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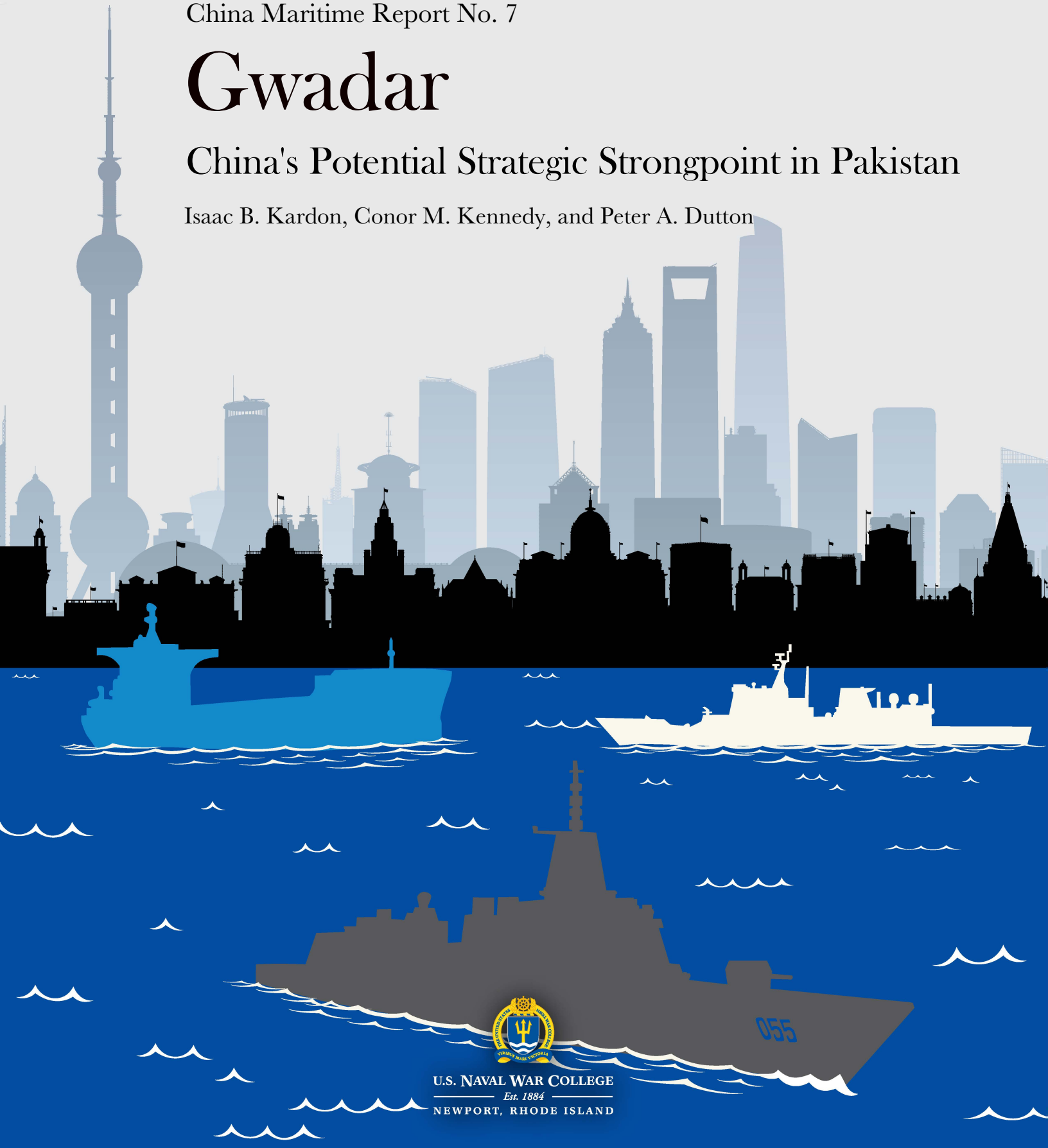
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Gwadar

China's Potential Strategic Strongpoint in Pakistan

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Series Overview

This China Maritime Report on Gwadar is the second in a series of case studies on China's Indian Ocean "strategic strongpoints" (战略支点). People's Republic of China (PRC) officials, military officers, and civilian analysts use the strategic strongpoint concept to describe certain strategically valuable foreign ports with terminals and commercial zones owned and operated by Chinese firms.¹ Each case study analyzes a different port on the Indian Ocean, selected to capture geographic, commercial, and strategic variation.² Each employs the same analytic method, drawing on Chinese official sources, scholarship, and industry reporting to present a descriptive account of the port, its transport infrastructure, the markets and resources it accesses, and its naval and military utility.

The case studies illuminate the various functions of overseas strategic strongpoint ports in China's Indian Ocean strategy. While the ports and associated infrastructure projects vary across key characteristics, all ports share certain distinctive qualities: (1) **strategic location**, positioned astride major sea lines of communication (SLOCs) and/or near vital maritime chokepoints; (2) **high-level coordination** among Chinese party-state officials, state-owned enterprises, and private firms; (3) **comprehensive commercial scope**, including Chinese-led development of associated rail, road, and pipeline infrastructure and efforts to promote trade, financing, industry, resource extraction, and inland markets; and (4) **potential or actual military utilization**, with dual-use functions that can enable both economic and military activities.

Ports are a key enabler for China's economic, political, and potentially military expansion across the globe. As China's overseas economic activity grows, so too have demands on the People's Liberation Army (PLA) to secure PRC citizens, investments, and supply lines abroad. Official PLA missions now include "safeguarding the security of China's overseas interests,"³ but "deficiencies in overseas operations and support" persist.⁴ Yet with the notable exception of the sole overseas PLA Navy (PLAN) base at Djibouti, all of the facilities examined in this series are ostensibly commercial. Notably, the establishment of the Djibouti base followed many years of Chinese investment at the adjacent commercial port and sustained attention into resources and markets inland.⁵

We should not assume that Djibouti is a model for other future bases. Instead, China's strategic strongpoint model should be understood as an evolving alternative to the familiar model of formal overseas basing. With strongpoints, trade, investment, and diplomacy with the host country remain the principal functions. However, the strongpoint creates conditions of possibility for the PLAN to establish a network of supply, logistics, and intelligence hubs. We are already observing this nascent network in operation across the Indian Ocean, and this series seeks to understand its key nodes.

¹ For an overview of this concept, see Conor Kennedy, "Strategic Strongpoints and Chinese Naval Strategy." Jamestown Foundation *China Brief* 19, no. 6 (March 22, 2019), <https://jamestown.org/program/strategic-strong-points-and-chinese-naval-strategy/>.

² Future case studies include Colombo and Hambantota in Sri Lanka, Kyaukphyu in Myanmar, and Dar es Salaam and Bagamoyo in Tanzania. None of these other commercial port projects hosts any PLA military facilities to date, though Chinese analysts discuss each as a potential strategic strongpoint.

³ PRC State Council Information Office, *China's Military Strategy* (May 2015), http://english.gov.cn/archive/white_paper/2015/05/27/content_281475115610833.htm

⁴ PRC State Council Information Office, *China's National Defense in the New Era* (July 2019), http://www.xinhuanet.com/english/2019-07/24/c_138253389.htm. The section on "Protecting China's Overseas Interests" states that China "builds far seas forces, develops overseas logistical facilities, and enhances capabilities in accomplishing diversified military tasks."

⁵ See Peter A. Dutton, Isaac B. Kardon, Conor M. Kennedy, "Djibouti: China's First Overseas Strategic Strongpoint," CMSI China Maritime Report No. 6 (April 2020), <https://digital-commons.usnwc.edu/cmsi-maritime-reports/6/>.

Summary

Gwadar is an inchoate “strategic strongpoint” in Pakistan that may one day serve as a major platform for China’s economic, diplomatic, and military interactions across the northern Indian Ocean region. As of August 2020, it is not a People’s Liberation Army (PLA) base, but rather an underdeveloped and underutilized commercial multipurpose port built and operated by Chinese companies in service of broader PRC foreign and domestic policy objectives. Foremost among PRC objectives for Gwadar are (1) to enable direct transport between China and the Indian Ocean, and (2) to anchor an effort to stabilize western China by shoring up insecurity on its periphery. To understand these objectives, this case study first analyzes the characteristics and functions of the port, then evaluates plans for hinterland transport infrastructure connecting it to markets and resources. We then examine the linkage between development in Pakistan and security in Xinjiang. Finally, we consider the military potential of the Gwadar site, evaluating why it has not been utilized by the PLA then examining a range of uses that the port complex may provide for Chinese naval operations.

Key Findings

- Chinese analysts view Gwadar as a top choice for establishing a new overseas strategic strongpoint, owing to its prime geographic location and strong Sino-Pakistani ties. Many PLA analysts consider Gwadar to be a suitable site for naval support.
- China’s interest in Gwadar—and in Pakistan’s economic development in general—does not depend primarily on commercial returns. Instead, the Gwadar project is best understood as a mode of strategic investment in China’s internal and external security.
- Externally, Gwadar’s principal strategic purpose for China is to become an “exit to the ocean” (出海口)—that is, a direct route via Chinese infrastructure to secure reliable access to the strategic space and resources of the northern Indian Ocean and the Persian Gulf.
- Internally, Gwadar is an extension of China’s national security and development policies. Beijing seeks to develop commercial linkages between western China, Pakistan, and Central Asia to promote economic growth and thus manage perceived risks to social stability in Xinjiang.
- Extensive transport infrastructure is fundamental to China’s overall plans for Pakistan. Yet while the planned transport corridor is often discussed as though it were operational, very little modern infrastructure has been built beyond a few roads and the port itself.
- The inland markets and resources of Pakistan (and Afghanistan) present some commercial prospects, but these have not yet borne fruit in part due to severe insecurity.
- Security measures may mitigate some risks to Chinese projects and personnel, but Gwadar and its hinterlands are unlikely to be secure enough to become a major commercial entrepôt.
- Gwadar is not a PLA base, but it is used extensively by the Pakistan Navy (PN). The PN operates frigates and patrol vessels bought from China and will also field Chinese-made submarines. Their facilities, parts, and technicians may be readily employed for some of the PLAN fleet.
- Gwadar’s port facilities could support the PLAN’s largest vessels. Beyond the pier, Gwadar possesses a sizeable laydown yard for marshalling military equipment and materials.
- Gwadar will not necessarily have utility as a base in a wartime scenario. The most critical factor informing this view is the apparent lack of political commitment between China and Pakistan to provide mutual military support during times of crisis or conflict.
- If the infrastructure projects mature, Gwadar could become a key peacetime replenishment or transfer point for PLA equipment and personnel. Prepositioning parts, supplies, and other materials at Gwadar would be a productive use of the port and airfield facilities.

Introduction

The People's Republic of China (PRC) has been the chief promoter, financier, developer, manager, and operator of the seaport at Gwadar since 2002.⁶ In October 2016, a decade after the port went into operation, the first trade expedition traveled from China to Gwadar on a 15-day, 3,115 kilometer (km) overland convoy from Xinjiang.⁷ The PRC Minister of Foreign Affairs, Wang Yi, described this elaborate exercise to export a modest 100 containers by truck as the “first movement in the ‘One Belt One Road’ symphony, rich in romance.”⁸ There has not yet been a “second movement” of large-scale transport from China to Gwadar, calling into question the heavily promoted idea of an economic corridor from China to the Indian Ocean.

Partly due to its anemic commercial performance, some observers conclude Gwadar port is on the verge of becoming “a new naval base in China’s string of pearls” across the Indian Ocean.⁹ Meanwhile, Chinese and Pakistani promoters claim that the dusty, isolated fishing town of 90,000 people is poised to become “a bustling city of two million people with a \$30 billion GDP...and 1.2 million high paid jobs.”¹⁰ Neither scenario is likely. While senior Pakistani officials have reportedly asked China to establish a Pakistani naval base at the site,¹¹ China has taken a different tack. Chinese leaders instead envision Gwadar’s development into an international transport hub, the centerpiece of an ambitious bilateral economic and security program.

Chinese firms would need to bring about a wholesale transformation of Gwadar for it to flourish in Pakistan’s remote and restive Balochistan province. Gwadar’s hinterlands are a sparsely populated, poor region bordering comparable areas of Iran and Afghanistan. It is forbidding terrain, prone to drought, flooding, and acute water and energy shortages, and plagued by labor unrest, terrorism, and long-standing anti-government militancy.¹² The area is potentially resource-rich, but almost totally

⁶ 吴邦国副总理出席巴基斯坦瓜达尔港口项目一期工程开工典礼 [“Vice-Premier Wu Bangguo Attends the Groundbreaking Ceremony of the First Phase of Gwadar Port Project in Pakistan”], PRC Ministry of Foreign Affairs, March 25, 2002, https://www.fmprc.gov.cn/web/gjhdq_676201/gj_676203/yz_676205/1206_676308/xgxw_676314/t5512.shtml.

⁷ 郝洲, 周戎, 刘英 [Hao Zhou, Zhou Rong, and Liu Ying], 中巴经济走廊实地调研报告 [“China-Pakistan Economic Corridor Field Research Report”], 人民大学重阳金融研究院与财经杂志报告 [Renmin University Chongyang Institute and Caijing Magazine Report], no. 19 (December 2016), p. 6. (“Renmin/Caijing Report”)

⁸ 中巴经济走廊树起“一带一路”样板 [“China-Pakistan Economic Corridor Sets a Model for the Belt and Road”], *China Industry & Commerce News* [中华工商时报], January 6, 2017, <http://fec.mofcom.gov.cn/article/fwtydl/zgzx/201701/20170102496988.shtml>.

⁹ Gurmeet Kanwal, “Pakistan’s Gwadar Port: A New Naval Base in China’s String of Pearls in the Indo-Pacific,” CSIS Briefs, April 2, 2018, <https://www.csis.org/analysis/pakistans-gwadar-port-new-naval-base-chinas-string-pearls-indo-pacific>.

¹⁰ Gwadar New Smart Port City Masterplan 2020, http://investment.cpicglobal.com/gwadar2020-brochure-bau-us-gs?gclid=EAIaIqObChMI7Kb9ipiV6QIVhZ6fCh1QPwNDEAAAYASAAEgJ8RvD_BwE.

¹¹ In 2011, visiting Beijing less than two weeks after the U.S. raid into Pakistan that killed Osama bin Laden, Pakistan’s Minister of Defense, Chaudhary Ahmed Mukhtar, told foreign media that “we have asked our Chinese brothers to please build a naval base at Gwadar.” See Farhan Bokhari, “Pakistan Turns to China for Naval Base,” *Financial Times*, May 22, 2011, <https://www.ft.com/content/3914bd36-8467-11e0-afcb-00144feabdc0>. Chinese media covered these comments, declining to say whether or not Chinese leaders had agreed. See 外媒称巴基斯坦希望中国援建海军基地 [“Foreign Media Say Pakistan Hopes China Will Help Build a Naval Base”], 新华网 [Xinhua Net], May 23, 2011, <http://news.cntv.cn/china/20110523/105539.shtml>.

¹² Frederic Grare, “Balochistan: The State Versus the Nation,” *Carnegie Endowment for International Peace* (April 11, 2013), <https://carnegieendowment.org/2013/04/11/balochistan-state-versus-nation-pub-51488>. A United Nations Development Program report from 2017 noted that the situation is, if anything, deteriorating. “In Balochistan, 20 out of 24 districts, for which decade-old data is available, suffered a fall in their rankings [in the Human Development Index, a composite indicator of standards of living].” Adil Najam and Faisal Bari, “Pakistan Human Development Index Report

lacking in industry and modern infrastructure to deliver its possible mineral wealth to market.¹³ Chinese analysts nonetheless continue to assert that “Gwadar is becoming ‘Shenzhen’ in Pakistan,” hoping against all odds that Balochistan will reprise the economic miracles of China’s Pearl River Delta.¹⁴

Thus far, commercial activity at Gwadar has been quite limited. The port has seen very little vessel traffic in over a decade of operation, and its overland transport links remain tenuous. Nonetheless, Chinese leadership continues to plow financial and political capital into this ambitious, long-term enterprise. If it is unlikely to become a major economic hub, why is the Gwadar project still under development? What are the motivations for continued Chinese interest and investment in the port and surrounding infrastructure? How do Chinese leaders and experts understand the purpose of this venture?

This case study focuses on China’s domestic discussion about Gwadar to understand why it remains a desirable overseas strategic strongpoint for the PRC. There are two principal reasons, which converge uniquely on Gwadar. The first is the port’s prized geostrategic location; the second is its critical function in a broader Chinese program to develop Pakistan in order to better address China’s domestic and regional security concerns. The evidence for these motivations emerges in the course of the proceeding analysis, but both warrant brief exposition before analyzing the port complex itself.

2017,” *United Nations Development Program Human Development Report*, 2017, https://www.undp.org/content/dam/pakistan/docs/HDR/HDI%20Report_2017.pdf. It is also the site of major shortfalls in human resources, including poor health and education. See The World Bank, “Balochistan, Pakistan: Strengthening Budget Management to Improve Education Service Delivery,” May 2018, <http://documents.worldbank.org/curated/en/872171540557541709/pdf/Balochistan-Strengthening-Budget-Management-to-Improve-Education-Service-Delivery.pdf>.

¹³ Planning and Development Department, Government of Balochistan, “Draft Balochistan Comprehensive Development Strategy (2013-2020),” *United Nations Development Program Roadmap*, 2013, [https://www.undp.org/content/dam/pakistan/docs/PROCUREMENT/2018/July%202018/2\)%%20BCDS%20Revised%20Final%20Draft%20August%2027%202013.pdf](https://www.undp.org/content/dam/pakistan/docs/PROCUREMENT/2018/July%202018/2)%%20BCDS%20Revised%20Final%20Draft%20August%2027%202013.pdf); Asian Development Bank, “Technical Assistance Islamic Republic of Pakistan: Balochistan Economic Report,” *ADB Technical Assistance*, Project Number 39003, (December 2005), <https://www.adb.org/sites/default/files/project-document/68721/39003-pak-tar.pdf>; Azhar Ahmad, 瓜达尔—地区战略转型中的平衡点 [*Gwadar: Balance Point For a Region in Strategic Transition*], trans. 李景峰, 史高杰 [Li Lingfeng and Shi Gaojie], (Kunming: Yunnan University Press, 2017), p. 180.

