

Global
CORRIDOR

Technical Report: The Karachi Coastal Comprehensive Development Zone (KCCDZ)

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1. Project Overview

1.1 Introduction

The Karachi Coastal Comprehensive Development Zone (KCCDZ) is a \$3.1 Billion Chinese investment development project planned along the backwater coastline of Karachi that will reclaim marshland and create a residential and commercial district meant to promote economic development. The scope of the project includes the setting up of a new industrial city, external connecting roads, shipping berths, breakwaters and a coastal bridge, a cruise terminal, seawater desalination plants, and environmental improvement works for the coast (APP, 2023). The KCCDZ is part of the China Pakistan Economic Corridor (CPEC) and consists of an agreement between the Chinese state-owned China Road and Bridge Corporation (CRBC) and the Pakistan Ministry of Maritime Affairs (MoMA), including other subsidiary stakeholders. This project is meant to promote the blue economy of Pakistan, and create an “international business bay area, a hi-tech knowledge-economy sector, a hub for global young talents and entrepreneurs, and a showcase of the world-class waterfront lifestyle” (APP, 2023). The KCCDZ has changed part of its project scope since its inception, and currently faces ontological challenges to reach the feasibility and implementation stage. While it is uncertain if the KCCDZ will materialise, there are several environmental and socio-economic concerns related to the project that would be damaging for the city if the project was to realise.

The KCCDZ was first introduced in September 2021 during the 10th Joint Cooperation Committee (JCC) on CPEC which was held online between Islamabad and Beijing. The Federal Government of Pakistan approved the selection of the CRBC as the project partner under Section 20 of the Public Private Partnership Authority (Federal Entity) Act, 2017. The KCCDZ is part of Phase II of CPEC, which focuses on industrial cooperation, agricultural development and trade promotion.

1.2 Geographic Location and Area Coverage



Fig.1. Map of the proposed Karachi Coastal Comprehensive Development Zone.
Source: Syed Ali Zaidi



Fig.2. Alternative view of the KCCDZ.

Source: Daily Times

The KCCDZ will be located along Karachi's Western backwaters coastline, spread over 687 hectares total, of which 640 hectares or 1,581 acres will be reclaimed low-tide marshland owned by the Karachi Port Trust (KPT) (Abbasi, 2021). During high-tide, this marshland becomes part of the sea. This tidal creek is known as the Lunikanwala Dor, and consists of Baba, Bhit, and Shams Pir islands which drains out from the Baba channel next to Manora.

The zone includes several key coastal areas, such as connections with Manora island and Sandspit beach due to the intended harbour bridge, and the mouth of the Lyari river, due to the intended water treatment plant (Ahmed, 2023). Previous blueprints of the plan included 162 hectares (400 acres) of the informal settlement of Machar Colony on KPT owned land, which has since been removed as part of the zone, as visible in Fig.3. (Cpecinfo, 2022) (Zaidi, 2022). Figures 1 and 2 showcase the initial rendering of the plan by CRBC, and the blueprint has not been updated since to reflect the new land use of the plan.

