliation, land or livestock ownership, social rank, and kinship all play a role in determining access to resources. Additionally, institutional arrangements, which may include a complex and overlapping combination of traditional or customary rules and modern management system regulations, legitimise and govern these commands. Therefore, to fully understand the causes and nature of poverty in fisheries, it is necessary to expand the research framework beyond the economic and environmental dimensions to include social and institutional factors.

Institutions and socio-institutional mechanisms can encompass a broad and ambiguous range of elements, including markets, local authorities, moral economy, and reciprocity principles. To differentiate between the various elements that may restrict or limit an individual's or group's control over resources, a typology was developed by Béné (2003).³⁴ This typology identifies four discrimination processes: social marginalisation, economic exclusion, class exploitation, and political disempowerment. While these mechanisms are closely interdependent and may reinforce one another, they can be analytically separated to understand the underlying causes of poverty better.

Economic exclusion

Economic exclusion can occur when individuals cannot access the necessary capital to enter or operate the activity due to financial limitations. The notion of exclusion contradicts the idea that fisheries are a 'last resort activity' for the poorest, where it is assumed that they can enter the sector due to its open-access nature. Like any other economic activity, fisheries involve entry costs or premiums, such as purchasing fishing equipment and licenses and paying bribes to local government officials or traditional authorities who regulate access to the fisheries, among other expenses. The most profitable equipment is often the most expensive to purchase and operate, and the most productive fishing spots are either privately owned or require high bribes and fees for access. As a result, the idea that fisheries are an open-access sector that serves as a last resort for the poorest is challenged because entry costs and other factors make it difficult for many individuals to participate.

A study conducted by Kremer in Bangladesh examined the seasonal fishing patterns in the Meghna River's catchment area.³⁵ The study found that the poorest section of the population lacked access to fishing during the driest season when the entry premiums, reflecting the expected yields, were at their highest values.

Field research conducted in sub-Saharan inland fisheries found a similar conclusion.³⁶ The study compared households' access to waterbodies in several villages in the Chari Delta (Chad) and along the western shore of Lake Chad (Nigeria). The research revealed that while the richest and middle-income groups had access to the same types of waterbodies, the poorest households only had access to a small portion of the waterbodies exploited by the community. This disparity is due to both 'direct' (financial) and 'indirect' (technical) constraints faced by the poor. The direct constraints arise from the various legal and illegal taxes imposed on access to waterbodies. These overlapping fees create multiple financial barriers that disproportionately affect the poorest and prevent them from entering the fisheries. Additionally, these households face indirect (or technical) constraints due to their lack of adequate fishing equipment and boats necessary to fish in certain waterbodies, such as open waters of the lake.

Social marginalisation

Social marginalisation refers to the exclusion of certain individuals, communities, or groups of individuals from having control over a resource, service or commodity. This exclusion is based on social criteria such as caste, gender, or ethnic origin. Marginalisation is similar to economic exclusion in that it involves the denial of access and use of a resource. However, the two concepts differ in the nature of the barriers to entry: financial in the case of economic exclusion and social in the case of marginalisation.

In rural African and Asian societies, social status and wealth distribution are often influenced by factors such as kin systems, ethnic groups and religious affiliations.³⁷ Similarly, in fisheries, it is not uncommon for certain families, kin systems, ethnic or religious groups to be considered 'legitimate, rightful' participants, leading to the social marginalisation of other individuals or groups. This phenomenon of marginalisation can be observed in various forms, such as discrimination based on ethnicity, religion, caste, and gender.

In Bangladesh, for example, Kremer found that Muslim communities specialising in fishing activities often engage in collective action to prevent fisherfolk, particularly the so-called low-caste Hindus, from fishing in certain 'open-access' flooded agricultural areas.³⁸ This territorial control is maintained through physical violence and theft of fishing equipment. Similarly, in Sri Lanka, Atapattu notes that 'socio-cultural barriers play a major role in all aspects of fisheries,' highlighting that although Buddhists comprise 67 percent of the population, they only represent 22 percent of the fishing population.³⁹

Marginalisation can also occur based on gender. While men usually carry out the extractive part of fishing activity, fish processing and trading are often carried out by women from the same or non-relative households. These women can face social marginalisation through gender-based segregating mechanisms. For example, in India, researchers reported that fisherwomen have a very low status in the social hierarchy and are often prevented from playing an equal part in decision-making

processes within their families or fishing communities.⁴⁰ They are excluded from membership in fisheries cooperatives, and their contributions to household income through fish marketing, net making, seed collection, and sales do not entitle them to make independent decisions or have access to resources.