¹⁴ 季伟 [Li Wei], 瓜达尔正在成为巴基斯坦的“深圳” [“Gwadar Is Becoming Pakistan’s ‘Shenzhen’”], 新华网 [Xinhua Net], August 28, 2018, http://m.xinhuanet.com/2018-08/28/c_1123340282.htm; 黄安芸, 杨超, 成奕霖 [Huang Anyun, Yang Chao, and Cheng Yilin], [“Gwadar: From a ‘Small Fishing Village’ to the ‘Pearl’ of the China Pakistan Economic Corridor”], 看看新闻 [KanKan News], May 19, 2017, <http://www.kankanews.com/a/2017-05-19/0037996621.shtml>

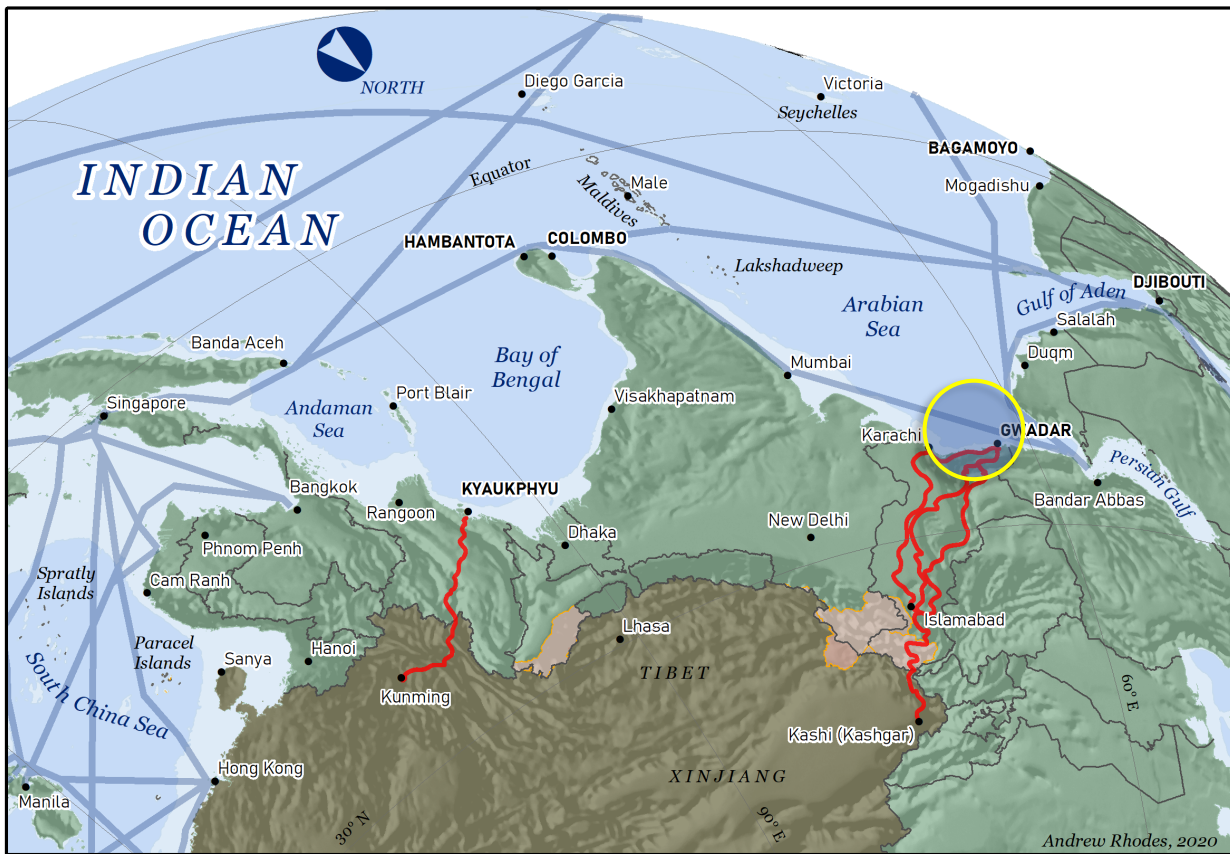


Figure 1. A view of the Indian Ocean from China.¹⁵

Objective #1: An Exit to the Sea

China's interest in Gwadar is dictated first by its strategic geography. Sited on Pakistan's southwestern Makran coastline, the port lies just 400 km east of the Strait of Hormuz, the narrow waterway connecting the Persian Gulf to global markets, and through which over 40 percent of China's imported oil transits.¹⁶ Iran is only 80 km to the west, and Gwadar's home province of Balochistan shares a long border with Afghanistan, some 500 km to the north of the port. Traveling overland from Gwadar, China's westernmost province of Xinjiang lies 1,800 km northeast over the Karakorum mountain range. Pakistan also shares a 520 km border with Xinjiang, part of which is Pakistan-occupied Kashmir disputed with India.

¹⁵ Map commissioned by CMSI, created by Andrew Rhodes. Blue lines show major shipping lanes, and red lines show proposed economic corridors linking western China directly to the Indian Ocean. The reddish shaded areas along the Sino-Indian borders designate disputed territory.

¹⁶ According to the U.S. Energy Information Administration, oil exports passing through the Strait of Hormuz average 21 million barrels/day, accounting for one third of globally traded oil. See "The Strait of Hormuz is the World's Most Important Oil Transit Chokepoint," *U.S. Energy Information Administration*, June 20, 2019, <https://www.eia.gov/todayinenergy/detail.php?id=39932>. The Chinese oil import figure (40.9 percent) comes from researchers at Dalian Maritime University under grants from the PRC State Council (Ministry of Natural Resources and Ministry of Education), Liaoning Province, and the Chinese Communist Party (Central Party Grant for Basic Research). 王爽 [Wang Shuang] et al., 瓜达尔港通航后的中国进口原油海运路径选择研究 ["Research on the Selection of Routes for Maritime Transportation of Imported Crude Oil from Gwadar Port to China"], *中国软科学 [China Soft Sciences]*, no. 5 (2018), p. 21.

Because of this geography, Chinese strategists prize Gwadar as a strategic strongpoint in a vital geopolitical region. It holds particular salience among China's strongpoints for its role as an "exit to the sea" (出海口) that links the Chinese mainland directly to the Indian Ocean.¹⁷ In this respect, Gwadar differs significantly from the strategic strongpoint at Djibouti, the subject of the first case study in this series. The Chinese presence at Djibouti expands the nation's reach with a foothold on the African continent, creating a military base from which to begin establishing exterior lines of naval operations from the Chinese mainland across the Indian Ocean.¹⁸

Pakistan, by contrast, is on China's immediate periphery and provides a rare channel of access to the Indian Ocean and Persian Gulf. Pakistan and Myanmar are the only states other than India that are contiguous to both Chinese territory and the Indian Ocean, and therefore have significant bearing both on China's peripheral security and its maritime access (see Figure 1).¹⁹ If overland road, rail, and pipeline connections can be achieved, Chinese control over the port of Gwadar would anchor a direct connection between Xinjiang and the Indian Ocean. Developing this infrastructure could produce the first modern, multi-modal, continental line of operations—for commercial as well as military purposes—from the ocean to the previously land-locked regions of western China.

Energy flows are a key component of this objective, which includes "entry" from the Indian Ocean and Persian Gulf as well as "exit" from the Asian continent. Secure energy flows are vital to China's commercial and military objectives. Energy insecurity has long been an acute concern for Chinese strategists, epitomized by the so-called "Malacca Dilemma," or China's reliance on shipping that

¹⁷ While the term translates directly to "estuary" and can be used for that technical purpose, it is also used in official and scholarly discourse to mean a port for accessing the ocean. For example, a description of Pakistan as a strong point on the Belt and Road by the PRC Ministry of Commerce frames the transport network through Pakistan as opening "an exit to the Indian Ocean" (打开一个面向印度洋的出海口). See 六、巴基斯坦与“一带一路”的关系 [“Six, Pakistan's Relationship to the Belt and Road”], 商务历史 - 中华人民共和国商务部 [History of Commerce – PRC Ministry of Commerce], Undated, <http://history.mofcom.gov.cn/?bandr=bjstydyldgx>, (accessed July 31, 2020); Former chairman of Pakistan's Board of Investment senator Saleem Mandviwalla explained to Chinese media that Xinjiang has gained an exit to the sea that can save time and effort through an overland route to Gwadar. 观察: 中国在巴基斯坦为新疆打造出口 [“Observer: China Creates an Exit to the Sea for Xinjiang in Pakistan”], BBC News – Chinese, April 21, 2015, https://www.bbc.com/zhongwen/simp/china/2015/04/150421_ana_xi_pakistan. In official diplomatic exchanges, CPEC is commonly referred to as an agreement between China and Pakistan on the construction of infrastructure between Xinjiang in the north and the “Indian Ocean exit to the sea, Gwadar Port.” See: 各国大使谈两会: 世界将从中国改革中分享红利 [“Ambassadors Discuss the Two Sessions: The World Will Share the Dividends of China's Reforms”], 新华网 [Xinhua], March 5, 2014, <http://politics.people.com.cn/n/2014/0305/c70731-24538827.html>. For scholarly discussion of the term, see 李靖宇 [Li Jingyu], et al, 关于中国在南亚区域选取印度洋出海口的战略推进构想 [“The Strategic Concept of Selecting Points for China's Access to the Indian Ocean in the South Asia Region”], 中国海洋大学学报 [Journal of Ocean University of China], no. 5 (2012), pp. 29–39; 李鲁奇, 孔翔, 李一曼, 许杨 [Li Luqi, Kong Xiang, Li Yiman, and Yang Xu], “一带一路”倡议下中国与中亚合作的战略支点选择 [“Selection of Strategic Strongpoints for China-Central Asia Cooperation under the Belt and Road Initiative”], 地理研究 [Geographical Research] vol. 38, no. 7 (2019), pp. 1705–1719; 蔡晨宇 [Cai Chenyu], 瓜达尔港的开发任重道远 [“The Development of Gwadar Port Has a Long Way to Go”], 中国港口 [China Ports], no. 1 (2017), pp. 17–20; 刘新华 [Liu Xinhua], 力量场效应、瓜达尔港与中国的西印度洋利益 [“Force Field Effect: Gwadar Port and China's Western Indian Ocean Interests”], 世界经济与政治论坛 [World Economics and Politics], vol. 53, no. 5 (2013), pp. 1–18.

¹⁸ On China's interior/exterior lines, see Peter Dutton, “A Maritime or Continental Order for Southeast Asia and the South China Sea,” *Naval War College Review*, vol. 69, no. 3 (2016), pp. 5–13.

¹⁹ Kyaukphyu in Myanmar (the subject of a forthcoming CMSI China Maritime Report case study) is often discussed as the other alternative “exit to the sea” for China to the Indian Ocean. Some analysts include ports in Bangladesh (Chittagong in particular) as also serving this function, though Chinese access to these ports would necessarily traverse India—including territory disputed between China and India in Arunachal Pradesh. See Li Jingyu, et al, “The Strategic Concept of Selecting Points.”

might be interdicted on its way through the Malacca Strait from the Indian Ocean.²⁰ Overland transport from China to Gwadar can ostensibly “shed 85 percent of the distance of sea-only transport,”²¹ and avoid Malacca altogether. If sufficient Chinese maritime power can be projected into Hormuz, as leading civilian transport officials have proposed, a new and secure energy route appears possible.²² Creating an alternative, protected channel for flows of vital resources and trade could reduce China’s vulnerability to disruptions from foreign maritime powers, piracy, natural disasters, and other shocks to maritime transportation. The confluence of land and sea access to the greater Middle East afforded by Pakistan is unique and could be strategically significant.



Figure 2. Gwadar-Xinjiang connection²³

²⁰ There is some discussion in China as to whether this is an entirely rational concern, but the concept remains prevalent. For a well-informed discussion of it, see 薛力 [Xue Li], 马六甲困境"内涵辨析与中国的应对 ["Analysis of the Content of the 'Malacca Dilemma' and China's Response"], 世界经济与政治 [World Economics and Politics], no. 10 (2010), pp. 117–140. For analysis specific to Gwadar, see 梅新育 [Mei Xinyu], 瓜达尔港与中国能源进口 ["Gwadar Port and China's Energy Imports"], 财经杂志 [Caijing Magazine], December 20, 2016, <http://magazine.caijing.com.cn/20161220/4214477.shtml>.

²¹ A February 2015 report stating that China would imminently enjoy an 85 percent reduction in transit distance for imported oil garnered great attention on Chinese social media. 巴基斯坦第三大港口 4 月运营我国石油运输线缩短 85% ["Pakistan's Third Largest Port Will Go Into Operation in April, Reducing the Transit Distance of Chinese Oil by 85%"], 新浪财经 [Sina Finance], February 21, 2015, <https://finance.sina.cn/chanjing/gdxw/2015-02-21/detail-icczmvun6226180.d.html?from=wap>; see also later skeptical commentary on it by a researcher from the PRC Ministry of Commerce (Chinese Academy of International Trade and Economic Cooperation): 梅新育 [Mei Xinyu], 中巴油气管线构想 深陷经济安全误区 ["The Concept of China-Pakistan Oil and Gas Pipelines is Deeply Trapped in Misconceptions About Economic Security"], 第一财经日报 [First Financial Daily], August 18, 2015, <https://www.yicai.com/news/4671232.html>; 蔡晨宇 [Cai Chenyu], 瓜达尔港的开发任重道远 ["The Development of Gwadar Port Has a Long Way to Go"], 中国港口 [China Ports], no. 1 (2017), p. 17.

²² Song Dexing, Director of the Water Transportation Bureau at the PRC Ministry of Transport, calls for “improved maritime power and influence in the Strait [of Hormuz].” See 史春林, 李秀英 [Shi Chunlin and Li Xiuying], 霍尔姆斯海峡安全对中国进口石油供应和运输影响 ["The Impact of the Security of the Strait of Hormuz on China's Imported Oil Supply and Shipping"], 中国软科学 [China Soft Sciences], no. 7 (2013), p. 15.

²³ “一带一路”期间与标杆——中巴经济走廊 ["One Belt One Road' Flagship and Model—China-Pakistan Economic Corridor"], 新华网思客 [Xinhua Net Thinker], archived June 17, 2020, <https://web.archive.org/web/20200617213149/http://sike.news.cn/hot/1705cpec/index.html>

Objective #2: Shoring Up Peripheral Security and Stability

Gwadar is also a key instrument for advancing Beijing's interest in a secure and stable Pakistan. This interest has both foreign and domestic security policy drivers, arising from the states' contiguous border regions of Xinjiang, in China, and Gilgit-Baltistan and Azad Jammu and Kashmir (i.e., Pakistan-administered Kashmir, which is disputed by India). This complex and unresolved border thus implicates both China's long-standing internal campaign to stamp out "separatism, terrorism, and extremism" in its ethnic minority western regions, and its external objective to keep India strategically focused on Pakistan.²⁴

These enduring interests make Pakistan a high priority for Chinese leaders, who routinely reaffirm the bilateral relationship in hyperbolic terms.²⁵ Pakistan is perennially China's largest arms-purchaser, and owes much of its nuclear and ballistic missile capabilities to the PRC.²⁶ Since China's border war with India in 1962, the Sino-Pakistani entente has functioned largely as a check on Indian power in the region, emphasizing military and intelligence cooperation, with mostly solid diplomatic support.²⁷ This basic logic still obtains, but China's broader regional objectives have led it to pursue a greatly augmented economic dimension to the relationship.

Beginning in 2013, Chinese and Pakistani leaders announced that Gwadar port would be the centerpiece of the "China-Pakistan Economic Corridor" (CPEC) (中巴经济走廊).²⁸ Chinese planners envision the port as the oceanic node of a transportation network of road, rail, and pipeline infrastructure intended to traverse over 3,000 km of rugged, often insecure Pakistani terrain to link up with Chinese transport networks in Xinjiang province. From a northern terminus at Kashgar in western Xinjiang, goods conveyed from Gwadar can then, in theory, proceed on to massive PRC markets further east, and vice versa. Landlocked central Asian states—Afghanistan in particular—are among the intended beneficiaries of this aspirational transport system.²⁹ Gwadar port is now heralded

²⁴ See Andrew Small, *The China-Pakistan Axis* (London: C. Hurst & Co., 2015); Isaac Kardon, "China and Pakistan: Emerging Strains in the Entente Cordiale," *Project 2049 Occasional Paper*, March 2011, https://project2049.net/wp-content/uploads/2018/05/china_pakistan_emerging_strains_in_the_entente_cordiale_kardon.pdf.

²⁵ Both sides routinely affirm that their "all-weather strategic cooperative partnership" is "higher than the Himalayas," "deeper than the Indian Ocean," and "sweeter than honey." See, for example, Hu Jintao, "Address at Islamabad Convention Center: 'Carry on Traditional Friendship and Deepen All-Round Cooperation'," Ministry of Foreign Affairs of the People's Republic of China, November 24, 2006, https://www.fmprc.gov.cn/mfa_eng/wjb_663304/zjzg_663340/yzs_663350/gjlb_663354/2757_663518/2758_663520/t285917.shtml; "China, Pakistan Vow to Push Forward All-Weather Strategic Cooperative Partnership to New High," *Xinhua*, September 8, 2018, http://www.xinhuanet.com/english/2018-09/08/c_137454716.htm.

²⁶ SIPRI Arms Transfers Database, <https://www.sipri.org/databases/armstransfers>

²⁷ For a comprehensive discussion of this long-standing diplomatic entente, see Small, "The China-Pakistan Axis." Recently, China declined to defend Pakistan against its listing on the Financial Action Task Force (FATF) "grey list" of countries needing to control financing for terrorism. Adnan Aamir, "The Grey List: More Trouble for Pakistan's Economy," *The Lowy Institute Interpreter*, July 18, 2018, <https://www.loyyinstitute.org/the-interpreter/grey-list-more-trouble-pakistan-s-economy>

²⁸ "Li Keqiang Urges Development of 'China-Pakistan Economic Corridor'," *South China Morning Post*, May 23, 2013, <https://www.scmp.com/news/china/article/1244267/li-keqiang-urges-development-china-pakistan-economic-corridor>

²⁹ A comprehensive study of CPEC and Gwadar conducted by researchers from Renmin University and reporters from *Caijing Magazine* argued that Gwadar was positioned to become "the port of choice for Central Asia, which will promote economic development in Central and South Asia." See Renmin University Chongyang Institute and *Caijing Magazine*, "China-Pakistan Economic Corridor Field Research Report," p. 3. See also 唐孟生 [Tang Mengsheng], 唐孟生谈中巴经济走廊：一带一路的旗舰与标杆 ["Tang Mengsheng Discusses CPEC: One Belt One Road's Flagship and Benchmark"], *Sina*, May 26, 2016, <http://news.sina.com.cn/w/2016-05-26/doc-ixsqxxu4430007.shtml>.

as “the second great monument of Pak-China friendship after the Karakorum Highway,” the high mountain road that connects the two countries.³⁰

China’s senior leadership has staked considerable capital and credibility on the success of Gwadar. During Xi Jinping’s April 2015 visit to Pakistan, he elevated CPEC to the highest priority and “flagship” of his “Belt and Road Initiative” (BRI).³¹ Xi named Gwadar as one of the four pillars of CPEC, and pledged \$46 billion in Chinese investment over the next 15 years.³² This largesse is a major departure from China’s long-standing economic neglect of Pakistan.³³ The huge and growing outlay of promised PRC investment in CPEC is estimated at as much as \$87 billion,³⁴ though only \$28.6 billion is allocated as of the latest official tally.³⁵ Whatever the ultimate figure, it is not a trivial sum. Chinese leaders have opted for a strong dose of economic engagement to shore up this important relationship for the new era. Direct investment at Gwadar is estimated to be \$1.62 billion to date, constituting a small but significant proportion of the PRC’s CPEC program.³⁶ As the key project in Xi’s signature international program, Gwadar’s development holds immense symbolic as well as practical value for Chinese foreign policy.