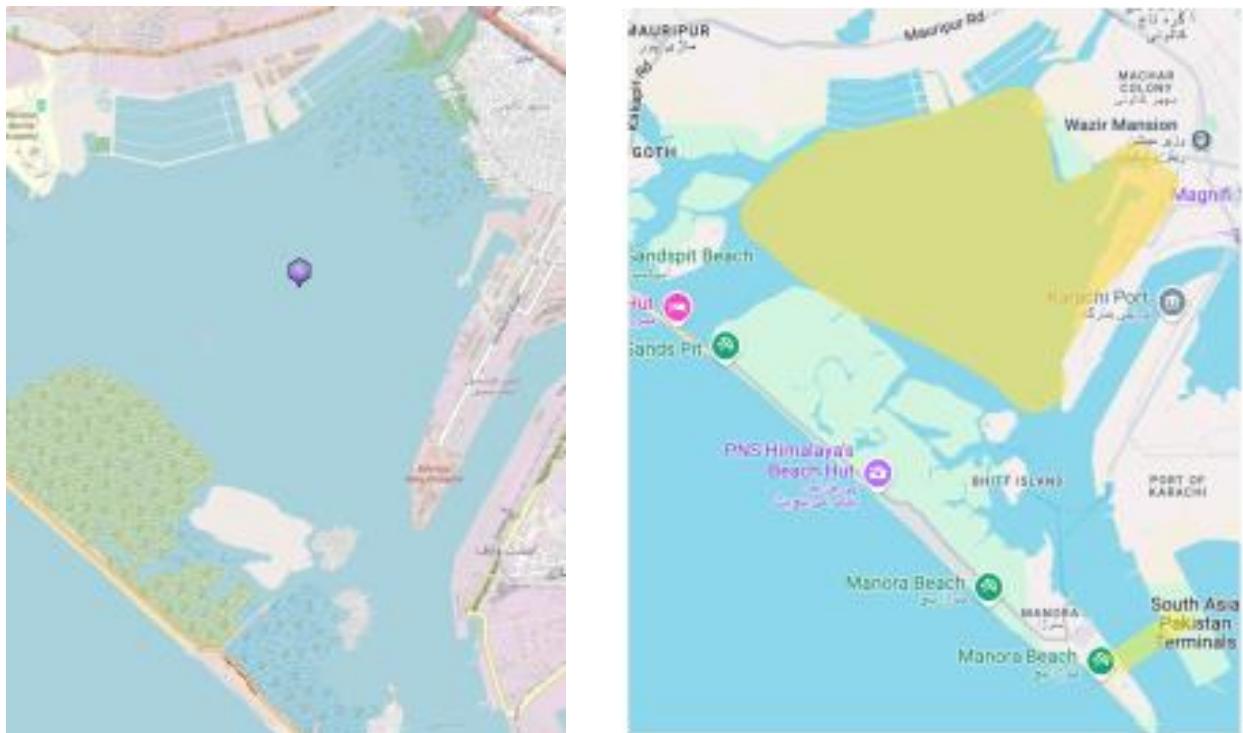


Fig.3. Spatial impact area of the revised KCCDZ (Source: author and Google Maps).

Fig.4. Current mangrove growth in the Lunikanwala Dor (Source: Mindat)

Moreover, the zone would impact several acreages of Karachi's mangrove forest along the intended coastal development. Fig.4. shows the current status of the mangroves still present in the area, and it is difficult to imagine the plan having a positive permanent effect on this forest, despite the KCCDZ claiming to preserve the mangroves.



Fig.5. Karachi Harbour Map (1838) (Source: Arif Hasan)

Historically, the Karachi coastline was predominantly mangrove forests and sandy hills (as visible in Fig.5.) that have since been largely reclaimed to urbanise and populate the city. Fig.5. also displays the initial boundaries of the Karachi harbour and the city's various water channels draining into the sea.

1.3 Key Features of the Development Plan

- **Economic Development:**

- Construction of a “new industrial city” consisting of a central commercial centre hosting an IT industry, the fashion industry, and media houses

- **Housing Infrastructure:**

- Development of 20,000 affordable housing units (at least within the framework of the initial plan)
 - Development of high-rise waterfront luxury housing for the city of Karachi

- **Port Infrastructure:**

- Four new berths for KPT usage
 - Hi-tech fishing harbour with a fish processing zone
 - Cruise terminal

- **Transportation Networks:**

- Harbor bridge rising from behind the deepwater port with exit ramps for Manora Island and Sandspit beach
 - Expansion of road networks connecting the zone to the city, specifically Clifton and Sea View

- **Environmental Conservation:**

- Water and sewage treatment plant for the zone
 - Preservation of mangroves
 - Seawater desalination plant
 - “Environment improvement works”

(CPEC Secretariat, 2022).

1.4 Stakeholders Involved

- **Government Bodies:**

Government of Pakistan (GoP), Ministry of Interior (MoI), Ministry of Maritime Affairs (MoMA), Karachi Port Trust (KPT), Government of Sindh (GoS), Sindh Environmental Protection Agency (SEPA), Ministry for Planning, Development and Special Initiatives (PD&SI), Pakistan Navy, Special Investment Facilitation Committee (SIFC), Joint Working Group (JWG) consisting of the Board of Investment (BoI) (Pakistan) and the National Development and Reforms Commission (NDRC) (China).

• Private Sector:

Real estate developers and construction firms, civil engineering consultants (HR Wallingford).

• Local Communities:

Local communities around the impact zone have not been involved for consultation or participatory planning.

• International Partners:

China Road and Bridge Corporation (CRBC), National Development and Reforms Commission.

2. Implementation Strategy

2.1 Phases of Development

The KCCDZ will be developed in three phases, starting with a “pre-feasibility phase” which it is currently undergoing, followed by two subsequent implementation phases consisting of land reclamation and construction respectively (Siddiqui, 2024).

2.2 Project Timeline

First introduced in September 2021 at the meeting of the 10th JCC on CPEC, the KCCDZ was meant to be completed in a period of five to six years (Ahmed, 2021). Leading up to the 12th JCC meeting held in Beijing in July 2023, the Minister for Planning and Development scheduled a special committee meeting of relevant stakeholders to expedite planning logistics for the KCCDZ (APP, 2023). The full contents of the 13th JCC and the Third Meeting of the CPEC Political Parties Joint Consultation Mechanism (JCM) have not been made public, and the briefings do not relay any further news of the KCCDZ planning on the government end (Ministry of Planning, Development & Special Initiatives, 2024).

According to the KPT Project Manager and the Executive Engineer for the KCCDZ, Zia Siddiqui and Noorul Ayen Hasan respectively, the KCCDZ feasibility plan has been submitted to a civil engineering firm (HR Wallingford) for hydraulic assessment to gauge its impact on water levels and its environmental consequences. An Environmental Impact Assessment report is yet to be conducted as well, as Section 17(1) of the Sindh Environmental Protection Act 2014 suggests that no construction of such a nature can commence unless an EIA report has been submitted. The CRBC drafted plan did not conduct any such assessments or research in its proposal, and there is a lack of clarity on the logistics and implementation schedule of the plan.