Class exploitation

The Marxist theory argues that exploitation occurs when a dominant class takes advantage of a subordinate working class by extracting surplus labour or not providing a fair share of the benefits generated by economic activity. This differs from exclusion and marginalisation, where the poor are not involved in economic activity. The social dynamics of small-scale fishing communities can be complex, with patron-client relationships often playing a significant role in labour relations. Contrary to the belief that these arrangements are outdated, they remain a pervasive feature of such communities.⁴¹

Exploitation can occur through individual patron-client relationships and institutional arrangements such as the leasing system, where waterbodies owned by the government are divided into individual ‘fishing lots’ and leased through an auctioning system. However, due to high lease fees, fisherfolk often cannot afford them, and leaseholders are usually wealthy investors. According to Toufique, most lessees of fishing lots in Bangladesh are past or present members or chairmen of local government institutions.⁴² These individuals usually come from the more powerful sections of the rural population. The lessees of fishing lots, also known as ‘water-lords,’ hire fisherfolk as daily labourers to conduct fishing operations on their behalf. These labourers are paid in cash or receive a small share of the catch, while most sale values go to the leaseholders. According to various sources, these leasing systems have resulted in the institutionalised exploitation of fisherfolk by the rural elite class.

In Bangladesh, the lease system is designed to generate revenue for the government and substantial income for leaseholders. However, this system also worsens the exploitation of fisherfolk, who do not own their produce and only receive a small portion of the full economic benefits. The share of profits given to labourers is

minimised as much as possible, considering their opportunity costs and awareness of fishing as a profitable economic activity.⁴³ Similarly, Cambodia's relationship between fisherfolk and lot owners is often marked by tension, threats, conflicts, and commercial partnerships in subleasing and fishing operations. The main issue with the leasing system is not its inefficiency or lack of functionality, but rather its arbitrary nature, which allows for abuses by those in a stronger position within the relationship.⁴⁴

Political disempowerment

Disempowerment is a complex concept that can be best understood through different dimensions. Friedmann identifies three dimensions of disempowerment: social, psychological and political.⁴⁵ Social disempowerment refers to the lack of access to resources necessary for the livelihood of poor individuals. Psychological disempowerment pertains to the internalised feelings of worthlessness and submissive behaviour towards authority among the poor. On the other hand, political disempowerment refers to the lack of a clear political agenda and voice among the poor.

The political dimension of disempowerment is more pertinent in this study as the poor are excluded from political participation and economic decision-making processes. The problem of power is primarily seen as an inequality of opportunities in people's ability to control their commands. Power is often employed against weaker groups by stronger groups, such as higher social classes, traditional authority leaders, or government officials, who regulate institutions, including markets and resources. These elites will try to set or alter these institutions to legitimise their decisions and behaviour, thereby sustaining their initial social, economic, or political advantages. Unfortunately, the poor are usually the ones most affected by these processes.

Challenges in fisheries in Pakistan

Pakistan marine fisheries face several challenges, foremost of which is overfishing. The only way to address this is to reduce fishing efforts, i.e. only a reduction in the number of fishing vessels can reduce the pressure on marine fisheries. The

governance of marine fisheries through the current institutional and legislative matrix faces several challenges. The country needs a review of fisheries legislation to address myriad regulatory challenges confronting the sector. This is important, particularly in the face of threats faced by coastal marine ecosystems. Threats to mangroves in Indus Delta are concerning since they provide breeding grounds for several fish types. The mangroves in the Indus Delta and the coastal ecosystem are threatened because of deforestation and industrial and domestic pollution that enters the aquatic ecosystem. Both overfishing and the destruction of ecosystems have adversely impacted the coastal communities of small-scale fishers. For many, fishing is no longer a viable economic activity. The social welfare coverage remains poor despite the provincial government's promises to improve it.