These huge investments are necessary, in PRC leadership’s estimation, because of Pakistan’s dire social and economic weakness. Xi has pledged a Chinese “blood transfusion” to shore up Pakistani instability.³⁷ This medical metaphor is also used within China to describe the “disease” of Uyghur

³⁰ Pakistan Ministry of Maritime Affairs, “Year Book 2016-2017,” Islamabad, 2018, http://moma.gov.pk/userfiles1/file/YB_2016-17.pdf, p. 51

³¹ 张尼 [Zhang Ni], 习近平今启年内首访如何助推中巴经济走廊引关注 [“How Xi Jinping’s First Visit This Year Will Boost the CPEC”], 人民日报 [People’s Daily], April 20, 2015, <http://politics.people.com.cn/n/2015/0420/c1001-26869793.html>

³² Xi himself has played a key role in defining the nature of China-Pakistan economic initiatives. During his visit in 2015, he outlined four main lines of effort for CPEC: expanding Gwadar port and its free zone, constructing energy projects, developing nation-wide transport infrastructure, and forging bilateral industrial cooperation. See 崔小粟 [Cui Xiaosu], 习近平在巴发表署名文章 描绘中巴关系新前景 [“Xi Jinping Publishes Signed Article in Pakistan Depicting New Prospects for China-Pakistan Relations”] 中国共产党新闻网 [China Central Party News Network], April 20, 2015, <http://cpc.people.com.cn/xuexi/n/2015/0420/c385474-26870490-2.html>; Subsequently, Xi has personally promoted the Gwadar project, citing it as an example of “continuous strengthening of facility connectivity” between ports and their connecting highways, railways, pipelines, and airports. 习近平出席“一带一路”国际合作高峰论坛开幕式并发表主旨演讲 [“Xi Jinping Attended The Opening Ceremony of the ‘Belt and Road’ International Cooperation Summit Forum and Delivered Keynote Speech”] 新华社 [Xinhua News Agency], May 14, 2017, http://www.gov.cn/xinwen/2017-05/14/content_5193673.htm#allContent

³³ Arif Rafiq, “The China-Pakistan Economic Corridor Barriers and Impact,” *Peaceworks*, no. 135 (Washington, DC: United States Institute of Peace, 2017), pp. 5-6; Small, “The China-Pakistan Axis,” pp. 93-116.

³⁴ The topline figure crept from \$46 billion to \$55 billion and later expanded to \$62 billion. Salman Siddiqui, “CPEC investment pushed from \$55b to \$62b,” *The Express Tribune*, April 12, 2017, <https://tribune.com.pk/story/1381733/cpec-investment-pushed-55b-62b/>. One recent assessment places the total at \$87 billion, including CPEC projects that have been paused or cancelled. See Jon Hillman, Maesha Mccalpin, and Kendra Brock, “The China-Pakistan Economic Corridor at Five.” *CSIS Briefs*, (April 2020), <https://www.csis.org/analysis/china-pakistan-economic-corridor-five>.

³⁵ Government of Pakistan Planning Commission, “Yearbook 2018-2019,” *Ministry of Planning, Development & Reform* (Islamabad, 2020), https://www.pc.gov.pk/images/final_year_book.pdf, p. 144.

³⁶ 王然 [Wang Ran], 巴基斯坦瓜达尔港已具备运营能力 [“Pakistan’s Gwadar Port Has Operating Capabilities”], 港口经济 [Port Economy], no. 4 (2015), p. 53; 中国共和国商务部 [PRC Ministry of Commerce], 巴基斯坦与“一带一路”的关系 [“Pakistan’s Relationship With the Belt and Road”], 商务历史 [The History of Commerce], Ch. 6, 2020, <http://history.mofcom.gov.cn/?bandr=bjstydyldgx>

³⁷ Tang Mengsheng notes that of 51 total investments announced with MOUs, 36 are projects currently designated as “CPEC,” of which 21 are focused on energy capacity. See Tang Mengsheng, “One Belt One Road’s Flagship and Benchmark.”

Muslim separatism.³⁸ Chinese analysts describe the connection of the port to China as “a large artery” supporting Pakistan’s health—and China’s, too.³⁹ Such emphasis on the basic unity of internal and external security reflects Xi Jinping’s conception of “holistic national security,” rooted in long-standing Chinese strategic thinking about its western frontiers.⁴⁰ According to the former PRC Ambassador to Pakistan, Lu Shulin, the CPEC program “will improve the economic and social development of the backward areas of Pakistan and China. The situation provides a ‘cure’ for the terrorist threat in the region.”⁴¹

Chinese rulers have long viewed economic development along China’s western periphery as a means to maintain stability. General Liu Yazhou, political commissar of the PLA National Defense University, captured this long-standing conception of China’s near abroad, stating that “we should see the western regions not as a frontier but rather as our advancing hinterlands.”⁴² From this perspective, Pakistan is part of the same socio-economic and security system as Xinjiang. Chinese security leadership considers instability in Pakistan to be a significant threat to PRC domestic stability, in large part because of its close connections to Xinjiang.⁴³ As the People’s Armed Police (PAP) Chief of Staff Lieutenant General Qin Tian put it, “the trend of foreign terrorists returning to the country is obvious. Xinjiang is under attack.”⁴⁴ Chinese analysts consider Pakistan a major vector for radicalization of Chinese Muslims. Beijing has thus long relied on Pakistan to “mediate major elements of its counter-terrorism policy.”⁴⁵

The economic program of CPEC (of which Gwadar is a component) is best understood then as an instrument of Beijing’s security policy. The aim is to stabilize and pacify Xinjiang by integrating its development with countries on China’s periphery. The development of an Indian Ocean port is fundamental to the overarching goal of internal stability and peripheral security. To understand why and how first requires an understanding of the port and its connecting infrastructure.

³⁸ Sheena Chestnut Greitens, Myunghye Lee, and Emir Yazici, “Counterterrorism and Domestic Repression: China’s Changing Strategy in Xinjiang,” *International Security*, vol. 44, no. 3 (2019), pp. 9-47.

³⁹ Cai Chenyu, “Gwadar Port Has A Long Way To Go,” p. 17

⁴⁰ For an assortment of Xi statements on his “holistic national security outlook,” see: 习近平 [Xi Jinping], 习近平关于总体国家安全观论述摘编 [*Selected Works of Xi Jinping on The Holistic National Security Outlook*] (Beijing: Central Party Publishing, 2018); see also Timothy Heath, “The ‘Holistic Security Concept’: The Securitization of Policy and Increasing Risk of Militarized Crisis,” Jamestown Foundation *China Brief* 15, no. 12 (June 19, 2015), <https://jamestown.org/program/the-holistic-security-concept-the-securitization-of-policy-and-increasing-risk-of-militarized-crisis/>.

⁴¹ 陆树林 [Lu Shulin], 中巴经济走廊: “一带一路”的旗舰项目和示范项目 [“China Pakistan Economic Corridor: A Flagship and Exemplary Project of the Belt and Road”], 印度洋经集体研究 [*Indian Ocean Economic and Political Review*], no. 4 (2015), p. 104.

⁴² 刘亚洲 [Liu Yazhou], 西部论 [“On the West”] 凤凰周刊 [*Phoenix Weekly*], August 5, 2010, http://risechina.blogspot.com/2013/03/blog-post_9585.html

⁴³ “Xi takes an integrated view of the international and domestic counter-terrorism situation,” according to then-Chief of Staff of the People’s Armed Police. 秦天 [Qin Tian]. 21世纪前期反恐形势与中国反恐军事力量建设 [“The Anti-Terrorism Situation in the Early 21st Century and the Building of China’s Anti-Terrorist Military”] 中国军事科学 [*China Military Science*], no. 1 (2017), p. 53

⁴⁴ *Ibid.*, p. 52

⁴⁵ Andrew Small, “China and Counter-Terrorism: Beyond Pakistan?” in Michael Clarke (ed.), *Terrorism and Counterterrorism in China: Domestic and Foreign Policy Dimensions*, (Oxford: Oxford University Press, 2018), p. 187.

Port Capacity & Characteristics

The port at Gwadar has been in operation since 2008 but has yet to see regular commercial service. Situated in the east bay of a hammer-shaped peninsula, it has historically supported artisanal fishing for the local population. That population has not yet been displaced by the industrial-scale commercial port operation intended by the project developers. Indeed, Gwadar port's commercial throughput is not yet reported by any major industry sources. The port and its adjacent free trade and export processing zone nonetheless continue as the subjects of voluminous reporting in Pakistani and Chinese media while incremental upgrades and expansions take place.

Port Development

The dream of a deep-water port at Gwadar has been long in the making. A survey by the United States Geological Service in 1954 demonstrated the suitability of the site's natural harbor for development as a port, after which Pakistan negotiated the purchase of the Gwadar site from the Sultanate of Oman for \$3 million in 1958.⁴⁸ Pakistani officials marketed the prospective port at Gwadar to foreign firms throughout the intervening decades, and nearly reached a deal in the late 1990s with the U.S. oil and gas firm Unocal, which reportedly aimed to use Gwadar as hub for natural gas pipelines spanning the region.⁴⁹ Pakistani leaders were unable to secure capital and technical expertise for the port's development until August 2001, when PRC Prime Minister Zhu Rongji committed Chinese support for the project.⁵⁰

The China Harbor Engineering Company (CHEC)⁵¹ was the general contractor on the initial development of the site, breaking ground in March 2002.⁵² CHEC inherited a design from a British firm, but opted to redesign "in line with Chinese port construction standards," according to the general manager and chief engineer of the project, Sun Ziyu, who noted that it was "built to specifications 70 percent higher than the standards of the United Kingdom."⁵³ Sun claimed that they were not the low bidder, but rather offered the highest quality project (though there is no public record of open bidding on the project).⁵⁴ One strength of the Chinese bid was the financial backing of state. The leading PRC policy bank supporting overseas construction, China's Export Import Bank (Exim Bank), financed the port construction project with a \$50 million grant, a \$50 commercial

⁴⁸ "Gwadar Port: 'History-Making Milestones,'" *Dawn*, April 14, 2008, <https://www.dawn.com/news/297994>.

⁴⁹ The firm reportedly engaged in multiple rounds of negotiations with the Pakistani government during the 1990s, hoping to use the port to connect to the energy-rich Caspian Sea. 郝洲 [Hao Zhou], 瓜达尔港曲折起航 ["Gwadar Port Sets Sail"], 财经 [Caijing], May 5, 2017, <http://magazine.caijing.com.cn/20170505/4268608.shtml>. Another U.S. firm also signed an investment memorandum of understanding for a \$460 fishing port and modern industrial fishing fleet, but also failed to close the deal. See Syed A. Aslam, "\$460 m Forbes Project is Dead," *Pakistan Economist*, no. 30 (August 1, 1999), <https://www.pakistaneconomist.com/issue1999/issue30/i&e1.htm>.

⁵⁰ 朱镕基会见巴基斯坦财政部长和交通部长 ["Zhu Rongji Meets with Pakistani Minister of Finance and Minister of Transportation"], 人民日报 [People's Daily], August 9, 2001, <http://www.people.com.cn/GB/shizheng/16/20010809/531795.html>; Hao Zhou, "Gwadar Port Sets Sail."

⁵¹ CHEC is a subsidiary of the leading central SOE working on global port projects, China Communications Construction Company (CCCC) (中国交通建设股份有限公司).

⁵² 巴基斯坦瓜达尔港口项目工程简介 ["Introduction to the Gwadar, Pakistan Port Project"], 中华人民共和国商务部 [PRC Ministry of Commerce], May 5, 2004, <http://www.mofcom.gov.cn/article/bi/200405/20040500216204.shtml>.

⁵³ 李强 [Li Qiang], 中港董事长: 瓜达尔港让中国工程走向世界 ["China Harbour Director: Gwadar Port brings Chinese engineering to the world"], 世界博览 [World Expo], September 27, 2011, http://news.ifeng.com/shendu/sjbl/detail_2011_09/27/9505763_0.shtml, p. 1. No other sources report on the British design firm.

⁵⁴ *Ibid.*, p. 1.

credit, and a \$98 million state credit repayable over 15 years, with Pakistan providing the remaining \$50 million for the \$248 million project.⁵⁵

The project faced significant security and technical challenges, including fatal terrorist attacks against the Chinese engineers and laborers working on site.⁵⁶ Lacking fresh water, reliable electricity, and modern roads, the Chinese laborers also made do with infrequent shipments from the PRC; project equipment came in on a semi-submersible barge from the mainland because it could not be conveyed overland.⁵⁷ These threats and obstacles notwithstanding, CHEC completed Phase I of construction in the spring of 2007, three months ahead of schedule, but \$50 million over budget.⁵⁸

The facility features a 4.7 km approach channel dredged to a depth of 14.5 meters (m), with a turning basin with a maximum allowable length overall (LOA) of 295m.⁵⁹ The 602m continuous quay wall includes three 200m multipurpose ship berths that can accommodate up to 50,000 DWT vessels with a maximum 12.5m draught.⁶⁰ The cargo berths are outfitted for container, RO-RO, breakbulk, and heavy project cargo; a 100m service berth is immediately west of the quay.⁶¹ The designed capacity is 137,000 TEU (containerized cargo) per year, and 868,000 tons of general and bulk cargo per

⁵⁵ 巴基斯坦政府正积极寻求外国公司运营瓜达尔港 [“Pakistani Government is Actively Seeking Foreign Companies to Operate Gwadar Port”], 中国驻巴基斯坦大使馆经济商务处 [PRC Embassy in Pakistan Economic and Commercial Office], February 26, 2006, <http://pk.mofcom.gov.cn/article/jmxw/200602/20060201601928.shtml>. For more information on the loans and grants, see A. Dreher, A. Fuchs, B.C. Parks, A.M. Strange, and M.J. Tierney, “China Exim Bank Provides USD 98 Million State Credit for Gwadar Port Project, Pakistan (Linked to #38995 and #35124), *Aid, China, and Growth: Evidence from a New Global Development Finance Dataset*. AidData Working Paper #46. Williamsburg, VA: AidData, 2017.

⁵⁶ “3 Engineers killed in car bomb in Pakistan,” *China Daily*, May 3, 2004, https://www.chinadaily.com.cn/english/doc/2004-05/03/content_328070.htm; PRC Ministry of Commerce, “Pakistan’s Relationship With the ‘Belt and Road’”

⁵⁷ Li Qiang, “Gwadar Port Brings Chinese Engineering to The World.”

⁵⁸ The project cost later increased to \$298 million. See “Gwadar Port: ‘History-Making Milestones,’” Li Qiang, “Gwadar Port Brings Chinese Engineering to the World,” p. 2.

⁵⁹ Port characteristics drawn from IHS Markit, “Gwadar Port Detail,” *Seaweb Ports*, accessed May 1, 2020. China Communications Construction Company subsidiary Shanghai Dredging Co. Ltd. spent five years dredging the port. Phase I was initiated in May 2002 and dredged the channel to 8 meters. Phase II later dredged the channel to 10-11 meters. For a personal account of the dredging work by company management, see 在巴基斯坦瓜达尔港疏浚航道的日子 [“The Time We Dredged Gwadar Port’s Channel in Pakistan”], 东南商报 [Southeast Business News], May 13, 2017, http://daily.cnnb.com.cn/dnsb/html/2017-05/13/content_1049758.htm?div=-1. This company has undertaken other projects of national importance, such as dredging artificial islands in the disputed Spratly Island Group of the South China Sea. See 百年上航 卓越领航 [“A Hundred Years of Shanghai Dredging Co., Leading in Excellence”], 中交上海航道局有限公司 [CCCC Shanghai Dredging Co. Ltd.], September 7, 2018, <http://www.sh-syh.org/node2/shsyh/qywh/u1ai3817.html>.

⁶⁰ These are the numbers available from IHS Markit’s *Seaweb Ports* entry for Gwadar. The COPHC website lists 12.5m for maximum draught and 70,000 for maximum DWT, but given that IHS Markit is a paid service for commercial operators, it is likely that the COPHC-published figures are inflated, or at best anticipatory of future dredging and expansion. See China Overseas Port Holdings Company, Pakistan, “Gwadar International Terminals Limited,” <http://cophcgwadar.com/gitl.aspx>, accessed May 1, 2020. The Pakistan Ministry of Maritime Affairs annual report also lists 12.5m as the draught, but 50,000 as the maximum DWT. See Government of Pakistan, Ministry of Maritime Affairs, “Year Book 2016-2017,” http://moma.gov.pk/userfiles1/file/YB_2016-17.pdf, p. 2.

⁶¹ IHS Markit, “Gwadar,” *Seaweb Ports*, accessed April 20, 2020. The current port operator, China Overseas Port Holdings, claims in its brochure that the facility can handle 70,000 DWT vessels, but this is not the current recommendation from commercial sources like IHS Markit. See China Overseas Ports Holding Company Pakistan (Pvt.) Ltd., “A Deep Sea Port Exploring Global Opportunities,” *COPHC Company Profile*, http://cophcgwadar.com/files/pdf/COPHC_Company_Profile.pdf, p. 14. The overall port area is 640,000 m² and includes 48,278 m² for container stacking, a 28,669 m² open storage yard, 3,750 m² of warehousing, an 1,800 m² hazardous cargo storage yard, and 400 reefer plugs for refrigerated cargos.

year.⁶² These are the modest port facilities currently operating, with only minor augmentation well over a decade later.

Port Management

The Gwadar Port Authority tendered international bids in 2006, and the Port of Singapore Authority (PSA) won a 40-year build-operate-transfer (BOT) lease for Gwadar port in 2007.⁶³ CHEC and Dubai Ports World also bid on the project, but PSA was awarded the concession on the strength of its reputation as a leading global port operator.⁶⁴ Under the agreement, PSA was to receive 91 percent of cargo operations revenues and 85 percent of the free zone revenues.⁶⁵ As part of this concession, PSA agreed to develop Phase II of the port, pledging a \$550 million investment in the construction of four additional container berths, a bulk cargo terminal, two oil terminals, a roll-on roll-off terminal, and a grain terminal over the next five years.⁶⁶ Stymied by political, engineering, and legal obstacles, PSA failed to implement Phase II expansion.⁶⁷ The port was only utilized for bulk cargos of fertilizer, urea, and wheat imported directly by the government-operated Trading Corporation of Pakistan, which had to subsidize these transactions.⁶⁸ In 2011, PSA entered negotiations to exit the project.

By February 2013, PSA had opted to sell all of its equity in the port to the Chinese state-owned firm China Overseas Port Holdings Company, Ltd. (COPHC).⁶⁹ When COPHC took over the port from PSA in February 2013, the facilities were in disrepair. Engineers from the China Communications Construction Corporation-Fourth Harbor Engineering Investigation and Design Institute Co., Ltd. (CCCC-FHDI, which was involved in the survey and planning of the port's construction from 2002-2007) assessed the port after the Chinese take-over and found the main pier in sound structural condition, but almost everything else had been neglected and was in various stages of decay. The approach had silted up to only 12.1 meters (from 14.5 m), steel components of the loading equipment and cranes were "severely corroded," quay crane hydraulic systems were leaking, and yard

⁶² Pakistan Ministry of Ports and Shipping, Gwadar Port Authority, "Gwadar Port & CPEC," A Presentation to Parliamentary Committee on CPEC, November 28, 2015, <http://www.na.gov.pk/cpec/sites/default/files/presentations/Parliamentary%20Committee%20on%20CPECNew.pdf>, p. 9.

⁶³ China Overseas Ports Holding Company Pakistan (PVT) Ltd., "Brief Summary of Development: Gwadar Port and Free Zone," *Presentation delivered at PRC Embassy, Pakistan*, Islamabad, 26 October 2018, <http://www.pakistan-china.com/wb-pci-pci/demo/wp-content/uploads/2019/10/cpec-3.pdf>.

⁶⁴ Some reports speculated that PSA was chosen over CHEC because then-President Pervez Musharraf sought to assuage American concerns about leasing a strategic asset to the PRC. See Declan Welsh, "Chinese Company Will Run Strategic Pakistani Port," *New York Times*, January 31, 2013, <https://www.nytimes.com/2013/02/01/world/asia/chinese-firm-will-run-strategic-pakistani-port-at-gwadar.html>.