2.3 Budget and Financial Planning

The proposed \$3.1bn funding (previous figures showing \$3.4bn to \$3.5bn (Nazir, 2021)) for the project is a direct Chinese investment without loan conditions (Butt, 2023). There is little further clarity on finances in terms of disbursement and allocation. In a letter notification dated February 2024, the Section Officer for the Government of Sindh asked the Planning and Development Department to clarify a number of questions they themselves have regarding the financial logistics of the KCCDZ plan. Some of these questions include the matter of ownership and project equity for the Government of Sindh. As while the area in question is Federal KPT land, all reclaimed land belongs to the Government of Sindh as established in order dated 18.10.1998 in Suit No.778/98 (Province of Sindh v. Administrator DHA & another) and

again in H.C.A No.236 of 2009 The Member (L.U) Board of Revenue Sindh Versus KPT Officer Cooperative Housing Society Ltd. & others. Other questions related to finance seek clarification for the "risks, rewards, responsibilities of each party", the matter of sale and rental prices of property in the KCCDZ, the matter of the contestation of a tax exemption requested for the project while Sindh Sales Tax on infrastructure development and maintenance charges, stamp duty and other taxes and fees is in the interest of the GoS as it has no other shareholding in the project (Section Officer, 2024). Moreover, it is still unclear how many relevant GoS departments and stakeholders are yet to be involved due to the various obligations listed in the project which would fall under the domain of the GoS, and the project finances may require review accordingly. Furthermore, there is also the question of the project model, as the KCCDZ joint venture has been agreed upon on the basis of Section 20 of the Public Private Partnership Authority (Federal Entity) Act, 2017, it does not fall under the legal regime of Sindh Public Private Partnership framework.

The GoS has made clear that the KPT will be responsible to provide and finance the provision of off-site infrastructure, rehabilitation and enhancement of TP3 sewerage treatment plant and other control works of the Lyari River, Budani River and diversion works of Moosa River. An anonymous informant from the KPT has disclosed that the KPT does not have the budget for such tasks, and the CRBC expects most of the groundwork to be undertaken by the Pakistan side, including the cost of reclamation. According to this current setup, the KCCDZ has dubious financial standing in the eyes of those in charge of its core logistics.

The National Development Programme 2022-23 & 2023-24/Public Sector Development Program (PSDP) for 2023-24 does not list any facet of the KCCDZ development in its report and budget. The PSDP is meant to be prepared in collaboration with all stakeholders and involves the listing of how Federal resources are being utilised in state led development projects and programmes. The Maritime Affairs divisions budgeted PKR 3300 Million in the PSDP for its ongoing projects, as detailed in Fig.6. (Planning Commission, 2023).

MARITIME AFFAIRS DIVISION

G.S.L No.	Name of the Project	Approval Status	Approved Cost		Estimated Expenditure 30.06.2023	Throw- forward 01.07.2023	Allocation 2023-24			(Rupees Million)
			Total	Foreign Aid			Foreign Aid	Rapee	Total	
1	2	3	4	5	6	7	8	9	10	
On-going Schemes:										
827	Construction of Groyne Wall / Break Water and Allied Works at East Bay (Demi Zer) Gwadar (Revised)	CDWP 01.06.2023	1473.950	0.000	1247.334	226.616	0.000	226.616	226.616	
828	Sewerage Treatment Plant for GPA Housing Complex Gwadar	ODWP 14.04.2022	103.780	0.000	1.800	101.980	0.000	101.980	101.980	
829	Maintenance Dredging of Gwadar Port	CDWP 27.01.2023	4670.000	0.000	1159.000	3511.000	0.000	1645.770	1645.770	
Total (On-going):			6247.740	0.000	2408.134	3839.606	0.000	1974.376	1974.376	
New Schemes:										
830	Perimeter Security System for Gwadar Port	ODWP 14.04.2022	252.350	0.000	0.000	252.350	0.000	100.000	100.000	
831	Establishment of Business Park at Korangi Fisheries Harbor	CDWP 16.04.2020	4301.234	4301.234	0.000	4301.234	5.000	0.000	5.000	
832	Establishment of Cold Storage and Freezing Tunnels	CDWP 16.04.2020	656.075	656.075	0.000	656.075	5.000	0.000	5.000	
833	Modification of Auction Hall at Korangi Fisheries Harbor	CDWP 16.04.2020	673.920	673.920	0.000	673.920	5.000	0.000	5.000	
834	Improvement of Official Control System and Strengthening Testing Services of MFD	Under Process	457.130	0.000	0.000	457.130	0.000	210.624	210.624	
835	Water supply line for Gwadar Free Zone from 1.2 MGD Desalination Plant to GPA	Under Process	140.556	0.000	0.000	140.556	0.000	140.556	140.556	
836	Water supply line for North Free Zone Gwadar from Airport water works.	Under Process	131.704	0.000	0.000	131.704	0.000	131.704	131.704	
837	Provision of Electricity to Free Zone North & South from National Grid	Under Process	928.230	0.000	0.000	928.230	0.000	727.738	727.738	
Total (New):			7641.281	6631.229	0.000	7641.281	15.000	1310.624	1326.624	
Total (M.A):			13788.941	6631.229	2408.134	11386.867	15.000	3395.000	3396.000	

Fig.6. Maritime Affairs Division PSDP budget allocation Source: Public Sector Development Program (PSDP) for 2023-24

Furthermore, quotations of land reclamation in Karachi are dubious, as according to Section 3 of the Sindh (Prohibition of Taking Minerals Including Reti (Sand) and Bajri From Any Land) Act 2003, “no person shall take minerals including reti (sand) and bajri from any land by excavation or otherwise” unless sanctioned so by the GoS, and the Mines & Mineral Development Department (MMDD), Sindh, the regulatory authority for all mining in Sindh does not disclose details of ongoing projects (Ali, 2022).