Similarly, the inland fisheries face several challenges as well. The current system of auctioning freshwater fisheries cannot ensure the sustainability of the resources. It leads to over-exploitation and is further compounded by the fact that sub-contracting, even though considered illegal, is widely practised. The inland fishing communities have mostly been rendered bystanders as institutional structures for effective community participation in fisheries' decision-making processes and management are absent. The decline in the Indus River ecosystem further complicates this.⁴⁶

Other organisations have also echoed the concerns highlighted above and its impact on coastal communities. ActionAid, in its report titled, 'Taking the Fish,' states that hundreds of fishing communities in Pakistan's coastal areas are being pushed into poverty due to overfishing done by large foreign trawlers.⁴⁷ These trawlers have been allowed to fish in Pakistani waters under an official policy that many consider 'too liberal.' Foreign trawlers often use harmful fishing methods that raise questions of sustainability and make it difficult for smaller local vessels to catch fish.

Khan and Khan argue that the poverty–resource degradation nexus is mediated through a poverty–credit market nexus and that addressing this problem will resolve imperfections in both the credit and product markets.⁴⁸ Furthermore, fishery degradation also has other causes and addressing these and empowering communities will ease the poverty–resource degradation nexus.

INSIGHTS FROM INTERVIEWS AND FOCUS GROUP DISCUSSIONS

Karachi, Sindh

Key informant interviews and focus group discussions were held in fisherfolk communities to ascertain their working conditions. The fisherfolk were interviewed in Ibrahim Hyderi, Gizri Village and Mubarak Village. Several issues came up through these interviews that can help us understand the working and living conditions of the fisherfolk. Below we discuss the specific issues that were highlighted in the interviews.

High levels of indebtedness

One common feature of the working conditions of the fisherfolk is the high level of indebtedness among the fisherfolk in general and boat labourers in particular. A boat labourer, called *khalasi*, usually receives his wages in advance as a loan before he sets out on a fishing trip. The amount is deducted from his share in the catch later. Usually, the share is not large enough to pay the principal and the interest. It was common to hear stories of accumulated unpaid balances that run into thousands for ordinary boat labourers. The story is similar for small boat owners who usually take a loan for fuel and other costs, including food and salaries loaned to the boat workers. The lenders are usually loan sharks or ‘mole-holders’—auctioneers who buy the catch once a boat returns to the harbour or the jetty. Most fisherfolk expressed their inability to get out of debt. Some have been indebted for so long that they cannot recall the principal amount or the amount they have already paid to the lender.

Urban planning and development in Karachi

Karachi has seen large-scale urban planning and development in the southern part of the city, which has the coastal areas. Much of this development, particularly of housing colonies, has taken place on the land reclaimed from the sea. This has destroyed traditional fisheries that have been a source of livelihood for Karachi’s

indigenous fishing communities for centuries. One such community lives in the historical Gizri village. Hussain Dorai comes from a community usually referred to as *qadeemi mahigir* [traditional fisherfolk]. They are called *qadeemi* because they are one of the few communities left in the Sindh coastal belt that fish only using simple nets. They do not possess boats or any other instruments to fish. This is also reflective of the abject poverty of these communities.

Gizri village was absorbed by the Defence Housing Authority in the 1980s, and this small village is now surrounded by large townhouses built around it. It would not be an exaggeration to say that the private villas have largely cordoned off this small community. Hussain Dorai is an old man in his 70s. He was unsure whether he was born before Pakistan came into being or after its creation. In any case, his face tells a story of a lifetime of hardship and poverty. The memory of urban development still seems fresh in his mind when he tells me that ‘one day these large machines just showed up on the sand and started putting it in the sea... then the sea started to disappear slowly.’ He recalls how in the 1960s, he would walk to the sea with his family, carrying their nets on their backs to fish. There was plenty to catch by then, and fishing gave them a decent living. Life is tough, and work is challenging to come by now. He tells me that because of reclaiming land, fishing in the sea has become tough. Speaking to a young man in his late 20s from the same village revealed a different story. I asked him why he and his friends would want to fish when the catch had dwindled. He replied that they have no skills or know any other way of living or being. Lack of resources and education restricts the young men and women from the community from accessing other work opportunities. In better economic times, some from each household turn to other forms of physical, menial labour to diversify their incomes. In an economic downturn, they all invariably resort to fishing to earn a living.