⁶⁵ K. Raffat Zaheer, "Development and Operations of the Port of Gwadar," *International Federation of Shipmasters' Associations* working paper, 2008, <http://www.ifsma.org/tempannounce/aga33/Gwadar.pdf>.

⁶⁶ "SC Revives Issue of Controversial Contract for Gwadar Port" *Dawn*, November 3, 2010, <https://www.dawn.com/news/892058>.

⁶⁷ 宋笛 [Song Di], 看见瓜达尔港：世界最大的深水港 ["Behold Gwadar Port: The World's Largest Deepwater Port"], *中国企业报 [China Enterprise News]*, February 17, 2016, http://www.cccnews.cn/mtjkj/201602/t20160217_45539.html.

⁶⁸ Song Di, "Behold Gwadar Port"; Hao Zhou, "Gwadar Port Sets Sail."

⁶⁹ Hao Zhou, "Gwadar Port Sets Sail." The principal complaint from PSA was the failure of the Pakistani Navy to turn over a large plot (584 acres of land at Shamba Ismail) that was meant to be developed as warehousing space adjacent to the port. Pakistani analysts differ as to whether this or broader security, commercial, or other political concerns were the principal causes of PSA's failure to perform planned expansion and operate the port successfully. See also "Putting Economics in Command," *Dawn*, September 2, 2012, <https://www.dawn.com/news/746500/putting-economics-in-command>; "Gwadar Port To Be Taken Over By Chinese Company: Minister Informs Senate Body," *Business Recorder*, August 29, 2012, <https://fp.brecorder.com/2012/08/201208291231513/>.

equipment “urgently needed maintenance.”⁷⁰ As late as 2016, the port’s cargo-handling equipment was reportedly unusable due to neglect; oil storage tanks were rusted over and non-functional, and “mountains of garbage filled the port area.”⁷¹ Still, shortly after Xi Jinping’s landmark trip and announcement of the CPEC project, COPHC finalized a new 40-year lease on the Gwadar port in November 2015.⁷²

COPHC had no prior experience owning or operating a port terminal before taking over at Gwadar.⁷³ Indeed, the firm was incorporated and registered (in Hong Kong) in August 2012.⁷⁴ According to COPHC’s chairman, Zhang Baozhong, the firm “was specially-designed and purposely-built...for Gwadar port by the Chinese government.”⁷⁵ Disclosures to the Hong Kong Exchange where the firm is domiciled describe it as a private corporation in which Zhang himself owns one third of the issued shares (worth only \$500,000 USD).⁷⁶ The firm is otherwise opaque, and unwilling to respond to Pakistani journalists’ requests for further information.⁷⁷ Public documents do not list any identifiable government actors in the firm’s management or ownership structure.⁷⁸ Nonetheless, the “state-owned” status of the port operator appears to be a selling point for developments surrounding Gwadar, indicating a degree of PRC government commitment, perhaps intended to assure investors.⁷⁹

This lease reportedly replicates the arrangements of the earlier PSA deal, with 91 percent of port revenues allotted to COPHC, 9 percent to the federal Pakistani government, and nothing to the

⁷⁰ 席芳, 汪超, 李俊星 [Xi Fang, Wang Chao, and Li Junxing], “一带一路”战略下的巴基斯坦瓜达尔港 SWOT 分析及发展策略 [“SWOT Analysis and Development Measures for Gwadar Under the One Belt One Road Strategy”], 交通企业管理 [Transportation Enterprise Management], no. 2 (2017), pp. 2-3.

⁷¹ Renmin/Caijing report; Hao Zhou, “Gwadar Port Sets Sail.”

⁷² Salman Masood and Declan Welsh, “Xi Jinping Plans to Fund Pakistan,” *New York Times*, April 21, 2015, <https://www.nytimes.com/2015/04/22/world/asia/xi-jinping-plans-to-fund-pakistan.html>.

⁷³ COPHC did bring on experienced Chinese state-owned enterprises to take on some construction tasks, e.g. Zhuhai Port Holdings Group Co., which signed a \$1.02 billion contract as part of a Zhuhai-Gwadar “sister port” program that entailed Chinese support on “harbor construction, personnel training, route exploration, goods supply, logistics warehouse construction and an information platform.” See Zheng Xin, “Zhuhai Port Scores big deal in Pakistan,” *China Daily*, October 30, 2015, http://usa.chinadaily.com.cn/epaper/2015-10/30/content_22326165.htm.

⁷⁴ China Overseas Port Holdings Company Limited, “Annual Return, Company no. 1787136, Form NAR1,” *Hong Kong Integrated Companies Registry Information System*, August 15, 2019.

⁷⁵ Yasir Habib Khan, “China Overseas Port Holding Company was made specifically to build the Gwadar port: chairman,” *Geo News*, May 14, 2019, <https://www.geo.tv/latest/237251-our-company-was-made-specifically-to-build-the-gwadar-port>

⁷⁶ China Overseas Port Holdings Company Limited, “Annual Return, Form NAR1.”

⁷⁷ A Pakistani newspaper investigated the firm and discovered that it is registered to a single room in Hong Kong that is also the registered address of four other firms. It has failed to submit annual documents to the Pakistan Securities and Exchange Commission. “The Mysterious China Overseas Port Company,” *Business Recorder Research*, February 18, 2018, <https://www.brecorder.com/2018/02/19/399768/the-mysterious-china-overseas-ports-holding-company/>.

⁷⁸ Zhang Baozhong (张保中) owns one third; another third is owned by an individual named Li Kejing, with a residential address in Hong Kong; the final third is owned by Cheer View Development Limited, with a British Virgin Islands address. One of the three directors, Qin Ling (秦岭), is listed in COPH’s filing to the Hong Kong Exchange has a Beijing residential address; the other, Li Jianhui (李建辉) has a Hong Kong residential address.

⁷⁹ See, for example, the promotional brochure of a Pakistani-British real estate development firm selling condominiums in two large residential zones in Gwadar city: “The port has been leased to China Overseas Port Holding Company a Chinese state-owned port operator for a term of 40 years and is being redeveloped under the economic model of Shenzhen in China.” “International Port City Gwadar,” *China Pakistan Investment Corporation*, 2019, <https://www.cpicglobal.com/downloads/Web2019-IPC-Brochure.pdf>, p. 9.

Baloch provincial government.⁸⁰ The COPHC lease also retains all of the PSA-negotiated arrangements and preferential conditions—“even PSA’s corporate structure for operation and management of ports and free zones—we have copied them intact,” according to a COPHC executive in Pakistan.⁸¹ PSA is among the leading global terminal operators, and has had the world’s highest throughput of containers through its terminals since 2008.⁸² Yet this world-class firm was unable (or unwilling) to successfully bring the port into commercial operation, calling into question the business case for COPHC’s subsequent efforts.

Port Utilization

Commercial activity at Gwadar has been quite limited, as of June 2020. While industry reporting does not cover throughput or utilization at the port, available evidence makes clear it is operating well below its designed capacity. According to the Pakistan Ministry of Maritime Affairs, cargo throughput actually *decreased* after COPHC took over the lease in 2013. Only 1.42 million tons of cargo and 99 ships came through Gwadar in the entire five years from 2013-2017 (the last time throughput was officially reported).⁸³ By contrast, in the second year of the port’s operation under PSA in 2009, a total of 2.25 million tons of cargo were imported through Gwadar by 70 ships. The port has generated only \$2.26 million in revenues during the period since the COPHC takeover in 2013, and only about \$200,000 went to the Gwadar Port Authority, according to reports from the Pakistan Ministry of Maritime Affairs in spring 2019.⁸⁴

“Most of the time,” wrote a Chinese industry analyst in 2017, “Gwadar port is basically idle.”⁸⁵ In the early years of COPHC operation, industry analysts described the problem at Gwadar as “ships but no cargo, or cargo but no ships.”⁸⁶ Three years after assuming control of the port, the Chinese operator handled its first commercial cargo vessel: the Sinotrans Shipping bulk carrier *Changhang Hanhai*, which offloaded 30,000 tons of engineering equipment and building materials at berth 2 in October 2016.⁸⁷ This limited activity consisted primarily of cargo for construction on the port and its

⁸⁰ “China To Get 91pc Gwadar Income, Minister Tells Senate”, *Dawn*, November 25, 2017; China Overseas Ports Holding Company Pakistan (PVT) Ltd., “Brief Summary of Development: Gwadar Port and Free Zone.”

⁸¹ Hao Zhou, “Gwadar Port Sets Sail.”

⁸² “Global Container Terminal Operators Annual Review and Forecast, Annual Report 2019” *Drewry Maritime Research*, p. 26.

⁸³ Pakistan Ministry of Maritime Affairs, “Year Book 2016-2017,” p. 54. In the entire period of operation through 2017, the port had handled only 205 vessels and 6.453 million tons of cargo (*Ibid.*, p. 2). The PRC Embassy in Pakistan, based in Islamabad, is nonetheless an enthusiastic promoter of the project. Although the figure conflicts with those reported by the Pakistan Ministry of Maritime Affairs, the embassy reported 400,000 tons of cargo handled in 2017 “Latest Progress on the CPEC,” *Embassy of the PRC in the Islamic Republic of Pakistan*, December 29, 2018, <http://pk.chineseembassy.org/eng/zbgs/CPEC/t1626097.htm>. For reference, Handymax bulk carriers, the largest that Gwadar can currently accommodate, can offload 50,000 tons of cargo; large container ships carry as many as 20,000 TEUs.

⁸⁴ “Economic Activity in Gwadar Increases as Port Generates PKR 358 Million,” *China-Pakistan Economic Recorder*, March 22, 2019, <http://www.cpecinfo.com/news/economic-activity-in-gwadar-increases-as-port-generates-pkr-358-million/NjgyOQ==>.

⁸⁵ Cai Chenyu, “The Development of Gwadar Port,” p. 18

⁸⁶ 张任重 [Zhang Renzhong], 瓜达尔港——中巴经济走廊的璀璨明珠 [“Gwadar Port—The Bright Pearl Of The China-Pakistan Economic Corridor”], 光明日报 [*Guangming Daily*], August 26, 2018, http://www.xinhuanet.com/world/2018-08/26/c_1123331199.htm.

⁸⁷ 中外运长航正式开通瓜达尔航线 [“Sinotrans Changhang Officially Opens the Gwadar Route”], *China Overseas Port Holdings, Gwadar*, October 28, 2016, <http://cophcgwadar.com/hotnews26.aspx>.

surrounding facilities.⁸⁸ Cargo throughput for import was not yet economically feasible. Engineers from CCC-FHDI reported in 2017 that cargo passing through Gwadar port required government subsidies of twenty USD per ton.⁸⁹

Actual commercial utilization began in 2018, when COPHC and COSCO announced the start of a regular container service. The MS TIGER arrived at Gwadar on March 7, 2018, accompanied by two Pakistani naval vessels and much fanfare.⁹⁰ The vessel subsequently loaded an undisclosed number of frozen seafood containers and left for Jebel Ali, UAE that same day. This “Karachi-Gwadar Express Service” was intended to run every Wednesday. However, according to COSCO logs online, the service ceased after only 9 such transits, in May 2018.⁹¹

Limited equipment upgrades have improved the handling capacity at the port. Three new quay cranes arrived mid-July 2018.⁹² These quay cranes have permitted the modest uptick in the frequency of ship visits, including for dry bulk items for which the cranes are well-suited.⁹³ In 2019, seven container vessels visited Gwadar; as of May 2020, three container vessels, two bulk vessels, and one liquid petroleum gas (LPG) carrier have called on the port, though there is no LPG terminal. Still, CCDI-FHDI engineers reported in 2019 that “due to the lack of specialized coal, ore, container, oil and gas berths in Gwadar port, the types of cargo handled are relatively simple. The role assumed in Pakistan's maritime trade is not yet prominent.”⁹⁴

The COSCO container service appears to have been resuscitated in early 2020,⁹⁵ though firm representatives say the line often skips Gwadar.⁹⁶ Throughput may improve marginally as enterprises begin operating out of the initial section of the free zone, but full utilization of the port is not on the horizon.

⁸⁸ 王琳 [Wang Lin], 一带一路倡议下, 瓜达尔每天都在变化 [“Gwadar Changes Everyday Under the One Belt, One Road Initiative”], 第一财经 [China Business Network], May 8, 2017, <http://www.yicai.com/news/5280826.html>. For example, one Zhejiang-based contractor for electrical cable pipe conduits has reported its preparations for delivery of piping to Gwadar port's free zone in April 2017. See 驰讯管业中标瓜达尔港电缆管道顺利起运装船 [“Successful Bidder Zhuxun Piping Industries Load Up Ships for Gwadar Port's Electrical Cable Piping”], April 14, 2017, <http://zjxggy.com/news/html/?424.html>.

⁸⁹ Xi Fang, et al, “SWOT Analysis and Development Measures for Gwadar,” pp. 1-2.

⁹⁰ “First-ever container vessel under CPEC arrives at Gwadar Port,” *The News International*, March 7, 2018, <https://www.thenews.com.pk/latest/289561-first-ever-container-vessel-under-cpec-arrives-at-gwadar-port>.

⁹¹ COSCO SHIPPING Lines, “KARACHI GWADAR GULF SERVICE (KGS),” <https://news.cpecb.com/wp-content/uploads/2018/02/KGS-LTS-updated.xlsx>, accessed June 6, 2020.

⁹² Staff Writer, “New Cranes Arrive at Gwadar Port,” July 13, 2017, www.cpecinfo.com/cpec-news-detail?id=MzQ1Nw==.

⁹³ An October 2018 COPHC report to Pakistani officials claimed that two 50,000 DWT Handymax vessels can be accommodated simultaneously, handling bulk-cargo, general cargo, containers, and roll-on roll-off “efficiently” (COPHC, “Brief Summary of Development of Gwadar Port & Free Zone,” PRC Embassy Islamabad, October 26, 2018, [http://www.cpecinfo.com/news/brief-summary-of-development-of-gwadar-port--free-zone-\(oct-2018\)/NjEzMw==](http://www.cpecinfo.com/news/brief-summary-of-development-of-gwadar-port--free-zone-(oct-2018)/NjEzMw==)).

⁹⁴ 周惊慧 [Zhou Jinghui], et al. 瓜达尔港发展及布局研究 [“Research on Development and Layout of Gwadar Port”], 水运工程 [Port & Waterway Engineering] 9 no. 560 (2018), p. 126.

⁹⁵ A search of COSCO Shipping's “Sailing Schedules” by city pairs found two container vessels, the Liberian flagged “Manet” and Tuvalu-flagged “Diyala” traveling between Jebel Ali and Gwadar every 5 to 9 days in May-June 2020, <https://elines.coscoshipping.com/ebusiness/sailingSchedule>.

⁹⁶ Sheridan Prasso, “One of China's Most Ambitious Projects Becomes a Corridor to Nowhere,” *Bloomberg*, March 2, 2020, <https://www.bloomberg.com/news/features/2020-03-02/a-china-belt-and-road-project-becomes-a-corridor-to-nowhere>.



Image 3: Gwadar Port and Free Zone, April 2020⁹⁷

Free Zone Development

The port is designed to incorporate an adjacent free trade and export processing zone modeled on Shekou, the port complex at the heart of the PRC's Shenzhen Special Economic Zone.⁹⁸ The basic "Shekou Model" (蛇口模式) is a port surrounded by a logistics and free trade zone, and bolstered by a purpose-built commercial and residential city to support the work-force for the whole complex. This "port-park-city" is designed to reproduce a thriving, Chinese business ecosystem that can generate and process the trade required to make the port and its hinterlands prosper.⁹⁹ Like Shenzhen, Gwadar's development begins from humble origins as a fishing village.¹⁰⁰ While Gwadar is plainly lacking most of the other crucial ingredients that make Shenzhen the economic miracle that it is, Chinese firms are nonetheless advocating a similar approach there.¹⁰¹

⁹⁷ CPEC Authority, "Development of Free Zone," *China-Pakistan Economic Corridor*, <http://cpec.gov.pk/project-details/36> (accessed August 3, 2020)

⁹⁸ See Gwadar New Smart Port City Masterplan 2020, http://investment.cpicglobal.com/gwadar2020-brochure-bau-us-gs?gclid=EAIaIQobChMI7Kb9ipiV6QIVhZ6fCh1QPwNDEAAAYASAAEgJ8RvD_BwE; 宋笛 [Song Di], 深圳的蛇口模式正在巴基斯坦瓜达尔港复制 ["Shenzhen's Shekou Model Is Being Replicated in Gwadar Port, Pakistan"], 经济观察网 [Economic Observer Online], September 10, 2016, <http://www.eeo.com.cn/2016/0910/291806.shtml>.

⁹⁹ For analysis of the "Shekou Model" that inspires this comparison, see Peter Dutton, Isaac Kardon, and Conor Kennedy, "Djibouti: China's First Overseas Strategic Strongpoint," pp. 6-8; see also 孔晓青 [Kong Xiaoqing], 招商港口 发展"蛇口模式"的形成 ["Formation of the China Merchants Port 'Shekou Model' of Development"], 国家航海 [National Navigation], (November 2017), pp. 39-54; 何继江, 刘宁 [He Jijiang and Liu Ning], 蛇口模式: 一种社会技术创新 ["Shekou Model: A Type of Social Innovation of Technology"], 特区经济 [Special Economic Zone Economies], no. 12 (2014), pp. 53-57.

¹⁰⁰ Some 75 percent of Gwadar's population of 85,000 is engaged in the fishing industry. See Renmin/Caijing Report, p. 7

¹⁰¹ Shenzhen is in China's economically vibrant Pearl River Delta region, adjacent to the huge urban centers of Hong Kong and Guangzhou, and served by a huge pool of high-skilled labor, functional infrastructure, and a technocratic,

The free zone is conceived as an integral part of the overall port project. COPHC secured a 43-year lease in 2015 to develop a 2,281-acre tax-free industrial, logistics, warehousing, and export zone north of the port, called the “Gwadar Free Zone.”¹⁰² It is operated by a COPHC subsidiary, Gwadar Free Zone Company, which intends to interface between Chinese firms and the local government, while providing utilities and security for the site.¹⁰³ Pakistan’s then-Prime Minister Shahid Abbasi presided over the inauguration of Phase I of this project in January 2018, a 60-acre initial commercial logistics zone on the western flank of the existing port facility.

The zone is meant to attract Chinese and Pakistani firms to the port. COPHC’s chairman, Zhang Baozhong, claims thirty-plus Chinese and Pakistani firms have already invested nearly \$500 million to use the facilities. COPHC posted an online investment guide with all of the registration procedures required for operating in the free zone, meant to attract Chinese firms and streamline the process for getting into the Pakistani market.¹⁰⁴ Incentives include the possibility of 100 percent ownership for foreign investors, a 23-year tax holiday on any revenues from operations in the zone, 99-year land-leases, duty-free imports and exports, a “world-class infrastructure and security arrangement,” and other promised business perks like flexible visas and ready-to-use office, industrial, and warehousing space.¹⁰⁵

The PRC Embassy in Islamabad reports that a wide range of state-owned and private firms, both Chinese and Pakistani, have submitted applications to become free zone companies.¹⁰⁶ Among them are the Shandong Linyi Overseas Investment Company, which has begun preparatory work on a trade exhibition hall and commercial logistics park.¹⁰⁷ Some large state-owned enterprises are involved at the Gwadar free zone, including the China Merchants Group and China Communications Construction Corp., but most of the contracts have reportedly gone to smaller local SOEs and private firms.¹⁰⁸

In January 2018, the Gwadar Free Zone desalination facility entered operation.¹⁰⁹ After upgrades, the plant now processes 220,000 gallons per day.¹¹⁰ Chinese sources claim the plant’s water supply and

growth-oriented government. For an early analysis of the “economic miracle” of the region, see Ezra Vogel, *One Step Ahead in China: Guangdong Under Reform* (Cambridge, MA: Harvard University Press, 1989).