There is currently no public transparency on the finances for the KCCDZ, and it appears there is little clarity on these matters for some key public institutions as well. However, current trends and examples in Asia forecast high returns on investment for similar projects in dense cities as reclaiming land can potentially be more profitable than existing expensive

land, and that land reclamation in China in particular has produced “10- to 100-fold profit” for investors.

Similar reclamations projects such as the Seri Tanjung Pinang 1 (STP1) and STP2 in Malaysia consist of the construction of luxury high rise condominiums built on over a 1000 acres of land artificially reclaimed from the sea are expected to have an eventual value of \$4.4bn (Shepard, 2018). These are also being built by the state-owned China Communications Construction Company (CCCC), of which the CRBC is a subsidiary, and which has been implicated for fraud and corruption (including the bribing of public officials) in Bangladesh, Equatorial Guinea, Malaysia, and the Philippines.

As the revenue for the KCCDZ will be largely generated through real estate and housing, this is the standard investors hope to follow and achieve.

3. Connections to China-Pakistan Economic Corridor

3.1 CPEC Background

The past ten years have seen an investment of approximately \$25Bn from China in various infrastructural projects dealing in road network connectivity and energy generation in Pakistan as part of China's 21st century Belt and Road or the New Silk Road initiative to reach connectivity between Central Asia, the Middle East and Africa (Abrar, 2024).

The CPEC's aim is to create a 2700 Km corridor between the Port of Gwadar in the South of Pakistan to Kashgar in the northwestern region of Xinjiang through a network of highways, railways, and pipelines in a total of fifteen years. The overall construction costs of the "one belt, three axes, and five functional zones" are estimated to be around \$46 Bn (Board of Investment, nd). Within this, Karachi falls into one of the horizontal axes, and is also part of the southern coastal logistics business zone (GoP&PRC, 2017).

Despite official script stating the benefits of CPEC for Pakistan's development, long term CPEC plans have been "exposed" and critiqued as China's imperialist intentions in Pakistan and other struggling economies (Husain, 2017; Afzal 2020) and an active colonial power depleting local resources and causing further inequality for the historically disenfranchised (Notezai, 2018; Anees, 2019; Baloch, 2024).

3.2 CPEC Phase II

While Phase I of CPEC has been focused on transforming "Pakistan's economic landscape through industrialisation" (GoP&PRC, 2017), which has largely meant the development of energy infrastructure and road infrastructure, Phase II is meant to focus on the development of Special Economic Zones (SEZ), agriculture modernization, and sciences & information technology cooperation (MPD&SI, 2023). The KCCDZ is proposed as a significant part of Phase II of CPEC, as decided at the 10th JCC held on 23rd September 2021.

The second phase of CPEC consists of five corridors, each designed to align with Pakistan's broader economic development strategies. These corridors consist of:

1. Growth Corridor
2. Economic Development Projects Corridor
3. Innovation Corridor
4. Green Corridor

5. Regional Connectivity Corridor

Each of the five corridors are designed to align with Pakistan's economic development framework, which is a long-term policy framework called the 5Es Framework. This framework is always mentioned in tandem with Phase II of CPEC, particularly the KCCDZ. The framework is meant to offer a "tangible pathway for economic revival" (Iqbal, 2023) in five priority areas:

1. Exports
2. e-Pakistan
3. Environment and climate change
4. Energy and infrastructure
5. Equity and empowerment

These five areas are further supplemented by seven pillars, some of which include "putting people first," "private sector-led growth", and "achieving sustainable, indigenous, and inclusive growth", as visible in Fig.7. (MoPD&SI, 2022). The inherent contradictions within these goals and processes are not discussed in any of the reports or editorials written and approved by the MoPD&SI. The KCCDZ is in fact pitched as part of the "principle of green and sustainable development" which exists in both the 5 Corridors of CPEC Phase II and the 5 E's Framework (MoMA, 2024).