Overfishing, industrialisation, downstream flow, and climate change

Fisherfolk interviewed in Ibrahim Hyderi reported several issues that negatively impact their livelihoods. Overfishing is their foremost concern because there is no effective regulation on the number of boats that can go into the sea for fishing.

Another reason for overfishing is the kind of nets used to catch fish. *Bhullo* and *gujjo* [fishing nets made of fine mesh] have been used for decades to catch fish, particularly prawns and shrimps near the shore. Fisherfolk have long protested with the authorities to ban these nets as it destroys fish hatcheries. The Sindh Government ultimately legislated against it but has not taken any steps to ensure that the net is not used for fishing. The participants also pointed out that corruption and weak law enforcement exacerbate these issues, with those responsible for regulation possibly involved in illegal activities.

Industrialisation in and around Karachi has been identified as a significant source of depletion of catch. The participants argued that the sea is used as a large dustbin for untreated industrial effluent. The city or the provincial authorities have not made any effort to check this. As a result, when the effluent enters the sea, it destroys the fisheries near the shore. This affects the small-scale fisherfolk the most as they do not possess the resources to go deep into the sea for fishing purposes. An interesting argument presented by fisherfolk is that the advent of climate change happened much earlier for them than for the rest of the country. The argument is that the construction of dams on upstream locations on the Indus River has reduced downstream water flow from Kotri, Sindh. The reduced flow downstream has had harmful impacts on the Indus Delta region in Thatta and Badin, the effects of which have also been felt in Karachi. This concern was expressed in informal conversations with other fisherfolk as well. They particularly want to emphasise the complex ecosystem chain in which the fishing sector exists. A healthy fishery can only be maintained by ensuring the overall ecosystem's health. The other source of pollution identified is the city's waste dumped into Malir and Lyari rivers, which eventually flow into the sea.

High-handedness of coastal authorities

The local fisherfolk face considerable difficulties navigating sea waters due to cumbersome procedures introduced by coastal authorities.⁴⁹ One particular challenge they pointed out is the strict rules introduced by authorities after the Mumbai attacks. Fisherfolk appreciated the security concerns but argued that it has made fishing costly for most fisherfolk. These difficulties include both legal and illegal

requirements that they are expected to fulfil before they set out for fishing. The fisherfolk also complained about the port charges, which add to their expenses. This was an issue, especially when they did not see the port authorities doing anything that improved the working conditions of the fisherfolk registered with them. The fisherfolk also now have to face excessive inspections from the coast guard, often resulting in fines for minor issues. The fishing community is burdened with fees from various authorities, such as the Maritime Security Agency, Customs and Karachi Port Trust, regardless of their usage of these services. Furthermore, they face challenges in renewing boat ownership and navigating bureaucratic procedures tied to their national identity cards. The fisherfolk emphasize the need for assistance and support from relevant authorities to improve their situation.

General issues facing the fisherfolk on the nearby islands

The interviews provided an insightful glimpse into the lives of the island communities of Karachi, particularly concerning their struggles with water supply and their efforts to preserve their cultural heritage. Historically, these communities have depended on boats and water lines to secure supplies. However, these methods have grown unreliable over time, and while occasionally provided, governmental aid has not been a consistent solution. This problem is further compounded by the expansion of Karachi, which increases the demand for already scarce resources. Despite these challenges, one respondent fondly reminisced about the peaceful island life, a haven free from crime, theft and violence. This tranquillity is something they fear could be endangered as the city continues to expand. In addition to these issues, he emphasised the importance of cultural preservation, particularly the traditional songs related to the sea and fishing. This underscores the community's determination to keep its unique cultural practices alive amidst change.

Gwadar, Balochistan

Three focus group discussions were conducted in Gwadar with three organisations: Fisherfolk Labour Union Tehreek, Gwadar, Haq Do Tehreek, and Pakistan Fisherfolk Forum, Gwadar chapter. The fisherfolk in Gwadar are caught in a political battle

with the state to secure their rights as ordinary citizens and as fisherfolk. Gwadar has gone through a major socio-economic transformation in the past two decades. One can trace the origins back to the federal government's decision to construct and extend the Makran Coastal Highway to Gwadar. This development alone reduced the travel time between Karachi and Gwadar to eight hours from seven days. At the same time, the decision to develop Gwadar port for strategic reasons was also taken.