¹⁰² Zhu Xi, “Pakistan to Hand Over 2,281 Acres of Gwadar Port’s FTZ to China,” *People’s Daily Online*, November 11, 2015, <http://en.people.cn/n/2015/1111/c90000-8974374.html>.

¹⁰³ China Overseas Ports Holding Company, “Gwadar Free Zone Investment Guide,” (2016) http://cophcgwadar.com/files/pdf/Investment_guide.pdf.

¹⁰⁴ China Overseas Ports Holding Company, “Gwadar Free Zone Investment Guide.”

¹⁰⁵ “Free Zone of Gwadar Port Inaugurated to Boost Regional Development,” *Xinhua*, January 29, 2018, http://www.xinhuanet.com/english/2018-01/29/c_136933829.htm.

¹⁰⁶ “Development of Gwadar Free Zone,” PRC Embassy in Pakistan, October 1, 2018, <http://pk.chineseembassy.org/eng/zbqx/CPEC/t1627112.htm>.

¹⁰⁷ Song Di, “Gwadar Free Zone”; Companies from Shandong province are reportedly among the main entrants into this market, due to reported incentives from the provincial government and what one Chinese scholar described as their “self-image as tough men” capable of dealing with the harsh environment of Balochistan. Author interview, Beijing March 2018).

¹⁰⁸ Song Di, “Gwadar Free Zone.” Of five confirmed businesses operating in the free zone, three are Chinese, while two are Pakistani. Licenses have been issued to these companies, which will manufacture high-density steel pipe and electric motor bikes, and process fish and edible oils. Naseer Khan Kashani, “Port Will Make Gwadar a Prosperous City,” *Global Times*, April 23, 2019, <http://www.globaltimes.cn/content/1147080.shtml>.

¹⁰⁹ “Introduction on CPEC Projects,” Embassy of the People’s Republic of China in the Islamic Republic of Pakistan, December 29, 2018, <http://pk.chineseembassy.org/eng/zbqx/CPEC/P020181230760035767518.pdf>, p. 29.

¹¹⁰ Reports differ as to the total capacity currently and the desired capacity. The PRC Embassy in Pakistan claims that the facility desalinates 220,000 gallons a day. “Latest Progress on the CPEC,” Embassy of the People’s Republic of China in

drainage system will support not only the port complex, but also parts of the surrounding community, which is plagued by persistent water shortages.¹¹¹ Other efforts around the Gwadar Free Zone include schools, hospitals, and commercial and residential real estate.¹¹²

Although the free zone intends to foster new industries, the long-standing fisheries industry was the first to attract Chinese investment and trading activity at the port. A Xinjiang-based fishing company, Yufei International Fishing Company, invested in building a fish processing and cold-storage center, kicking off construction in the initial section of the free zone in May 2017.¹¹³ The firm plans to ship frozen seafood from Gwadar in reefer containers and truck it over the roughly ten-day, 1,800-km route through the Khunjerab Pass into Xinjiang Province.¹¹⁴ Western China got its “first taste of the Indian Ocean” at a promotional event for Gwadar’s seafood in Karamay, Xinjiang on May 20, 2017. For this event, however, Yufei flew two tons of seafood from Gwadar to Urumqi via Karachi and Beijing, arriving on Karamay citizens’ tables 34 hours later.¹¹⁵ There is no subsequent reporting on overland transport of Gwadar fish, though the container service has exported it to regional markets.¹¹⁶

Phase II and Beyond

Phase II expansions to the port and free zone are planned, but little progress is evident. One common sentiment among Chinese analysts is that the infrastructure must precede the commercial activity. In the words of an economics reporter who led a major study of the port: “in the longer term, when China lays out the basic infrastructure, it needs more participants to form a self-operating economic ecology. Relying solely on China’s unilateral blood transfusions is unsustainable. If you want to attract more foreign investors, you need to take your time and wait for Pakistan’s economic

the Islamic Republic of Pakistan, December 29, 2018, <http://pk.chineseembassy.org/eng/zbqx/CPEC/t1626097.htm>. The China International Development Cooperation Agency claims that COPHC expanded the plant’s capacity from 100,000 to 200,000 gallons/day. 瓜达尔港 – 中巴经济走廊的璀璨明珠 [“Gwadar Port—A Bright Pearl in the China-Pakistan Economic Corridor”], 光明日报 [Guangming Daily], August 28, 2018, http://www.cidca.gov.cn/2018-08/28/c_129941571.htm. According to the Government of Pakistan Planning Commission, the project is ultimately going to process 5 million gallons/day, but reports that less than 2 percent of the estimated cost has been spent as of the end of 2019. Another 13 percent is allocated for 2020. See Government of Pakistan Planning Commission, “Pakistan Public Sector Development Programme 2019-2020,” *Planning Commission of the Ministry of Planning, Development, and Reform* (2020) https://www.pc.gov.pk/uploads/archives/PSDP_2019-20_Final.pdf, p. 23.

¹¹¹ “Gwadar Port – A Bright Pearl in the China-Pakistan Economic Corridor”; Renmin/Caijing Report, pp. 7-9

¹¹² “Gwadar Smart Port City Master Plan Project—Special Report on CPEC Projects (Transportation Infrastructure: Part 6)”, Embassy of the People’s Republic of China in the Islamic Republic of Pakistan, October 1, 2018, <http://pk.chineseembassy.org/eng/zbqx/CPEC/t1627114.htm>; Adnan Aamir, “Pakistan’s Belt and Road Has Singapore-size Goal”, *Nikkei Asian Review*, March 2, 2020, <https://asia.nikkei.com/Spotlight/Belt-and-Road/Pakistan-s-Belt-and-Road-port-has-Singapore-size-goal>; 中巴经济走廊瓜达尔联合工作组第四次会议在伊斯兰堡召开 [“The Fourth Meeting of the Gwadar Joint Working Group of the China-Pakistan Economic Corridor Held in Islamabad”], 国际合作司-中华人民共和国国家发展和改革委员会 [International Cooperation Department – National Development and Reform Commission], September 29, 2019, https://www.ndrc.gov.cn/fzggw/jgsj/gjs/sjdt/201909/t20190929_1195782_ext.html.

¹¹³ Wang Lin, “Gwadar Changes Every Day Under the One Belt, One Road Initiative.”

¹¹⁴ This ten-day route over land is reportedly twenty days shorter than getting Pakistani seafood to Xinjiang by sea. Cui Jia and Mao Weihua, “Pakistan to Export Seafood to Xinjiang via Land,” *China Daily*, February 17, 2017, http://www.chinadaily.com.cn/china/2017-02/17/content_28234349.htm.

¹¹⁵ 瓜达尔港海鲜 34 小时飞到克拉玛依市民餐桌 [“Gwadar Port Seafood Flies in to Karamay Citizens’ Tables in 34 Hours”], 人民网-新疆频道 [People’s Daily Online—Xinjiang Channel], May 22, 2017, <http://xj.people.com.cn/n2/2017/0522/c349472-30222892.html>; 巴基斯坦海鲜正游向中国! [“Pakistan Seafood Is Traveling To China!”], 搜狐媒体平台 [Sohu Media], June 28, 2017, <https://m.sohu.com/n/498942735/>.

¹¹⁶ COSCO logs do not specify that Yufei is the exporter, but they do indicate shipping of reefer containers from Gwadar to Jebel Ali, UAE. COSCO SHIPPING Lines, “KARACHI GWADAR GULF SERVICE (KGS),” <https://news.cpecb.com/wp-content/uploads/2018/02/KGS-LTS-updated.xlsx>, accessed June 6, 2020.

fundamentals to be revitalized.”¹¹⁷ The medical metaphor of Pakistan as a sick patient is indicative of some of the socio-economic and security concerns that have hampered expeditious development at the port and free zone.

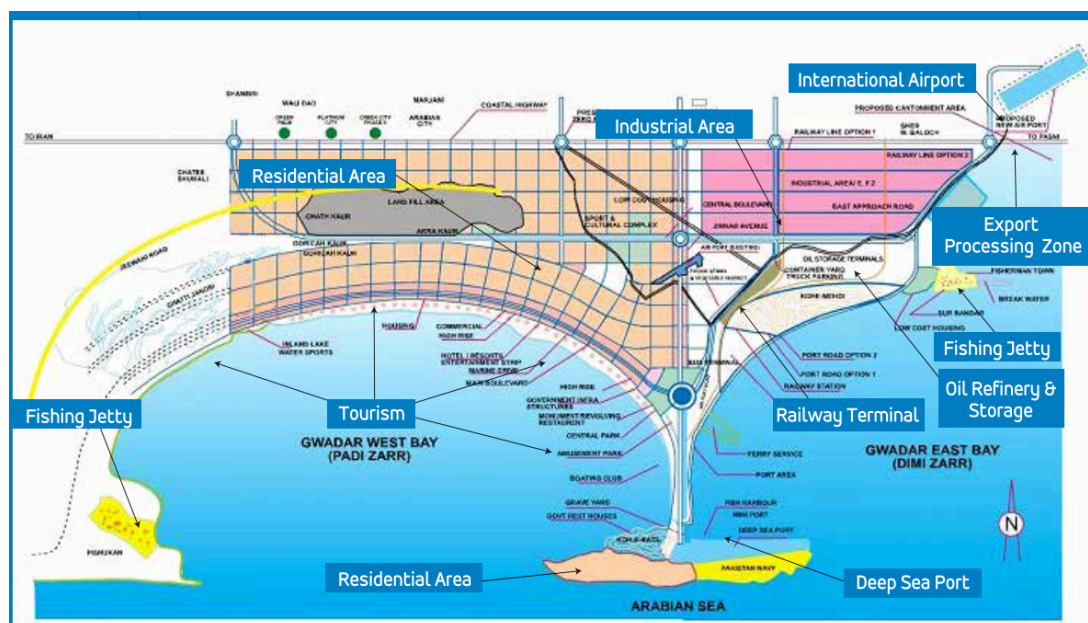


Figure 3. Gwadar city master plan¹¹⁸

Phase II plans include a further nine berths to the east of the existing multipurpose berths, including a container terminal with four berths, a grain terminal, a bulk terminal, and two oil terminals on the northeast of the bay.¹¹⁹ COPHC has submitted a proposal to construct the breakwaters needed to carry out this expansion, but the business plan remains under review by the Pakistan Ministry of Ports and Security.¹²⁰ Indeed, reviews and approvals from Pakistani officials have been a source of major frustration for COPHC, which all but begged for support from Pakistan’s Federal Board of Revenue in a recent presentation at the PRC Embassy in Islamabad.¹²¹

Trade is hampered by customs regulations that thus far have limited imports to only 20 specified items. Pakistan’s bureaucracy also has a complicated licensing system for potential investors in the free zone, such that only 12 of the 30 registered investors had been licensed (as of the last report in October 2018).¹²² COPHC noted that these are among the obstacles “involved in non-operation of Gwadar Port for commercial purposes” and claim that desired actions by Pakistani officials will

¹¹⁷ Hao Zhou, “Gwadar Port Sets Sail.”

¹¹⁸ China Overseas Port Holding Company Pakistan (Pvt.) Ltd, “A Deep Sea Port Exploring Global Opportunities,” *COPHC Company Profile*, http://cophcgwadar.com/files/pdf/COPHC_Company_Profile.pdf, p. 25.

¹¹⁹ CPEC Authority, “CPEC Gwadar Projects,” <http://cpec.gov.pk/gwadar>, (accessed July 31, 2020); “China to Construct 3.2km Additional Berths at Gwadar Port,” *Customs Today*, March 9, 2016, <http://www.customstoday.com.pk/china-to-construct-3-2km-additional-berths-at-gwadar-port/>.

¹²⁰ CPEC Authority, “Construction of Breakwaters,” *CPEC-China Pakistan Economic Corridor*, <http://cpec.gov.pk/project-details/34>, (accessed July 31, 2020).

¹²¹ In a briefing to Pakistani and Chinese officials, COPH officials addressed “matters involved in non-operation of Gwadar Port for commercial purposes,” stating that “issuance of necessary approvals” and permissions for trade are “a stepping stone for the prompt operationalization of Gwadar Port.” COPHC, “Brief Summary of Development: Gwadar Port & Free Zone,” pp. 43-44.

¹²² COPHC, “Brief Summary of Development: Gwadar Port & Free Zone,” pp. 22-23.

allow the “operationalization of Gwadar Port.”¹²³

The natural sedimentation of the port means that continuous dredging is required for sufficient depth to be maintained for larger vessels to call.¹²⁴ Officially, a COPHC bid to conduct further dredging of channels and berths is under review by the Pakistan Ministry of Ports and Shipping and the Gwadar Port Authority.¹²⁵ No contract has yet been publicized, but maintenance dredging occurs periodically in order to maintain the current depth and provide landfill for port projects.¹²⁶ Recent channel dredging observed in Spring of 2019 is reportedly being done for construction of the East Bay Expressway.¹²⁷ A PRC Ministry of Foreign Affairs (MFA) spokesperson publicized this dredging activity, noting that it was conducted by one of the vessels involved in China’s land reclamation in the disputed Spratly Islands of the South China Sea, the *M/V Tian Bai* owned by CCCC subsidiary Tianjin Dredging Company.¹²⁸ One Chinese analyst claims COSCO would begin to operate more regularly out of Gwadar if vessels larger than the current maximum of 50,000 DWT (Handymax) could use the facility.¹²⁹ Given the low utilization of the port at present, it is hardly certain that larger ships would call even with adequate facilities.

Satellite imagery shows signs of new construction occurring adjacent to the port, with current focus on roadways and storage laydown areas. Most observed construction appears to be focused on land preparation, roads, piping, and structures of the initial section of the free zone. Substantial land reclamation must be completed before work on much of the other infrastructure can even be initiated. The land on which planners envision the secondary container terminal, the grain and bulk terminals, and the oil terminal, does not yet exist. Continued dredging and deepening of the approach channel could provide some of the landfill for such reclamation.¹³⁰

¹²³ Ibid.

¹²⁴ Excessive silting in the harbor may be responsible for delays in this planned upgrade. 阎新兴, 刘国亭, 蔡嘉熙 [Yan Xinxing, Liu Guoting, Cai Jiaxi], 巴基斯坦瓜达尔港泥沙来源及海岸稳定性分析 [“Analysis of Sediment Source and Coastal Stability of Gwadar Harbor of Pakistan”], 水道港口 [Waterways and Ports] 23, no. 3, 2002; NGA, “Sailing Directions (Enroute) Red Sea and Persian Gulf 172”, NGA, 2017, p. 249; Wang, et al. “Research on the Selection of Routes for Maritime Transportation,” p. 20.

¹²⁵ CPEC Authority, “Dredging of Channel and Berthing Areas,” *China-Pakistan Economic Corridor*, <http://cpec.gov.pk/project-details/35> (accessed July 31, 2020).

¹²⁶ Chinese engineering experts from the CCCC subsidiary CCCC-FHDI Engineering Co., Ltd., which was involved in the survey and planning of the port’s construction, reported sedimentation buildup in the harbor and waterway revealed by surveys, and said it could prohibit the aspired navigation of fully loaded 50,000-ton ships to the terminal without regular maintenance dredging. See Xi Fang, et al., “SWOT Analysis and Development Measures for Gwadar Port,” p. 2.

¹²⁷ “Developing Pakistan” (@DevelopmentPk). 2019. Twitter, March 26, 2019, 12:13 p.m. <https://twitter.com/DevelopmentPk/status/1110575521220517888?s=20>.

¹²⁸ Zhao Lijian 赵立坚 (@zlj517). 2019. Twitter, March 26, 2019, 4:48 a.m. <https://twitter.com/zlj517/status/1110463636840030208/photo/1>.

¹²⁹ 宋笛 [Song Di], 巴基斯坦瓜达尔港自由区启动三家中方公司共同运营 [“Pakistan’s Gwadar Port Free Zone Begins Operations - Jointly Operated by Three Chinese Enterprises”] 经济观察网 [The Economic Observer], September 10, 2016, http://www.ship.sh/news_detail.php?nid=22281.

¹³⁰ This assessment is based on satellite images of the land to the east of the terminal being filled in with dredging fill. Satellite imagery from MAXAR. For details, see 瓜达尔港为巴基斯坦打造区域商贸线路 [“Gwadar Port Creates Regional Trade Routes for Pakistan”], 中央广电总台国际在线 [CCTV International Online], February 8, 2019, <http://news.cri.cn/20190208/90c19e43-6beb-35b2-504e-7097bdf77c37.html>; 巴基斯坦瓜达尔港工程 [Pakistan Gwadar Port Project], 中交第四航务工程勘察设计院有限公司 [CCCC-FHDI Engineering Co., Ltd.], April 15, 2013, https://www.fhdigz.com/project_detail.php?id=79.

Competition from Other Ports

Pakistan already has two large ports in a major urban area, relatively well-connected to their hinterland, that are also being actively expanded by Chinese firms: Karachi and Port Muhammad Bin Qasim (Port Qasim). Virtually all maritime trade in Pakistan goes through Karachi or Qasim, some 600 km to the east in relatively prosperous Punjab province.¹³¹ Commercial data providers still do not bother reporting statistics on Gwadar's throughput, because according to engineers from CCCC-FHDI, Gwadar's cargos account for less than one percent of the roughly 100 million tons of annual throughput in Pakistani ports in recent years.¹³² Yet despite its underutilization to date, the project's backers claim Gwadar will handle a staggering 300 million to 400 million tons annually once all phases of construction are complete by 2030.¹³³

Sited in the largest Pakistani city by population, Karachi's port is the nation's principle maritime trade link. The second most active hub is Port Qasim, which is 35 km east of Karachi city but sometimes considered to be a part of the Karachi port complex. Both are linked up with Pakistan's rail and road system on the better developed eastern side of the country. The Gwadar Port Authority and Chinese engineers promote Gwadar as a response to growing demand and lack of space for Karachi's future expansion, and the geographic disadvantages of Qasim.¹³⁴

The claim that these established ports cannot expand to meet capacity demand, however, is belied by Chinese firms' active pursuit of expansion at both sites. Chinese firms have recently pursued a container terminal expansion at Karachi (beginning 2019)¹³⁵ and the construction under CPEC of two 660 mW coal-fired power plants and a coal-berth at Port Qasim (begun 2015, made operational in 2017 and 2018).¹³⁶ Bidding for a floating LNG terminal expansion project at Qasim is open and attracting international bids.¹³⁷ Qasim and Karachi are actively under development and evidently still present a value proposition for Chinese and other foreign firms.

If Gwadar has any competitive advantages over these established facilities, they lie in the PRC's intimate connections to Pakistan. Its success will depend on the distinctive characteristics of China's strategic strongpoints—particularly the coordinated efforts of the Chinese party-state and business enterprises to realize their comprehensive development goals. For Gwadar to thrive, it will depend on

¹³¹ CEIC, "Pakistan Container Port Throughput," *UN Conference on Trade and Development Data*, 2008-2018, <https://www.ceicdata.com/en/indicator/pakistan/container-port-throughput>.