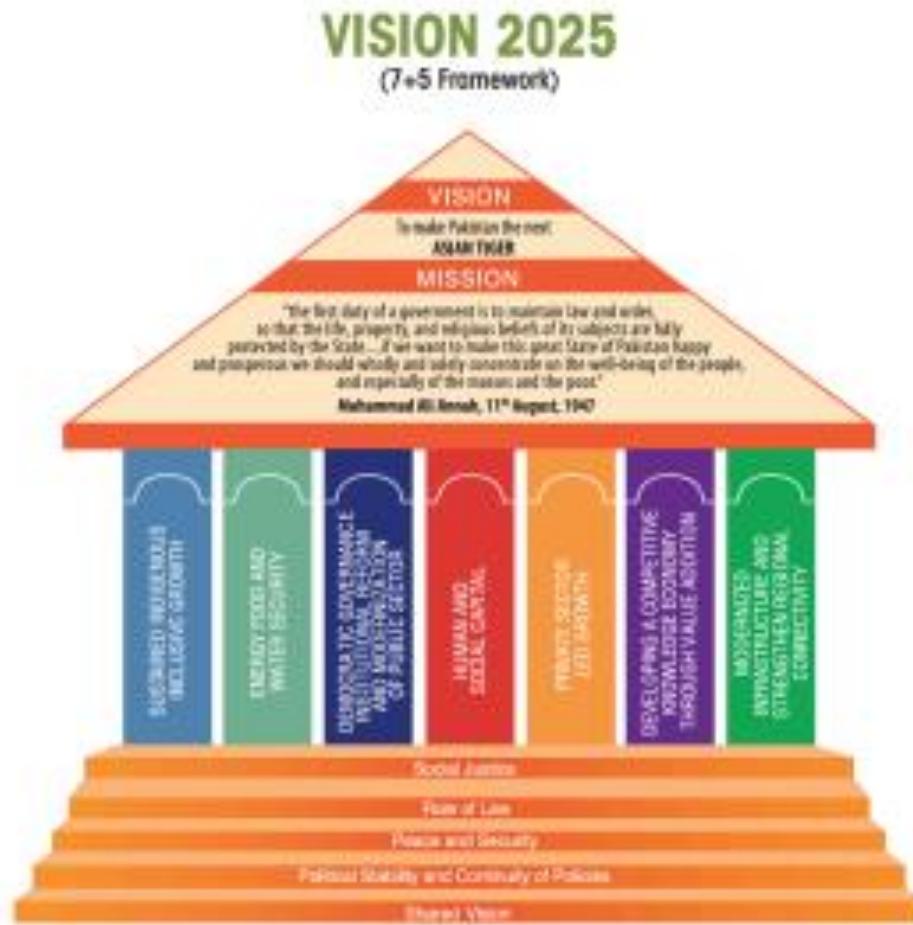


Fig.7. 5E's Framework to Turnaround Pakistan (Source: Ministry of Planning, Development & Special Initiatives)

2024-25 is thus planned to be the CPEC year of industrial cooperation, agriculture modernization, socio-economic development, and scientific collaboration in addition to the ongoing projects in infrastructure and energy. The overall objective of Phase II is to "reap dividends" of the investment made in the first phase (2015-20) which has opened pathways for investment in other sectors, such as tourism and real estate (MoPD&SI, 2023). The drive for this for both the GoP and CRBC is to attract global investment into subsidiary projects of CPEC as a tangential outcome of established infrastructure in Phase I.

The CRBC is China's fourth largest state owned company and is present in 60 countries and regions in Asia, Africa, Europe and the Americas. Its strength and experience is in contracting and investment of development and operation of roads, bridges, ports, railways, airports, and tunnels, but also in real estate and industrial park projects (CRBC.com, nd; MoMA, 2023). The KCCDZ would be CRBC's first project of this nature in Pakistan.

KCCDZ has certain components within the first of the 5 E's: exports. Pakistan's seafood exports to China (specifically the ribbon fish, croakers, sole fish, and cuttlefish) reached \$247.3 million in 2024, marking a 13 percent increase from the previous year. The President PCJCCI, Moazzam Ghurk, has stated this can be "increased to \$600 or 700 million" with the development of fisheries and ice storage facilities that are ripe for investment (Pakistan Today, 2024).

As a result of the 13th JCC, two new working groups had been added to oversee Phase II, the Working Group on Water Resources, and a Working Group on Climate change. It is unclear if either of these groups will play a role in the planning for the KCCDZ, despite the obvious overlap in thematic and spatial concerns with the project. It is also not clear where the KCCDZ factors into current CPEC project planning, as there is no mention of the plan on any public CPEC documentation on either country's end beyond what is mentioned in this report.

4. Analysis and Key Project Issues

4.1 Planning and Political Logistics of the Project

Despite the goal alignment with Phase II of CPEC and the proposal for the KCCDZ to be a kind of partial SEZ that promotes the IT, fashion, and media industry in tandem with Karachi's port, it is evident that in its renewed and current form, the KCCDZ is largely a real estate project meant to garner profits through an attractive waterfront development scheme.

The KCCDZ proposal is an evolved and co-opted version of a 2006/7 plan made by the KPT to manage port handling and storage that was intended to be a "Cargo Village" (Siddiqui, 2024). The KPT Project Manager for the KCCDZ is not sure how this plan was brought to the attention of folks dealing with CPEC proposals, and at what stage it was revamped to be pitched this way to the GoP. KPT officials have a highly sceptical outlook on the viability and realisation of the plan due to a number of reasons.

The KCCDZ proposal puts the burden of ground logistics on the KPT, which is a Federal entity in the city of Karachi and has competing jurisdiction for many logistical tasks with the

Government of Sindh and the KMC. According to KPT officials, CRBC expects GoP to front the cost and manage logistics, especially for the initial stages of the plan such as cleaning up the area and disposing of waste. The GoP has delegated all responsibility for this to the KPT, despite this being a GoS function. The GoS will not assist in this deal until their revenue stream and returns in the project stake are made evident, as detailed in the 2024 letter, and particularly until land ownership is given to them as per the order dated 18.10.1998 (Section Officer, 2024). KPT officials feel that this is a bad deal for them, and not in the interest of the KPT, especially as it stands to lose a lot of authority with such stakeholders and even major port function if KCCDZ construction obstructs water pathways to retain the land reclaimed and push the sea away.