Both these significant developments have a long-lasting impact on the region. Where this may have brought new opportunities, the development of the port and other related infrastructure in the city is popularly perceived to have only added to the hardship of the fisherfolk. Jamali argues that Gwadar's centuries-old moral order has collapsed because of intense modernisation and development. This has led to citizens organising themselves under various political banners to articulate their demands for a just and equitable society.⁵⁰

One of the most significant changes in the city is the increased level of securitisation after the federal government decided to handover the operations of Gwadar port to a Chinese company. The fisherfolk feel the increased level of securitisation has made it extremely difficult for them to access the sea to earn a living. But more importantly, Gwadar citizens felt that increased securitisation has taken away their freedom of expression, movement and association to protect their rights.

Since the last quarter of 2021, Gwadar has also seen an increase in vocal and organised resistance to the increasing militarisation and securitisation of the area. The foremost among these is Maulana Hidayat ur Rehman's led Haq Do Tehreek. Other movements include Fisherfolk Labour Union Tehreek, Gwadar and Pakistan Fisherfolk Forum, Gwadar Chapter. Below is a summary of key points that emerged in the focus group discussions conducted with each of these organisations. Unlike the Karachi discussion above, where interview responses were organised under various themes, the point of view of each of these movements in Gwadar is presented under each organisation's name. This way, the subtle differences in position can be made visible.

Fisherfolk Labour Union Tehreek, Gwadar

Gwadar is undergoing significant socioeconomic changes due to various factors, notably the China-Pakistan Economic Corridor (CPEC) and the development of local industries. The CPEC, while fostering large-scale industrial growth and infrastructural improvements, is causing displacement and hardships for local fisherfolk and small businesses. The local fishing industry is struggling due to overfishing, lack of modernisation and insufficient policy support.

Large trawlers, primarily from Sindh, are depleting the fish population and negatively impacting the livelihoods of local fisherfolk. The local economy, particularly the fishing industry, has declined over the past seven years, with an annual decrease of about 10–15 percent. This decline is exacerbated by harmful practices like diesel and petroleum smuggling, which has caused substantial environmental damage, including a diesel spill that prevented local fishing for a month.

There is a need for better education and skill development opportunities in the region. The local population is keen to learn and develop but lacks access to quality education and training. There is a lack of meaningful development for the local people, despite the introduction of large projects like the CPEC. The promised jobs and economic growth seem to primarily benefit outsiders or elites, leading to resentment among locals. The security presence in the region has increased, likely due to Gwadar's strategic importance and the ongoing CPEC project. However, local law enforcement appears inadequately equipped to police smuggling and other illegal activities effectively.

Despite these changes, there are numerous issues in Gwadar, including proper sewage, supply of potable water, provision of uninterrupted electricity and gas, and functioning healthcare facilities. The government's policies are not being effectively implemented to address these problems. There is a growing local movement in Gwadar, likely in response to these socioeconomic changes and challenges. However, the specifics of this movement are unclear.

Haq Do Tehreek

The Haq Do Tehreek, which began in 2021, situates its struggle in response to the continuous economic exploitation and systematic deprivation faced by the Baloch people. The Gwadar-based movement aims to address the unfair distribution of resources, ensuring that Balochistan's people benefit from their resources. Issues of economic exploitation, lack of employment opportunities, and neglect of basic amenities like water, electricity, health, and education are highlighted. The movement has united different segments of society, including fisherfolk, farmers and labourers, in demanding their constitutional rights.

Women have actively participated in protests, showcasing determination and commitment to fighting for their rights. The movement emphasises peaceful and democratic means to challenge oppressive practices, advocating for rights through constitutional avenues. It seeks to address grievances and promote dialogue rather than resorting to violence. The movement calls for an end to the marginalisation and mistreatment of the Baloch population in Balochistan and other parts of Pakistan. Discrimination, harassment and profiling faced by Baloch people are highlighted as issues requiring attention.