¹³² Zhou Jinghui, et al., "Research on development and layout of Gwadar Port," p. 126

¹³³ Renmin/Caijing Report, p. 5

¹³⁴ The Gwadar Port Authority argues that Port Qasim is 40 km inland, thus requiring long transits that are difficult and costly for larger vessels. Gwadar Port Authority, "Gwadar Port," <http://www.gwadarport.gov.pk/about%20us.aspx>. CCCC-FHDI engineers also argue that Karachi is limited in its room for expansion because it abuts the city, while Qasim's position further inland on the delta makes "channel maintenance on its long entries a factor restricting the enlargement of the port." Zhou Jinghui, et al. "Research on development and layout of Gwadar Port," p. 126

¹³⁵ Hutchison Ports, a major Hong Kong port operator and developer, has operated at Karachi since 2007 and recently commenced construction on an expansion of its container terminal to achieve a 3.2 million TEU handling capacity. "Hutchison Ports Commences Port Expansion Project in Pakistan with US\$240 Million, Bringing Total Investment in the Country to US\$1 Billion," Website of Hutchison Ports, October 16, 2019, <https://hutchisonports.com/en/media/news/hutchison-ports-commences-port-expansion-project-in-pakistan-with-us240-million-bringing-total-investment-in-the-country-to-us1-billion/>; "Chinese company awarded \$239mln contract to build jetty," *The News*, March 16, 2018, <https://www.thenews.com.pk/print/105491-Chinese-company-awarded-239mln-contract-to-build-jetty>.

¹³⁶ CPEC Authority, "2x660MW Coal-Fired Power Plants at Port Qasim Karachi," *China-Pakistan Economic Corridor*, <http://cpec.gov.pk/project-details/1> (accessed June 11, 2020).

¹³⁷ "Port Qasim LNG Expansion Project Moves Ahead," *Greenport*, February 10, 2020, <https://www.greenport.com/news101/lng/port-qasim-lng-expansion-project-moves-ahead>

robust transport networks that link it to markets and resources. Functional road, rail, air, and pipeline infrastructure are essential to expanding the hinterland served by the port.

Transport Infrastructure

The promise of a direct commercial connection between the Indian Ocean and Xinjiang province has fixated Chinese leaders and analysts—especially as a means of circumventing the much-hyped “Malacca Dilemma.”¹³⁸ But the Balochistan hinterlands are sparsely populated and barely developed, making it essential to develop modern transport links to convey goods and natural resources between the port and more substantial inland markets.¹³⁹ Progress in constructing transport infrastructure providing connectivity to the port has been halting. Nearby the port, the obstacles to infrastructure development include poor power and water supply, difficulty in securing permits and support from local government, persistent terrorist attacks on projects and personnel, and difficulty securing capital given those risks and continued non-performance of the port itself.¹⁴⁰ Further afield, it is the engineering challenges that loom large, especially as the terrain climbs the Himalayan plateau in Pakistan’s north and east and crosses the Khunjerab Pass in order to connect to PRC rail, road, and pipeline networks.

Work to date has yet to meaningfully connect the port to inland transport networks. Instead, CPEC construction has largely focused on “early harvest” projects that prioritize power generation. A CPEC “Joint Commission” consisting of government and commercial actors from both sides was established in August 2013.¹⁴¹ Its biannual meetings have led to a prioritization on energy generation and transmission. Power plants, mostly coal, and related infrastructure have largely been constructed along the already better-developed central and eastern corridors, rather than the western corridor traversing Balochistan.¹⁴²

Gwadar and its hinterlands have been neglected in favor of the relatively better-off and more developed eastern portions of the country, Punjab and Sindh. This prioritization largely reflects political goals of former Prime Minister Nawaz Sharif (2013-2017), who ran on a platform of ending power blackouts (his slogan was “Bright Pakistan”).¹⁴³ Sharif initiated CPEC with a vision of leveraging Chinese firms’ extraordinary capacity in coal power generation. This prioritization of the program differs from that of his successor, Imran Khan, who has shown more interest in industrial

¹³⁸ 张运成 [Zhang Yuncheng], 马六甲海峡与世界石油安全 [“The Malacca Strait and World Oil Security”], 人民日报 [People’s Daily], December 5, 2003, <http://www.people.com.cn/GB/paper68/10833/983912.html>; Ian Storey, “China’s ‘Malacca Dilemma’,” Jamestown Foundation *China Brief* 6, no. 8 (April 12, 2006), <https://jamestown.org/program/chinas-malacca-dilemma/>.

¹³⁹ Quantitative modeling for port connectivity in Pakistan by Chinese scholars supports the case for Gwadar, arguing that it is not far-fetched if it has an adequate hinterland transport system in place that connects it to markets and resources in Xinjiang and Central Asia. See 雷艳灵, 刘崇献 [Lei Yanling and Liu Chongxian], 中巴物流通道建设分析 [“Analysis of the Construction of the China-Pakistan Logistical Corridor”], 对外经贸 [Foreign Economic Relations and Trade], no. 6 (2019), pp. 6-10; Naima Saeed and Odd I. Larsen, “Container Terminal Concessions: A Game Theory Application to the Case of the Ports of Pakistan,” *Maritime Economics and Logistics*, vol. 12, no. 3 (2010), pp. 237–62; Ryuichi Shibasaki, Satoshi Tanabe, Hironori Kato, and Paul Tae Woo Lee, “Could Gwadar Port in Pakistan Be a New Gateway? A Network Simulation Approach in the Context of the Belt and Road Initiative,” *Sustainability*, vol. 11, no. 20 (2019), pp. 1-28.

¹⁴⁰ Xi Fang, et al., “SWOT Analysis and Development Measures for Gwadar,” pp. 2-3.

¹⁴¹ Tang Mengsheng, “One Belt One Road’s Flagship and Benchmark.”

¹⁴² For an in-depth analysis of the power projects under CPEC, see Erica Downs, “The China-Pakistan Economic Corridor Power Projects: Insights Into Environmental and Debt Sustainability,” Columbia University Center on Global Energy—China Energy and Climate Research Program,” (October 2019), https://www.energypolicy.columbia.edu/sites/default/files/pictures/China-Pakistan_CGEP_Report_100219-2.pdf.

¹⁴³ Erica Downs, “The China-Pakistan Economic Corridor Power Projects,” pp. 13-14.

parks than power plants.¹⁴⁴ The following section summarizes the limited progress to date in connecting Gwadar to road, rail, air, and pipeline networks.

Road Networks

The most immediate priority for Gwadar's connectivity is the construction of a road that links the port to Pakistan's highway system. Pakistan's national highway system also requires upgrades and expansion to connect it to Chinese road networks in Xinjiang, and to the wider Central Asian region. At present, there are only two roads connecting Gwadar to Pakistan's road network: the Makran Coastal Highway (N-10) that runs east toward Karachi and west to the Iranian border, and the incomplete M-8 highway, which runs north-east toward Sindh and Punjab. Neither provides sufficient land transport capacity or range to support a thriving gateway port at Gwadar.

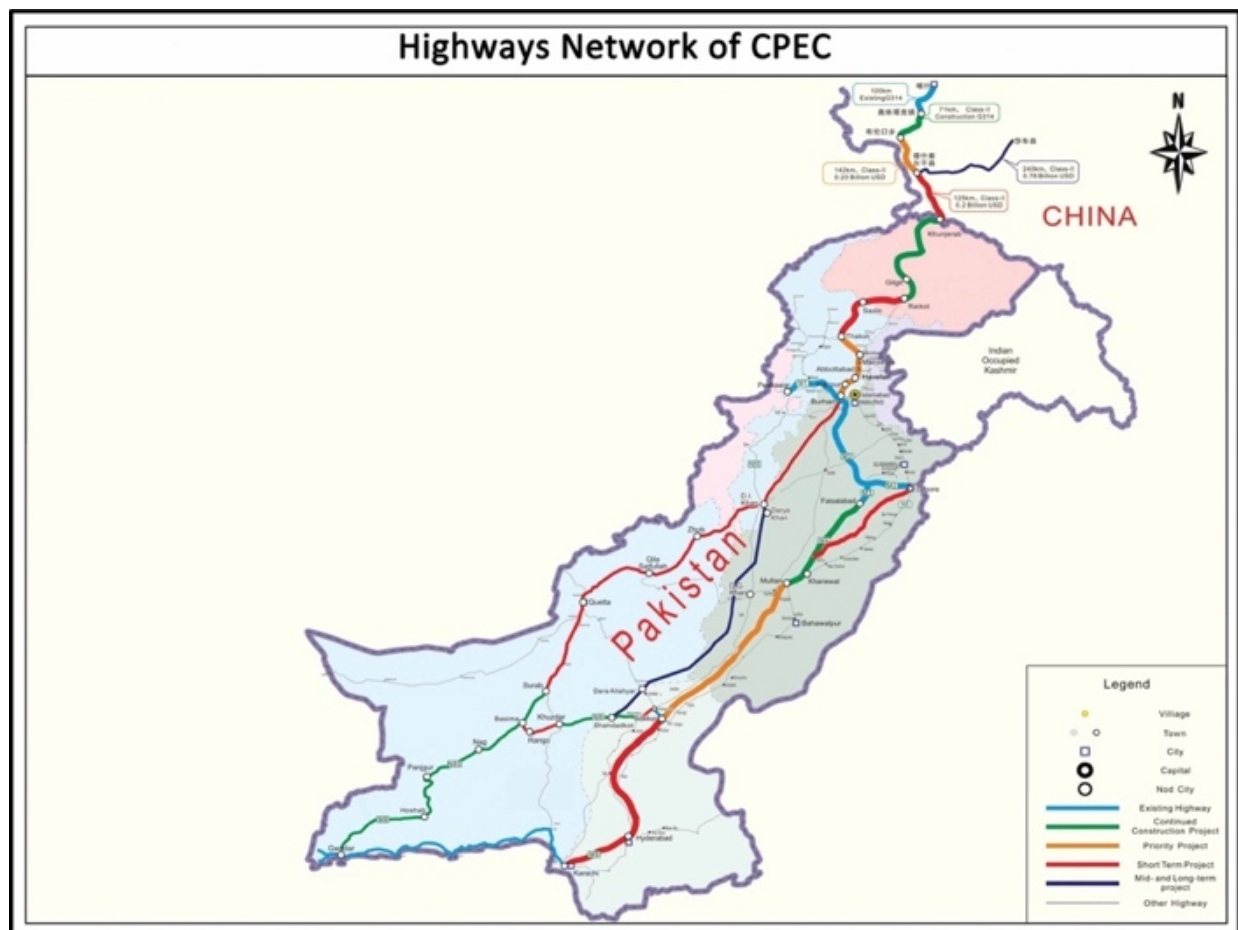


Figure 4. Official CPEC roadways map¹⁴⁵

At present, the only thoroughfare connecting the port to other roads is a 16-foot wide local road lined by restaurants, mosques, and food stalls.¹⁴⁶ This is not a viable route for trucks serving the port. After

¹⁴⁴ Drazen Jorgic, "Fearing Debt trap, Pakistan Rethinks Chinese 'Silk Road' Projects," *Reuters*, September 30, 2018, <https://www.reuters.com/article/us-pakistan-silkroad-railway-insight/fearing-debt-trap-pakistan-rethinks-chinese-silk-road-projects-idUSKCN1MA028>.

¹⁴⁵ CPEC Authority, "Monographic Study on Transport Planning, 2013-2030," *China-Pakistan Economic Corridor*, <http://cpec.gov.pk/map-single/1> (accessed August 1, 2020).

¹⁴⁶ CPEC Authority, "Gwadar East-Bay Expressway," *China-Pakistan Economic Corridor*, <http://cpec.gov.pk/project-details/32> (accessed May 4, 2020).

land reclamation and construction along Gwadar's east bay (currently underway), this route will be replaced by a 6-lane expressway. The planned "East-Bay Expressway" is intended to connect the port area to the M-8 highway and N-10 arteries that connect Gwadar to the rest of the country. The CPEC broke ground on this project in November 2017,¹⁴⁷ and landfill on the east side of the peninsula can be seen on satellite imagery. The project has been repeatedly paused, however, and may be forced to reroute due to protests by local fishermen whose livelihoods will be upset by the highway cutting off access to their fishing pier.¹⁴⁸ Completion of an expressway that will circumvent that route is now projected for October 2020.

Gwadar is thus in the process of being connected to Pakistan's highway system. However, for Pakistan's highways to provide a "corridor" connecting the port to western China, substantial road works are required elsewhere in the country. In particular, the linchpin of the China-Pakistan overland connection is the Karakorum Highway (KKH) in the northeast of the country. It long predates CPEC and is sometimes referred to as the "China-Pakistan Friendship Highway," because it was jointly constructed and is the only road link between the two countries. Construction began in 1959, and Chinese engineers and workers were instrumental throughout the 27 years it took to build this "Eighth Wonder of the World," so dubbed because it traverses some of the most treacherous terrain on the planet (and reportedly cost the lives of 800 workers).¹⁴⁹

The KKH runs 1,300 km, from Hasan Abdal in Punjab province and passes through Gilgit-Baltistan before traversing the highest mountain pass in the world (the Khunjerab Pass, over 4,500 meters elevation) and terminating in Xinjiang. It is another 420 km along China National Highway 314 to the first Chinese city, Kashgar. The mountainous sections of the route are only passable several months a year, depending on conditions, and major landslides, avalanches, and earthquakes often render it impassable even during the warm season.¹⁵⁰ Since an MOU was signed between the two governments in 2008, Chinese firms funded by China Export-Import Bank loans have been working to expand the road from 10 to 30m in width to triple its transport capacity.¹⁵¹ But natural disasters have limited progress to date. A landslide in the Hunza Valley in January 2010 created a massive lake covering more than 20km of the road. After several years of trying to repair the road, the CBRC

¹⁴⁷ CPEC Authority, "Gwadar East-Bay Expressway," *China-Pakistan Economic Corridor*, <http://cpec.gov.pk/project-details/32> (accessed June 7, 2020).

¹⁴⁸ "CPEC and Gwadar Fishermen," *Daily Times*, March 18, 2019, <https://dailytimes.com.pk/366412/cpec-and-gwadar-fishermen/>.

¹⁴⁹ "Tribute Paid to Chinese, Pakistanis Who Died During KKH Construction," *Pakistani Dawn*, April 7, 2019, https://epaper.dawn.com/DetailImage.php?StoryImage=07_04_2019_007_001. MFA estimates that 140 of these were Chinese workers. "Speech by H.E. Li Keqiang Premier of the State Council of the People's Republic of China at the Senate of the Islamic Republic of Pakistan," Ministry of Foreign Affairs of the People's Republic of China, May 23, 2013, https://www.fmprc.gov.cn/mfa_eng/topics_665678/lkqipsg_665690/t1043526.shtml.

¹⁵⁰ The site of the road in the world's highest mountain range forces construction to contend with "very high geodynamic activity." The "KKH has been subject to damage and disruption by rockfall, sliding of rock and debris, debris flow, mudflow, dry powder flow, flash flooding by water and torrent gravels, basement undermining by abstraction, subsidence and frost heaving. The road surface is regularly damaged by rockfall impact, floods and frost shattering." Edward Derbyshire, Monique Fort, and Lewis A. Owen, "Geomorphological Hazards along the Karakoram Highway: Khunjerab Pass to the Gilgit River, Northernmost Pakistan," *Erkunde*, vol. 55, no. 1 (2001), pp. 49-71.

¹⁵¹ China Aid Data, "Loan for upgrading of Karakoram Highway, Pakistan (CPEC)," Project ID 35739, <https://china.aiddata.org/projects/35739>. Though many Chinese analysts describe KKH as though it were already a fully functional commercial roadway, better informed scholars recognize the need for significant capacity and quality upgrades. See, for example, Li Jingyu, et al, "The Strategic Concept of Selecting Points for China's Access to the Indian Ocean in the South Asia Region," p. 14; 陈小萍 [Chen Xiaoping], 中巴贸易能源通道构想与前景 ["Concept and Prospect of a Sino-Pakistani Trade and Energy Corridor"], 南亚研究季刊 [*South Asian Studies Quarterly*], no. 136 (2009), pp. 80-86.

opted to reroute it in 2012 and completed a new road and series of tunnels circumnavigating the lake in September 2015.¹⁵² Plans to re-establish the original route have been permanently shelved.¹⁵³

Elements of the KKH have been upgraded, with a spur from Thakot to Havelian in Khyber Pakhtunkhwa province “substantially completed” by CCCC in March 2020. Another spur running 136 km from Thakot to Raikot in Gilgit Baltistan is still undergoing a “feasibility study for realignment,” reflecting both engineering and bureaucratic challenges facing this high mountain route.¹⁵⁴ Pakistani planners claim they are searching for “financially viable road projects and schemes in less developed areas,” including “the western route of CPEC [to Balochistan and Gwadar],” but allocation of funding still skews towards the more developed east of the country.¹⁵⁵

Despite slow progress in road construction, China’s third largest truck manufacturer, state-owned China National Heavy Duty Truck Group Co., Ltd. (Sinotruk), signed a strategic cooperation framework agreement with COPHC and Gwadar’s port authority in August 2017.¹⁵⁶ Heavy trucking industries will be critical to ongoing construction and transport, particularly in the absence of railway links to the port at Gwadar.

Railroad Networks

Gwadar is not yet connected to Pakistan’s rail networks. Technical studies on Gwadar’s viability as a port hinge on successful development of links to inland railroads, which are concentrated in the east of the country.¹⁵⁷ China, which has laid more domestic high-speed rail line than any other nation in history, has a direct interest in improved rail systems,¹⁵⁸ since the continental portion of its Belt and Road Initiative hinges on extensive rail connectivity throughout Eurasia.¹⁵⁹ The rail network in Xinjiang is comparatively well-developed and could easily facilitate access to the wider Chinese market once rail connectivity to the port of Gwadar is completed.¹⁶⁰

¹⁵² Asghar Khan, Zulfiqar Ali Khan, “KKH Realignment: 94% work on the project completed so far, remaining to be completed by Sep. 25 this year: *Pamir Times*, June 27, 2015, <https://pamirtimes.net/2015/06/27/kkh-re-alignment-94-work-on-the-project-completed-so-far-remaining-to-be-completed-by-sep-25-this-year/>.

¹⁵³ Irfan Haider, “PM Nawaz Inaugurates Pak-China Friendship Tunnels Over Attabad Lake,” *Dawn*, September 14, 2015, <https://www.dawn.com/news/1206911>.

¹⁵⁴ CPEC Authority, “KKH Thakot-Raikot N35 Remaining Portion,” *China-Pakistan Economic Corridor*, <http://cpec.gov.pk/project-details/71> (accessed June 7, 2020).

¹⁵⁵ Government of Pakistan Planning Commission, “Annual Plan 2019-2020,” *Ministry of Planning, Development, and Reform* (2020), <https://www.pc.gov.pk/uploads/annualplan/AnnualPlan2019-20.pdf>, pp. 156-158.

¹⁵⁶ 中国重汽集团与中国港控公司、巴基斯坦瓜达尔港务局正式签署战略合作框架协议 [“China National Heavy Duty Truck Group Co., Ltd. Officially Signs Strategic Cooperation Framework Agreement with COPHCL and Pakistan’s Gwadar Port Authority”], 中国重汽集团 [*China National Heavy Duty Truck Group*], August 14, 2017, <http://www.cnhtc.com.cn/view/NewsDetailPic.aspx?id=394>.

¹⁵⁷ Lei Yanling et al., “Analysis of the Construction of the China-Pakistan Logistical Corridor”; Naima Saeed and Odd I. Larsen, “Container Terminal Concessions: A Game Theory Application to the Case of the Ports of Pakistan”; Shibasaki, et al. “Could Gwadar Port in Pakistan Be a New Gateway?”