Moreover, KPT officials have been strong-armed into accepting the KCCDZ proposal and mandated to make the plan a reality despite their many reservations regarding both logistics and also environmental concerns. According to one KPT official, the blueprint presented by the CRBC is an "empty document" without any research conducted on the logistical feasibility and environmental impact of the project. KPT has passed this plan on to the GoS for their comments and hopes the hydraulic assessment report by the engineering consultancy can be enough to be a stoppage of the plan altogether, as it is well known the Sindh Environmental Impact Assessment is a shoe-in in favour of the highest bid (Mallick, 2022).

Lastly, the KCCDZ was championed and promoted by a previous government and Minister of MoMA (Ali Haider Zaidi of the Pakistan Tehreek-e-Insaf), who pitched the project specifically as a low income housing project for the betterment of those living in Machar Colony that would simultaneously bring international economic opportunities for the city of Karachi (Zaidi, 2022). As the current government appears to desire “undoing” much of the previous government’s legacy (Khan, 2024), some bureaucrats interviewed believe the project plan has undergone changes to suit the new regime and may be sidelined until tensions with the PTI and its supporters relent in the political ecosystem of the country.

4.2 Coastal Ecosystem Impact – Environment and Communities

The Karachi coastline is home to diverse marine life, mangroves, and natural habitats that are crucial for maintaining ecological balance. The area marked for development also supports local fishing communities and is a regularly used water channel by residents on nearby islands and adjacent areas. The proposed plans for the zone would lead to habitat disruption at best, or destruction at worst.

- **Land reclamation concerns and the importance of backwaters and mangroves**

The Chief of Pakistan’s National Institute of Oceanography has stated that Karachi is likely to be underwater by 2060. Alongside other causes of climate change, coastal erosion, ensured by the destruction of mangroves and rapid urbanisation on the coast, is a primary reason for this (Muhammad, 2015). Karachi has seen an increased amount of urban flooding in the recent past, and much of the cause lies in the blockage of the city’s natural drainage outfalls. For example, two of Karachi’s main drains fall into the China Creek backwaters, but face obstruction due to the construction of a KPT housing colony, the direct cause of flooding in the area (Gulrez, 2023).

The Avicennia Marina (locally called the Temer) functions as a nursery and feeding habitat for fish, crustaceans, and migratory birds. Mangroves not only support the livelihoods of coastal communities but also offer protection from storms and floods. Thousands of acres of Karachi’s coast has already suffered the deforestation of mangroves for urbanisation, and this leaves the city extremely vulnerable to cyclones which have historically been destructive to the city. The 1906 cyclone winds blew at 100mph and sea water was forced through the Manora breakwaters and into the city (Arif Hasan, 2023), and current KCCDZ plans intend to change the nature and placement of the Manora sea wall as it is to support the development of

the KCCDZ. Mangroves and mudflats are nature's best protection, the sea wall is the human made protection, and both appear to be at risk due to intentions of the plan.

In a similar case of the Gizri Creek on the Eastern marshland side, DHA top officials assured that DHA Karachi would ensure protection of mangroves – but they cut the mangroves anyway. Engineering experts have always explained that the only way to reclaim marshes is “by blocking seawater ingress for which they will have to dump massive boulders along the edges and then dewater the area... which would choke off the mangroves' very source of survival, which is the seawater” (Khattak, 2013).

The Hutchison Port is an existing example of Pakistan's first high-tech deep-water container terminal costing \$1.4 billion, constructed through a public-private partnership of Karachi Port Trust (KPT) and Hong Kong-based Hutchison Ports Holdings. Since its initial test operations in 2016, it has “broken its own productivity record four times and serviced some of the largest container ships in the world” (Ahmed, 2018). It has also pushed the sea back by a large amount, as all the construction sand was dumped at the coast (Kohari, 2023). The Hutchison Port is a CPEC project with similar stakeholders, and therefore does not provide much confidence in responsible and sustainable KCCDZ construction.

Moreover, Sengupta highlights that coastal land reclamation is a practice that has not been sufficiently studied, emphasising the need for comprehensive research to evaluate the extent of harm it has caused to the ecosystems of coastal megacities (Mazhar et al., 2020; Sengupta et al, 2019). On the economic-ecological side, a study conducted on the coastal wetlands in Hangzhou Bay found that 75,134.3 hectares of coastal wetlands were reclaimed between 1985–2015 which led to a significant decline in ecosystem service value (ESV). The ESV dropped from 866,400 Yuan per hectare in 1985 to 285,800 Yuan per hectare in 2015. Despite economic gains from land reclamation, the ESV loss exceeded these benefits, highlighting a trade-off between short-term economic profits and long-term ecological damage (Qiu et al, 2021).

The Boat Basin is another one of Karachi's backwaters that has been reclaimed. It acted as an important absorbent of high tide water, as it provided a neutral ground where the land meets the sea and therefore acted as a flood basin during the rainy season. Such natural swamps slow down floodwaters before it reaches the sea, and the mangroves growing in them further prevent flood damage. The KPT (along with the DHA and other foreign actors) has been reclaiming wetlands and shrinking the city's backwaters. The KCCDZ would be made by the same stakeholders that have repeatedly set precedents of environmental negligence and a trajectory of doom.