Their demands include access to education, employment opportunities, healthcare, and dignity for the people of Balochistan. Removal of check posts, resolution of missing persons' cases and provision of essential amenities like water and electricity are also emphasised. The movement envisions a Pakistan where all citizens are treated with dignity and fairness, regardless of their region or ethnicity. Unity among different regions and provinces is emphasised, along with the need for a shared ideology and equal application of laws. The movement highlights the Baloch people's identity as Pakistanis and the need for their voices and concerns to be heard and addressed. Recognition of Balochistan's contributions and resources is essential for building a more inclusive and equitable society. Concerns are raised about the impact of the CPEC on the local population and the need to ensure local benefits. There are concerns about the potential withdrawal of Chinese investments in case of unrest. The movement emphasises the importance of creating an environment

where all citizens have equal rights, opportunities and access to resources. It calls for a society that values the contributions of all its citizens and ensures their well-being and dignity.

Pakistan Fisherfolk Forum, Gwadar

The CPEC and industrial developments are significantly affecting local fisherfolk in Gwadar, causing harm to their livelihoods and marine life. The lack of infrastructure, particularly reliable electricity supply, modern fishing equipment and basic services, is causing significant challenge to the local community. The development of projects like Marine Drive has displaced local fisherfolk. Further, there are concerns about the potential displacement of locals due to future developments, such as big hotels and business centres. The local government is perceived as inefficient in addressing these challenges, with problems like inadequate municipal services and flooding since the Gwadar Development Authority's establishment. The conversation revealed an economic disparity between locals and outsiders, with locals often paid less for the same work. This issue is exacerbated by the preference of companies (particularly foreign ones) to bring their workers. Matters related to land ownership and sale have caused economic inequality in Gwadar. Those who held onto their land until prices soared significantly profited, while many locals who sold their plots early missed out on this economic opportunity. Despite some locals becoming wealthy through land sales, the rising cost of living has worsened the financial situation for many, with price increases noted for everyday goods and services. There is a substantial focus on corruption in political appointments and government contracts. Significant economic challenges include price differences in commodities across regions, corruption at checkpoints and accessing banking services.

Regional conference in Karachi

A regional conference was organised in a local hotel in Karachi on 6 May 2023 to discuss the issues faced by fisherfolk in Sindh and Balochistan. The conference was attended by representative activists from inland and marine fisherfolk communities from Sindh and Balochistan. This was a unique opportunity for many representatives

to sit down with activists from other areas to listen to each other and discuss their problems. The participants from Sindh appreciated that activists from Gwadar attended the conference, which allowed them to listen to the problems they face regularly. The participants touched upon several issues covered in detail above. The following key points emerged from the discussion:

- The number of freshwater lakes has reduced from 1200 to just 600 in Sindh. Their encroachment by land grabbers and local landlords must be stopped immediately.
- Many freshwater lakes in Sindh are used as dumping grounds for industrial and city effluents. This poisons the lakes, which are sources of drinking water and farming for local communities.
- Fisherfolk communities do not have access to quality education, including technical and vocational education and training, that can give them different skills. This is important for them to break out of poverty and diversify household income streams.
- Coal-fired electric power plants built around Karachi are a source of pollution for the sea.
- In Gwadar, the fisherfolk are continuously marginalised in the city's development. For example, the Marine Drive constructed a few years ago has blocked the fisherfolk's access to the sea, and they face great difficulties in taking their boats out into the water.
- Several projects under CPEC have been initiated in and around Gwadar city, yet local people cannot find jobs there.
- There are no facilities that allow fisherfolk to learn new skills and benefit from other opportunities available in Gwadar or elsewhere. Federal and provincial governments can set up skills centres to help Gwadar citizens address this concern.

Recommendations

- A comprehensive plan must be devised to clean Sindh's freshwater lakes.
- In Sindh, the government must enforce the ban on harmful nets.
- The government must ban the registration of new boats and conduct a census to properly ascertain the number of boats currently involved in commercial fishing.
- The government must provide healthcare, education and sanitation facilities for fisherfolk communities.
- The government must enforce all relevant environmental regulations to protect the sea and the local fisheries near power plants built around Karachi and other coastal areas.
- The government must include fisherfolk communities in decision-making processes about various coastal and city development projects. This is particularly important in Gwadar, where the locals feel they have no role in the city's development and progress.

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