¹⁵⁸ “Fact Sheet: High Speed Rail Development Worldwide,” Environmental and Energy Study Institute, July 19, 2018, <https://www.eesi.org/papers/view/fact-sheet-high-speed-rail-development-worldwide>; “China Has Built the World’s Largest Bullet-train Network,” *The Economist*, January 13, 2017, <https://www.economist.com/china/2017/01/13/china-has-built-the-worlds-largest-bullet-train-network>.

¹⁵⁹ 铁路助力“一带一路”建设 [“Railways Help the Construction of the Belt and Road”], PRC Ministry of Commerce, May 25, 2015, <http://cafec.mofcom.gov.cn/article/tongjipeixun/201505/20150500983191.shtml>.

¹⁶⁰ In May 2020, tracklaying began to complete a high-speed railway loop circling the Taklimakan desert. “Tracklaying starts on southern Xinjiang rail links,” *Railway Gazette International*, May 21, 2020, <https://www.railwaygazette.com/infrastructure/tracklaying-starts-on-southern-xinjiang-rail-link/56562.article>.

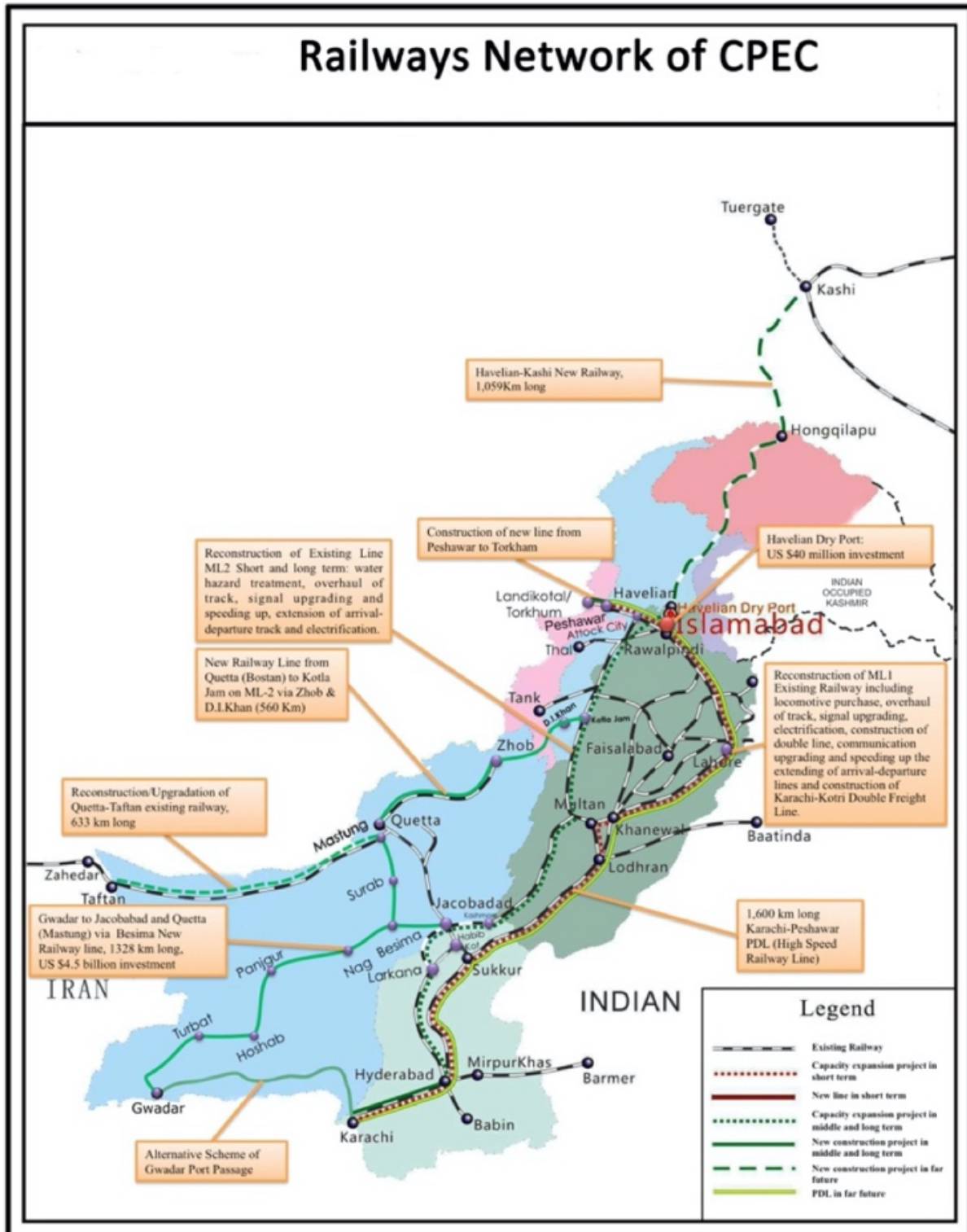


Figure 5. CPEC official railway plan¹⁶¹

¹⁶¹ CPEC Authority, "Railways Network of CPEC," *China-Pakistan Economic Corridor*, <http://cpec.gov.pk/map-single/2> (accessed June 7, 2020).

However, Pakistan's existing railroad network requires substantial investment since it lacks the capacity to meet current commercial demand.¹⁶² As is the case for most other infrastructure, Balochistan is worse off than the rest of the country.¹⁶³ Nonetheless, Gwadar's rail connectivity has not yet been a priority for Chinese and Pakistani planners. Current CPEC plans prioritize improvements to Pakistan's existing rail network—including at Port Qasim—and postpone plans for new rail lines to connect Gwadar to the “middle and long term.”¹⁶⁴ Pakistani Railway Ministry officials evidently do not view the costs of connecting Gwadar as worth the expected benefits—especially not weighed against other priorities.¹⁶⁵

For some Pakistani transport analysts, if the goal is to link Gwadar to Central Asian and Chinese markets, then the port is more likely to be integrated into Iranian rail network to the west.¹⁶⁶ The relative efficiency of the Iranian rail system provides one argument for continuing to delay any major investment in rail in Balochistan.¹⁶⁷ Sanctions on Iran have made this option unattractive, but this disincentive is not necessarily permanent. As China and Iran explore a more substantial bilateral relationship, the prospect of circumventing western Pakistan to access Central Asia through Iran may prove more appealing.¹⁶⁸ India's existing port project at Chabahar and fraying Sino-Indian ties, however, will make Chinese inroads into Iran's transport networks more challenging.¹⁶⁹

¹⁶² Dr. Muhammad Asim and Imtiaz Qanita, “International Review of Management and Business Research Pakistan Railways at the Verge of Collapse: A Case Study.” *International Review of Management and Business Research*, vol. 3, (September 2014), pp. 2306-9007; Sohail Rahsid, “55% of Pakistan's Rail Tracks Are More Than 100 Years Old,” Samaa, March 19, 2019, <https://www.samaa.tv/news/2019/03/55-of-pakistans-rail-tracks-are-more-than-a-100-years-old-report/>; The official CPEC site calls for “capacity development” and has established “focus groups...for capacity enhancement.” CPEC Authority, “Progress Update,” *China-Pakistan Economic Corridor*, <http://cpec.gov.pk/progress-update> (accessed August 1, 2019).

¹⁶³ Planning & Development Department, Government of Balochistan, “Infrastructure Development in Balochistan,” *World Bank Public Sector Development Programme*, 2003-2004, <http://siteresources.worldbank.org/PAKISTANEXTN/Resources/Pakistan-Development-Forum-2004/RDPBalochistan.pdf>; Fahad Naveed, “Train to Balochistan,” *Pakistani Dawn*, October 8, 2016, <https://herald.dawn.com/news/1153377>.

¹⁶⁴ Government of Pakistan Planning Commission, “Annual Plan 2019-2020,” p. 156.

¹⁶⁵ Chief Executive of Pakistan Railways, Aftab Akbar, testified to a Senate Sub Committee on Railways that Gwadar rail links (to Mastung and Besima to Jacobabad) are not planned until 2025, largely because the cost is prohibitive. Amin Yusufzai, “Rail Connectivity of Gwadar With Other Parts of Pakistan Not a Priority: Officials,” *Propakistani*, April 6, 2019, <https://propakistani.pk/2019/04/06/rail-connectivity-of-gwadar-with-other-parts-of-pakistan-not-a-priority-officials/>.

¹⁶⁶ “Iran ‘Ready to connect Gwadar to Chabahar Port,’” *The Express Tribune*, May 24, 2019, <https://tribune.com.pk/story/1979802/3-iran-ready-connect-gwadar-chabahar-port/>; “Iran After Connecting Chabahar to Pakistan's Gwadar,” *Fars News Agency*, May 24, 2019, <https://en.farsnews.com/newstext.aspx?nn=13980303000457>.

¹⁶⁷ There have been discussions by Chinese and Indian sources about linking Gwadar to Chabahar, the nearby Iranian port developed by India. 伊朗查巴哈尔港比中国援建的巴基斯坦瓜达尔港更具发展优势 [“Iran's Chabahar Port is More Advantageous Than the Chinese-built Gwadar Port in Pakistan”], 驻巴基斯坦使馆经商处 [Economic and Commercial Office of the PRC Embassy in Pakistan], March 24, 2008, <http://pk.mofcom.gov.cn/aarticle/jmxw/200803/20080305443938.html>; Sudha Ramachandran, “India Doubles Down on Chabahar Gambit,” *The Diplomat*, January 14, 2019, <https://thediplomat.com/2019/01/india-doubles-down-on-chabahar-gambit/>.

¹⁶⁸ Farnaz Fassihi and Steven Lee Myers, “Defying U.S., China and Iran Near Trade and Military Partnership,” *New York Times*, July 11, 2020, <https://www.nytimes.com/2020/07/11/world/asia/china-iran-trade-military-deal.html>; Shahram Akbarzadeh and Mahmoud Pargoo, “Iran-China deal raises more questions than answers,” *Middle East Institute*, July 27, 2020, <https://www.mei.edu/publications/iran-china-deal-raises-more-questions-answers>.

¹⁶⁹ There has been Indian interest in the commercial port at Chabahar since roughly 2003. In 2016 the countries agreed to upgrade the port and into rail lines connecting Chabahar to Iran and Central Asia. In 2020, in the wake of the announced “China-Iran deal,” the status of the Indian project at Chabahar was called into doubt. See Maya Mirchandani, “On Chabahar, India Must Recover Lost Ground With Iran Quickly,” *NDTV*, July 18, 2020.

Some Chinese scholars believe that if Pakistan could connect directly into China's advanced logistics networks it could readily "turn Gwadar into China's exit to the sea."¹⁷⁰ These and other hopeful suggestions neglect to consider the engineering and security challenges posed by building rail lines across mountainous and insecure terrain of Khyber Pakhtunkhwa and Gilgit-Baltistan.¹⁷¹ A China-Pakistan joint railroad group met in summer 2017 to develop these plans, but no progress is visible. At present there is little realistic prospect of laying down rail connecting China and Pakistan.¹⁷² Remarkably, a former senior diplomat at the PRC Embassy in Islamabad pointed out that "a China-Pakistan railway must always lose money" because of the relative cheapness of maritime shipping and the prohibitive expense of building and maintaining rail infrastructure.¹⁷³

Air Transport

Gwadar's viability as an international transport and trading hub requires air transport. Beginning in 2019, Chinese firms began constructing a "New Gwadar International Airport" to replace the small facility currently serving Gwadar. This new project is managed by China Airport Construction Group, directly subordinate to the Civil Aviation Administration of China, a branch of the PRC Ministry of Transport. Beijing Urban Construction Group Co., Ltd. and China Railway Beijing Engineering Group Co., Ltd. are contracted to construct the airport.¹⁷⁴

Although the Chinese government converted the original \$230 million loan to a grant in 2015,¹⁷⁵ it took four years before construction began at a site 26 km east of Gwadar out in the desert in an area known as Goran Dani.¹⁷⁶ A groundbreaking ceremony was held in March 2019 with Pakistan's President Imran Khan in attendance.¹⁷⁷ It is designed to be Pakistan's second largest airport covering 18 square kilometers (6.9 square miles) with a runway more than 12,000 feet (3,658 meters) long—capable of handling the largest civilian and military aircraft.¹⁷⁸

¹⁷⁰ Li Jingyu, et al, "The Strategic Concept of Selecting Points," p. 34

¹⁷¹ See, for example, Liu Xiaotong, Zhang Kai, Chen Bokui, Zhou Jun, and Miao Lixin, "Analysis of Logistics Service Supply Chain for the One Belt and One Road Initiative of China." *Transportation Research Part E: Logistics and Transportation Review*, no. 117 (2018), pp. 23–39; Shibasaki, et al. "Could Gwadar Port in Pakistan Be a New Gateway?"

¹⁷² Fawad Yousafzai, "3 Railway Projects Included in CPEC: Saad," *The Nation*, January 6, 2017, <https://nation.com.pk/06-Jan-2017/3-railway-projects-included-in-cpec-saad>

¹⁷³ 毛四维 [Mao Siwei], 认识中巴经济走廊的三大错误 ["Three Big Mistakes in Understanding the CPEC"], 财新博客 [Caixin Blog], Dec. 15, 2016, <http://maosiwei.blog.caixin.com/archives/156135>. The low priority for developing rail to and from Gwadar may also reflect the priorities of the Imran Khan government, which since taking office in 2018 has downgraded the priority of railway construction under CPEC. Press Trust of India, "Significant Shift in CPEC Projects: Report," *The Business Standard*, October 22, 2018, https://www.business-standard.com/article/international/pak-pm-imran-khan-wants-significant-shift-in-cpec-projects-report-118102201102_1.html.

¹⁷⁴ 连线巴基斯坦 – 帮“巴铁”建机场，我参与了最大无偿援外工程 ["Connecting Pakistan—Helping Pakistan Build an Airport, I Took Part in the Largest Free Foreign Aid Project"], 中国民航网 [Civil Aviation Administration of China News], May 8, 2020, https://www.sohu.com/a/393879179_263678; Also see the Civil Aviation Administration of China's (中国民用航空局) main website under "directly subordinate agencies" (直属机构), <http://www.caac.gov.cn/website/old/>, (accessed May 18, 2020).

¹⁷⁵ "China Converts \$230m Loan for Gwadar Airport into Grant," *The News*, September 23, 2015, <https://www.thenews.com.pk/print/14833-china-converts-230m-loan-for-gwadar-airport-into-grant>

¹⁷⁶ 中巴经济走廊重点项目瓜达尔新国际机场启动奠基 ["New Gwadar International Airport Kicks Off, Key Project for the China-Pakistan Economic Corridor"], 观察者 [Observer], March 31, 2019, http://www.guancha.cn/international/2019_03_31_495735.shtml.

¹⁷⁷ "Pakistan breaks ground for China-funded New Gwadar International Airport," *Xinhua*, March 30, 2019, http://www.xinhuanet.com/english/2019-03/30/c_137935903.htm.

¹⁷⁸ Chinese reporting states the airport will be capable of handling the world's largest passenger aircraft, the Airbus A380. 巴基斯坦新瓜达尔国际机场举行奠基仪式 ["Pakistan's New Gwadar International Airport Holds Groundbreaking



Image 4. Chinese staff working on the New Gwadar International Airport¹⁷⁹

Security and virus containment measures are recent challenges for the airport construction site that reveal aspects of its development. In May 2020, the head of the Chinese project management group visited the site in a convoy of military and police vehicles. He said the site resembled a military facility due to the large presence of military personnel, bunkers, concrete roadblocks, sandbags for blast proofing, and watch towers. No medical facilities capable of handling the spread of COVID-19 exist. The virus situation has also slowed shipments of construction supplies from Karachi from weekly to monthly. That the supplies come from Karachi strongly confirms that the nearby port of Gwadar remains ill-suited to meet even local needs.¹⁸⁰

Ceremony”], 新华网 [Xinhua], March 30, 2019, http://www.xinhuanet.com/world/2019-03/30/c_1124303511.htm; 连线巴基斯坦 – 帮“巴铁”建机场, 我参与了最大无偿援外工程 [“Connecting Pakistan—Helping Pakistan Build an Airport, China Participates in the Largest Free Foreign Aid Project”], 中国民航网 [China Civil Aviation Web], May 8, 2020, https://www.sohu.com/a/393879179_263678; “Construction of New Gwadar International Airport Enters Its Second Phase,” *The News*, May 17, 2020, <http://cpecinfo.com/construction-of-new-gwadar-international-airport-enters-its-second-phase/>.

¹⁷⁹ Plans for the airport include a 150,000 sq. ft. terminal building, support facilities (warehouses, offices, etc.), air space control facilities, public use infrastructure (water, electricity, etc.), and an adjacent hospital, school, and residence facility. See “Connecting Pakistan—Helping Pakistan Build an Airport, I Took Part in the Largest Free Foreign Aid Project.”

¹⁸⁰ Ibid. While worker temperatures are tested twice daily and precautionary measures are in place, the restriction on their movement in and out of the work site has seen a reduction in the 200 Pakistani workers, thereby impacting the project’s progress.

Once the new airport is operational it will provide a ready connection to China without the manifold challenges posed by ground transportation. The PRC central government intends to develop Xinjiang's aviation sector and its role as a hub for Central and South Asia.¹⁸¹ Chinese analysts promote an "Aviation Silk Road" and claim that "by building up and expanding airports and aviation operations in Pakistan's major cities and along its coast, China can open up an air corridor to the Indian Ocean."¹⁸² Air transport may augment the commercialization of the port, but its low capacity and high cost make aviation an unlikely commercial savior.¹⁸³ It could, however, enable military logistics that would have otherwise been impossible.

Oil and Gas Infrastructure

For nearly 15 years, China and Pakistan have made announcements of ambitious plans for oil and gas infrastructure development at Gwadar as detailed below, but to date no oil or gas terminals, refineries, or pipelines have been built.

- In 2006 Hu Jintao visited with a delegation that signed an MOU for a \$12.5 billion Chinese petrochemical terminal at Gwadar.¹⁸⁴
- In 2015, China Pipeline Petroleum Bureau (a subsidiary of the China National Petroleum Corporation, one of the three major Chinese national oil companies) agreed to build a 42-inch diameter pipeline with two compressor stations to handle some 500 million cubic feet per day from the planned terminal at Gwadar.¹⁸⁵ The projected cost of \$1.6 billion of both pipeline and LNG terminal would bring the line as far as Nawabshah to connect with other Pakistani pipelines; an additional spur to Lahore is planned for another \$2 billion.¹⁸⁶ These projects have not yet been approved by Pakistan's Ministry of Petroleum and Resources.¹⁸⁷
- In 2018, a planned LNG terminal on the north side of the bay was originally due to be completed, but work on the project was delayed when Pakistan's Ministry of Planning sought to lease an FSRU rather than purchasing one outright, as a cost saving measure.¹⁸⁸

¹⁸¹ 铁路公路航空三路并进 新疆构建“立体丝路”大通道 [“Three Ways of Rail, Road, and Air Advancing Together as Xinjiang Build a ‘Three-Dimensional Silk Road’ Grand Corridor”], 国务院新闻办公室网站 [State Council Information Office], December 21, 2015, <http://www.scio.gov.cn/ztk/wh/slx/31208/Document/1459644/1459644.htm>.

¹⁸² 周恒 [Zhou Heng], “航空丝路”重点国家筛选和应对策略 [“Strategies for Choosing and Approaching Key Countries for the ‘Aviation Silk Road’”], 中国军转民 [Defence Industry Conversion in China], no. 6 (2017), p. 69.