- **Implications for existing community**

No public participation or input in planning has taken place so far regarding the KCCDZ, and as such is the nature of such projects in Karachi, it is unlikely that any effort to involve public consensus will be made in the future. Public interest litigation or a pushback from the Fisherfolk Forum may be the most likely tracks that involve public opinion in some form, as witnessed before through similar projects.

The communities that will be impacted most directly are those with the strongest relationship with the sea, namely fisherfolk or mahigeer and low-income residents of adjacent islands and the coast. The project would cordon both these groups off by blocking access to their water route, and also their land route as the plan may involve a long boundary wall enclosing residents of Machar Colony and/or also Mauripur off from the intended upper-class residents for the KCCDZ.

This segregation of the city and sea leads to a problematic sequestering of society that is already being developed spatially along class lines. A likely outcome of this very physical restriction is also the implementation of strong policing on a marginalised community that is also already criminalised or harassed by security authorities¹ (Sandhu, 2024; Khattak, 2013). As the privatisation of the beach along the luxury Emaar residential projects has caused frequent persecution of the mahigeer by the navy coastal guard and police demonstrates (Kohari, 2023), the everyday passage and life of these communities will be impacted in a negative manner and there will be no support, acknowledgement, or concessions from the state for them.

Due to the involvement of a foreign counterpart that requires more militarised security as CPEC “progress” takes place (Valle et al, 2024) and the anxiety of the elite being proportional to their proximity to lower-income communities, the question of “security” will become a prominent one on both sides of what may in essence be a gated or enclosed area. There is likely to be an increase of surveillance, checkpoints or barriers that restrict access and movement, and “create contradictions of security and insecurity, and generate vulnerabilities of inclusion and exclusion” (Kaker, 2014).

The access to the sea will be monitored and restricted, as seen in case of the Gizri Creek and Emaar, where access has been cut off due to commercial ventures built on the strip and permission revoked for fishing these waters due to security concerns (Ahmad, 2022). Local fishermen are thus perpetually concerned that their passage to open sea will be blocked and that they will no longer have mobility from their source of livelihood to their source of shelter. The most troubling aspect is therefore those that receive no benefits from the project will be the ones most troubled by it.

In light of this, one would then echo the question as stated by a local fisherman regarding such projects: “It’s the elite who will live [in such developments], not the

fishermen. What is the point of such development where the original coastal inhabitants have been deprived of their rights, while preference is given to others instead?" (Gulrez, 2023). Pakistan has an urban housing demand of 350,000 units, of which 62% is of the lower-income group and 10% of upper-middle and above-income groups, with the rest consisting of lower-middle income groups. The official supply of housing is 150,000 units per year. This unmet demand

¹A large majority of Machar Colony consists of undocumented Bengali residents and Rohingya refugees who live in informal settlements and encroached KPT land (Raza, 2019).

is therefore only fulfilled by the creation of informal settlements, and the densification of existing low and lower-middle income settlements (Hasan, 2020). This informality is partly indulged by state institutions to "value-tag land for future formal commercial enterprises" and therefore create perpetual uncertainty that impedes upwards mobility for the majority of the poor in the country, especially megacities like Karachi (Raza. 2019).

Those in informal settlements are already underserved by the State. Not only do affordable housing schemes then not get built for the masses who need them most, but new developments end up exacerbating existing conditions and causing disenfranchisement. This becomes a cycle, or more likely, a spiral of dispossession through top-down planning regimes meant only for the elite and those with capital. Climactic impact in this context compounds vulnerability, and a life of indignity is perpetuated by design.

In the case of the KCCDZ, the 20,000 affordable housing units meant for Machar Colony are likely not going to be accommodated in the newer version of the plan on the reclaimed land. While this is unfortunate as the city desperately needs formal affordable housing, it may be a boon for the residents of Machar Colony who may have had to face evictions, demolitions, and a total slum clearance in the name of urban renewal without any guarantee for resettlement with community and dignity (Khan, 2021).

4.3 A history of negotiated and abandoned projects

These developments point to an obsession with or a regime of urban planning on a city-within-a-city framework. Local and provincial governments incapable of urban planning for the city on a cohesive level would rather focus on creating mini and sanitised "safe" cities on a carte blanche (which as established, does not exist without consequence). These are glorified gated communities and enclaves profiting off an elitist fear of the common and therefore potentially "criminal" class. This

creates a desire for further security and self reinforces the need for seclusion. This sentiment is a great opportunity for real estate investment, and considered a genuine solution by many for both their housing needs and the city – despite established urban planning practices and theory warning otherwise (Davis, 1990).

The KCCDZ is not the first development project of its kind. Karachi has witnessed a history of failed or abandoned waterfront development projects, or similar projects recently implemented that bring to light certain negative consequences for the city and the coast.

- **Emaar and Diamond Bar City**

Emaar has become a key player in the ongoing battle for Karachi's coastline, particularly after the DHA revealed its ambitious waterfront development plans for a 14 KM stretch of Sea View beach and beyond. Part of this land, located at the southernmost tip of DHA Phase 8, has been sold to Emaar, the global construction company renowned for projects like Palm Jumeirah in Dubai.

Emaar's Crescent Bay project, a high-rise residential and commercial complex, is being built on reclaimed land in DHA Phase 8. The development includes luxury accommodations and

a five-star beachfront resort. However, this project has sparked concerns about further limiting public access to Karachi's Sea View beach, as these high-end developments primarily cater to the affluent, reducing spaces traditionally open to the general public. Such coastal projects reflect a growing trend of privatisation along Karachi's shoreline, raising issues about equitable access to natural resources and the environmental impact of large-scale land reclamation.

This seems a lesser evil when compared with the initial plans of the investment group to create Diamond Bar Island City on 12000 acres of Bundal and Buddu Islands in collaboration with the Port Qasim Authority (PQA). The Diamond Bar Island City is a now rejected, but initially accepted plan of \$43 billion first proposed in 2006 to create, over 13 years, a modern city of 15,000 housing units, commercial spaces, and industrial parks that would be a free-trade zone with port terminals, connected through a one-and-a-half KM bridge connecting it to DHA Phase 8 (Zameen, 2019). However, despite the massive resistance by the fisherfolk community and the civil society on the basis of the project being approved without an EIA procedure and how disastrous it was for indigenous folk (Dawn, 2006), the project was most likely scrapped due to the eventually revealed financial model. The finances stated Emaar would retain 85% of the profits from a 99-year lease agreement, while the KPT would receive the remaining 15%. Moreover, there were concerns that the UAE owned project may lead to negative consequences or a lack of control for the Pakistan

Navy's port activities on the islands (Masood, 2006). A similar issue may arise with KCCDZ due to the latter's concern and context.



Fig.8. Diamond Bar Island City by Emaar Source: Shehri CBE

- **Bahria Town and Bodha Island City**

Exactly similar to Diamond Bar Island City, real estate mogul and serial criminal Malik Riaz (Dawn, 2024; Syed, 2021) signed a \$20 billion agreement in 2013 with the now broke real

estate mogul and serial (alleged) rapist Thomas Kramer (Martin, 2018) to build Bodha Island City on Bundal and Buddu Islands within ten years. Along with everything Emaar intended above for Diamond Island, Bodha Island City would be a "high security zone" carrying the world's tallest building, the world's largest shopping mall, be a self-sufficient power and water generator, and "help eliminate terrorism and crimes" (Dawn Correspondent, 2013).



Fig.9. A Vision of One of the Island Cities Proposed on Bundal and Buddo Islands
Source: Zameen.com



Fig.10. Thomas Kramer's Bodha Island rendering
Source: Thomas Kramer

The project fizzled out and there has been no news regarding updates, most likely due to the extremely fraudulent nature of the deal and all those involved (DMKM, 2021).

- **Sugarland City**

In 2006, plans for Sugar Land City were launched through the signing of an MOU between the then Government of Pakistan and Nakheel (owned by the government of Dubai) for an investment exceeding \$68 Bn (Haider, 2007). Sugar Land City would be built on 68,000 acres of Karachi's land, taking over most of Hawks Bay and Keamari Town.



Fig.11. Sugar Land City boundary of 68,000 acres. Source: Shehri CBE

This was meant to be Pakistan's biggest project, and it hoped to provide millions of job opportunities and single family houses to the city, for which the stakeholders had received the relevant NOC to begin real estate development on reclaimed land and along the beaches of Hawksbay, Sandspit, Manora and Cape Monze. This area in particular also encompasses the KCCDZ project area as well, as visible in Fig. 11. It is unclear what the likely cause of the abandonment of this project is, but the Sindh Taraqqi Pasand Party's (STP) resistance may have been the biggest factor (Bureau Report, 2008).

4.4 Lack of transparency in governance, and the rise of ethnic dissatisfaction with an imperialist takeover

The KCCDZ would be part of China's growing imperialism in Pakistan (Caroll, 2019). BRI-linked projects in the Thar Desert region and the Pakistani government's tolerance of Chinese trawlers' deep-sea fishing have been fuelling a new wave of ethnic insurgency in the province, and the KCCDZ will be part of the reason for the growing anti-Chinese sentiment in the country, especially amongst the Sindhi and

Baloch communities most directly impacted by these developments. Leaders of the STP state that grievances lie with both the governments dealing in secret projects such as the KCCDZ along the coastal belt with no transparency, and the Chinese occupation of Sindh's lands (Khan, 2019).

The KCCDZ is meant to transform Karachi's coastal region, bringing significant economic, social, and environmental benefits. However, the project lacks certainty in being materialised, and contains a host of socio-economic and environmental concerns. The renderings in Figures 9 and 10 show a jagged contrast of the fantastical future city with the contextual backdrop of the locality. These islands are considered mostly empty land capital ripe for foreign investment and purchase by land management authorities (Zameen, 2019), but that is simply a matter of priority. Almost all of these islands contain ancient sites of religious and spiritual significance, indigenous populations as permanent or seasonal inhabitants, and the coastal forest that provides life and protects the city. These multi-million-dollar projects from the UAE and China highlight the significant development potential of Karachi's coast. However, these initiatives represent large-scale, luxury, and modern developments that threaten local fishing communities, residents, historical sites, and the visual and cultural identity of the site context. Additionally, they pose serious risks to Karachi by increasing vulnerability to natural disasters, largely due to the deforestation of mangrove forests (Khan, 2023).

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