¹⁸³ Liu Xiaotong, Zhang Kai, Chen Bokui, Zhou Jun, and Miao Lixin, “Analysis of Logistics Service Supply Chain for the One Belt and One Road Initiative of China,” *Transportation Research Part E: Logistics and Transportation Review*, no. 117 (2018), pp. 23–39.

¹⁸⁴ “PSA Bags Gwadar Rights”, *Seatrade Maritime News*, December 13, 2006, <https://www.seatrade-maritime.com/asia/psa-bags-gwadar-rights>.

¹⁸⁵ The framework MOU was signed when Xi visited in 2015. Saeed Shah, “China to Build Pipeline from Iran to Pakistan,” *The Wall Street Journal*, April 9, 2015, <https://www.wsj.com/articles/china-to-build-pipeline-from-iran-to-pakistan-1428515277>; “Pak China In Talks to Have an LNG Terminal at Gwadar,” *Pak-China News*, September 6, 2016, <http://pakchinanews.pk/pak-china-in-talks-on-lng-terminal-in-gwadar/>; Khalid Mustafa, “China Wants End to Delay in LNG Project,” *The News*, February 20, 2017, <https://www.thenews.com.pk/print/187582-China-wants-end-to-delay-in-LNG-project>.

¹⁸⁶ “Gwadar-Nawabshah Pipeline, LNG Terminals: All Projects Will be Completed On Time, Says Official,” *Tribune*, May 12, 2016, <https://tribune.com.pk/story/1101858/gwadar-nawabshah-pipeline-lng-terminals-all-projects-will-be-completed-on-time-says-official>.

¹⁸⁷ Fawad Yousafzai, “Construction Mode of Gwadar LNG Terminal Changed from BOOT to APC,” *The Nation*, January 30, 2017, <https://nation.com.pk/30-Jan-2017/construction-mode-of-gwadar-lng-terminal-changed-from-boot-to-apc>.

¹⁸⁸ While the Planning Commission has opposed the leasing option of an LNG terminal at Gwadar, preferring an outright purchase of the facility for Rs41 billion, the Central Development Working Party (CDWP) led by Planning and Development Minister Ahsan Iqbal has set aside the commission's objections, giving the petroleum ministry a go-ahead

- In 2019, CNPC reportedly considered building an 80km spur connecting Gwadar to the Iranian border, but persistent sanctions on Iran have prevented development.¹⁸⁹

In early 2019, Saudi Arabia stepped in to offer financing and construction for oil facilities near Gwadar that may displace the long-stalled Chinese project.¹⁹⁰ After a trip to Pakistan by Saudi crown prince Mohammad Bin Salman, the Saudis pledged \$10 billion to build a petrochemical refinery complex in the north bay at Gwadar.¹⁹¹ Chinese firms initially appeared concerned about this Saudi interest.¹⁹² Increasingly, they express cautious optimism about possible Sino-Saudi cooperation to help Pakistan's troubled fiscal situation.¹⁹³ Saudi Arabia, China and the UAE have pledged financing to keep Pakistan on track in servicing its current IMF bailout loan, providing some evidence of coordinated Chinese and Saudi support for their struggling partner.¹⁹⁴ More recent reports, however, deal another blow to hopes of developing Gwadar. The Saudis announced they may move the location of their refinery from Gwadar, where there are no other oil and gas facilities, to Hub, a city near Karachi.¹⁹⁵

Chinese analysts may be coming to terms with the commercial futility of developing Gwadar into a petrochemical processing hub. The urgency to do so may be diminished, as oil and gas are now piped from Kyaukse, Myanmar to Yunnan province in southwestern China, providing one direct link to the Indian Ocean (and the subject of a forthcoming case study in this series). Further, the feasibility and desirability of a Pakistan energy corridor is in doubt. A researcher from the PRC Ministry of Commerce recently disparaged the so-called "Malacca Dilemma" as a "pseudo-concept," in part due to varied needs China would face if there was actually a concerted effort to interdict China's maritime energy shipments. Wartime oil demand could be curtailed, and reserves and existing overland routes could be tapped in the short term.¹⁹⁶ In peacetime, the cost of constructing pipelines and refineries compared to building and operating crude oil carriers makes the maritime route significantly cheaper and higher capacity, even given the greater distance.¹⁹⁷ This research report

for leasing the Floating Storage and Re-gasification Unit (FSRU) for 25 years at an estimated cost of \$120,000 per day. Khaleeq Kiani, "Planning Commission opposes LNG terminal leasing at Gwadar," *Dawn*, March 24, 2017, <https://www.dawn.com/news/1322510>.

¹⁸⁹ Zafar Iqbal, "Pakistan's hopes for an energy pipeline with Iran evaporate," *Asia Times*, July 1, 2019, <https://asiatimes.com/2019/07/pakistans-hopes-for-an-energy-pipeline-with-iran-evaporate/>.

¹⁹⁰ Ismail Dilawar and Kamran Haider, "Saudi Prince Starts Asia Trip Pledging \$20 Billion for Pakistan," *Bloomberg*, February 17, 2019, <https://www.bloomberg.com/news/articles/2019-02-17/saudi-crown-prince-arrives-in-pakistan-to-sign-investment-deals>.

¹⁹¹ "Land Allocation in Process For \$10b Saudi Aramco Refinery in Gwadar," *Arab News Pakistan*, March 2, 2020, <https://www.arabnews.pk/node/1629231/pakistan>.

¹⁹² 沙特在瓜达尔兴建最大炼油厂，中资利益恐受损？说好“巴铁”呢 [“Saudi Arabia Constructing Largest Refinery in Gwadar, Do Chinese-funded Interests Fear Losses? What about Pakistan”] 金十数据 [Gold Ten Data], January 28, 2019, <http://dy.163.com/v2/article/detail/E6K93IE80519EO06.html>; 沙特加入中巴经济走廊 中国再平衡巴基斯坦瓜达尔深水港利益格局 [“Saudi Arabia Joins the China-Pakistan Economic Corridor, China Rebalances Interests in the Pakistan Deepwater Port of Gwadar”], 第一黄金网 [First Gold Net], February 25, 2019, <http://www.dyhjw.com/gold/20190225-30592.html>.

¹⁹³ Saeed Sha and Benoit Faucon, "Pakistan Pursues Saudis in Bid to Avoid More China Debt," *Wall Street Journal*, September 30, 2018, <https://www.wsj.com/articles/pakistan-pursues-saudi-role-in-chinas-infrastructure-program-1538330703>.

¹⁹⁴ International Monetary Fund, "First Review Under the Extended Arrangement," p. 17.

¹⁹⁵ Khalid Mustafa, "S Arabia May Install Refinery, Petrochemical Complex in Hub," *The International News*, March 2, 2020, <https://www.thenews.com.pk/print/622614-s-arabia-may-install-refinery-petrochemical-complex-in-hub>.

¹⁹⁶ Mei Xinyu, "Gwadar Port and China's Energy Imports."

¹⁹⁷ The pipelines would need to pass through altitudes of 5,000 to 6,000 meters, with corresponding requirements for heat, power, and insulation.

estimated that the overland transport costs would be 42 percent of the selling price of the oil, compared to less than 2.5 percent of the price of oil transported by sea.¹⁹⁸ While some Chinese academics unaccountably predict that some 60% of China's energy needs could be supplied via pipeline from the Indian Ocean,¹⁹⁹ Chinese officials do not consider this remotely realistic.²⁰⁰

Technical analyses of the viability of overland pipelines to supply Chinese energy demand make note of the capacity limitations inherent in pipelines. Pipelines have a maximum throughput that cannot be scaled up like seaborne transport. Logistics experts at Dalian Maritime University have analyzed the cost and reliability of the overall logistical chain, modeling a series of scenarios predicated on different assumptions about risks to different maritime and land channels. They find that the highest utilization scenario for Gwadar would provide only six percent of China's oil imports.²⁰¹ These analysts also note the many other seaborne passages for oil and gas, including from the Americas, Africa, and the Arctic, that could further mitigate the "dilemma" and obviate the need for costly, risky overland routes.²⁰² Other analysts assess the overland security risks (e.g., from terrorism and natural disasters) are both more acute and more likely than those affecting the maritime route.²⁰³

Power Priorities

The slow pace of linking Gwadar with transport infrastructure is partly a result of those projects being crowded out by a higher Pakistani priority: power. The majority of the projects listed formally as "CPEC" concern power generation, mostly in the form of coal fired power plants.²⁰⁴ Power shortages are the norm in Pakistan, especially in Gwadar, where severe outages—as long as 20 hours per day—are not unusual. Since 1999, all of Gwadar's electricity has been imported from Iran.²⁰⁵ There is great demand for stable power that must be met before any more ambitious development can be carried out.

Power generation is thus among the key Chinese projects around Gwadar. The CCCC began constructing a \$542 million 300mW coal-fired power plant 40 km east of Gwadar on November 4, 2019. Ning Jizhe, the deputy director of China's lead economic planning group, the National Development and Reform Commission, attended the groundbreaking ceremony to emphasize China's leadership's focus on projects in line with Pakistani demands.²⁰⁶ Pakistan's Ministry of Water and

¹⁹⁸ Mei Xinyu, "Gwadar Port and China's Energy Imports."

¹⁹⁹ 李希光, 孙力舟 [Li Xiguang and Sun Lizhou], 中巴经济走廊战略价值与安全形势 ["Strategic Value and Security Situation of the China-Pakistan Economic Corridor"], 观察者 [Observer], April 20, 2015, https://www.guancha.cn/LiXiGuang/2015_04_20_316607.shtml.

²⁰⁰ 毛四维 [Mao Siwei], 中巴经济走廊到底有多重要 ["How Important is the China Pakistan Economic Corridor"], 观察者 [Observer], July 24, 2015, https://www.guancha.cn/MaoSiWei/2015_07_24_328017.shtml.

²⁰¹ Wang Shuang, et al. "Research on the Selection of Routes for Maritime Transportation," p. 20

²⁰² Ibid., p. 19-21

²⁰³ Li Jingyu, et al, "The Strategic Concept of Selecting Points," pp. 34-36; Tushar Mohanty, "Balochistan: Running out of Gas," *South Asia Intelligence Review*, vol. 56, no. 9. (2011) http://www.satp.org/satporgtp/sair/Archives/sair9/9_46.htm; Renmin/Caijing report, pp. 12-18.

²⁰⁴ CPEC Authority, "CPEC Energy Projects," *China Pakistan Economic Corridor*, <http://cpec.gov.pk/progress-update> (accessed June 7, 2020).

²⁰⁵ Iran provides power to the Gwadar, Ketch and Panjgur districts of Makran division of Balochistan. From 1999 to 2013, it provided 35 megawatts per day; beginning in 2013, this increased to 100 megawatts, but has been unreliable. See Naimat Khan, "Parts Of Balochistan Plunged Into Darkness As Iran Cuts Off Power Supply," *Arab News*, July 16, 2018, <https://www.arabnews.pk/node/1339891/pakistan>.

²⁰⁶ 宁吉喆出席瓜达尔中国企业项目奠基仪式 ["Ning Jizhe attended groundbreaking ceremony of Chinese enterprise's Gwadar project"], *China Communications Construction Corp., Ltd.*, November 11, 2019, http://www.ccccltd.cn/news/gsyw/201911/t20191111_98243.html.

Infrastructure took a long time approving the project in part because the local Baloch government claimed that 14mW is sufficient for local purposes and the resources would be better spent elsewhere. The Balochistan Environmental Protection Agency also took several years to authorize the plant's construction.²⁰⁷ Despite these delays, Dongfang Electric Corporation reportedly won the bid to supply two 150mW steam turbine generators for this project in late March 2020.²⁰⁸ With this large-scale equipment on the way, Gwadar may have ample electricity in the near future.²⁰⁹

Overall Assessment of Transport Infrastructure

While Chinese officials and scholars routinely discuss the prospective transport corridor as though it were operational, very little modern infrastructure has been built beyond a few roads and the port itself. This is not atypical of Chinese investment abroad, which is marked by leadership summits with memorandums of understanding signed, repeated announcements of the same projects, followed by halting progress.²¹⁰ Chinese engineers familiar with the project acknowledge “at present, the hinterland of the port is limited to the neighboring areas.”²¹¹ The lack of high capacity transport infrastructure greatly limits the potential for Gwadar's commercial development. The Balochistan hinterland is insufficient to realize the grand regional ambitions for Gwadar. However, the long-term nature of China's interest in Pakistan's development cautions against ruling out the eventual development of a viable transport network. Such connectivity is vital to both of Beijing's central aims, to create an “exit to the sea” and to develop Pakistan—and through that development, to promote security and stability in China's western provinces and near abroad.

Inland Markets & Resources

The resources and markets of Pakistan (and of its neighbors) provide China with linked economic and security incentives to remain invested in the Gwadar project. The CPEC program, of which Gwadar is a key instrumentality, is the main vehicle for Chinese commercial activity in Pakistan. To date, however, that “flagship” initiative has largely focused on power projects without developing the transport infrastructure that would enable Gwadar to drive broad-based economic development. This section briefly summarizes the markets and resources that the port and its transport infrastructure may unlock, exploring Chinese projects inland as well as more recent efforts to trade with landlocked Afghanistan.

Pakistan's Limited Commercial Appeal

The Chinese aim to develop Gwadar and its hinterland transport network targets some significant economic opportunities. Pakistan's 233 million people make it the world's fifth most populous

²⁰⁷ Hao Zhou, “Gwadar Port Sets Sail”; CPEC Authority, “300MW Imported Coal Based Power Project at Gwadar, Pakistan,” *China-Pakistan Economic Corridor*, <http://cpec.gov.pk/project-details/5> (accessed July 31, 2020).

²⁰⁸ 东方电机中标巴基斯坦瓜达尔港 2x150MW 汽轮电机项目 [“Dongfang Electric won the bid for 2x150mW steam turbine motor project in Gwadar Port, Pakistan”], 东方电机网站 [Dongfang Electric Website], March 31, 2020, <http://www.dongfang.com/data/v/202003/8518.html>

²⁰⁹ Other power generation projects at Gwadar are also under consideration. Chinese scientists from the PLA University of Science and Technology, the Chinese Academy of Sciences, the Dalian Naval Academy, and the State Oceanic Administration have also been exploring the wind energy potential around Gwadar, finding it “stable year round” based on a multi-year study. See 郑崇伟 [Zheng Chongwei], et al., 巴基斯坦瓜达尔港的风能资源评估 [“Analysis of Pakistan's Gwadar Port Wind Energy Capability”], 厦门大学学报 [Journal of Xiamen University], vol. 55, no. 2 (2016) pp. 210–15.

²¹⁰ According to a RAND study, only 6 percent of a pledged \$66 billion in Chinese outward foreign direct investment came through in the period 2001-2011. See Charles Wolf, Jr., Xiao Wang and Eric Warner (eds.), *China's Foreign Aid and Government-Sponsored Investment Activities: Scale, Content, Destinations and Implications* (Santa Monica: CA: RAND, 2013), pp. 37-38.

²¹¹ Xi Fang, et al, “SWOT Analysis and Development Measures for Gwadar,” p. 2.

nation.²¹² This vast human potential is one of the reasons for China's largesse in Pakistan, and informs the business case for investment in power and transport infrastructure. PRC Ministry of Commerce analysts believe that with "early harvest" projects for power generation and transmission intact, China can help Pakistan to "build a complete industrial sector through international capacity cooperation and the construction of overseas economic and trade cooperation zones."²¹³ That is, China will export its goods and industrial capacity to Pakistani markets once the country has sufficient infrastructure. This is a heroic aim, and despite the enthusiasm of Chinese promoters, is privately not considered a high-probability outcome by more sober-minded analysts.²¹⁴

Pakistan is beset by major problems hindering economic progress. Although its GDP grew at an annual rate of roughly 5 percent for the period 2013-2018,²¹⁵ Pakistan suffers from chronic macroeconomic instability. In mid-2019, Pakistan received its thirteenth IMF bailout in the last thirty years,²¹⁶ this one a \$6 billion loan to deal with a persistent balance of payments crisis.²¹⁷ China's CPEC investment evidently has not improved Pakistan's macroeconomic health.²¹⁸ Although Pakistan is the target of growing Chinese investment, Sino-Pakistani bilateral trade remains "tiny and weak,"²¹⁹ actually contracting from 2017 to 2018.²²⁰

Poor past performance notwithstanding, Pakistan's young demography and low levels of urbanization present some attractive growth opportunities.²²¹ In light of China's growing labor costs and export tariff burdens to key markets, Pakistan is also attractive as an investment destination

²¹² "South Asia: Pakistan," *CIA World Factbook* (July 2020 estimate) <https://www.cia.gov/library/publications/the-world-factbook/geos/pk.html>.

²¹³ 卢伟, 申兵[Lu Wei and Shen Bing], 从中长期看中巴经济走廊建设的关键问题 ["Looking at the Key Issues in the Construction of the China-Pakistan Economic Corridor"], 中国发展观察杂志社 [*China Development Survey Magazine*], June 7, 2017, <http://theory.people.com.cn/n1/2017/0607/c83853-29323649.html>.

²¹⁴ Authors' discussions with Chinese economic analysts and country specialists, Beijing and Hong Kong, June 2019.

²¹⁵ The World Bank, "GDP growth (annual %)—Pakistan," *World Bank DataBank*, accessed June 10, 2020.

²¹⁶ Sophia Saifi and James Griffiths, "Pakistan Agrees to 13th Bailout in 30 years from the IMF," *CNN International*, May 13, 2019, <https://www.cnn.com/2019/05/13/asia/pakistan-khan-imf-intl/index.html>.

²¹⁷ International Monetary Fund, "IMF Reaches Staff-Level Agreement on Economic Policies with Pakistan for a Three-Year Extended Fund Facility," *IMF Press Release*, No. 19/157, May 12, 2019, <https://www.imf.org/en/News/Articles/2019/05/12/pr19157-IMF-Reaches-Staff-Level-Agreement-on-Economic-Policies-with-Pakistan-for-a-Three-Year-EFF>.

²¹⁸ Debt to China is among the many economic burdens cited by the IMF, which notes that 25 percent of outstanding public debt and nearly 40 percent of the debt that will come due during the period of the 2019 IMF "Extended Fund Facility" is owed to the PRC. See International Monetary Fund, "First Review Under the Extended Arrangement Under the Extended Fund Facility and Request for Modification of Performance Criteria," *IMF Country Report*, no. 19/380, December 2019, <https://www.imf.org/en/Publications/CR/Issues/2019/12/20/Pakistan-First-Review-Under-the-Extended-Arrangement-Under-the-Extended-Fund-Facility-and-48899>, pp. 28-34.

²¹⁹ Ye Hailing, "China-Pakistan Relationship: All-Weather, But Maybe Not All-Dimensional," in Kristina Zetterlund (ed), *Pakistan—Consequences of Deteriorating Security in Afghanistan* (Stockholm: Swedish Defence Research Agency, 2009), cited in Small 2015, p. 117.

²²⁰ World Bank, "China imports, exports, and trade balance by country and region (2017)," *World Integrated Trade Solutions*, <https://wits.worldbank.org/CountryProfile/en/Country/CHN/Year/2017/TradeFlow/EXPIMP>. The 2017 trade volumes are \$84 billion with India and \$20 billion with Pakistan.

²²¹ Pakistan's average age is 22, or the 48th youngest; it is 37.2 percent urbanized. See CIA, "South Asia: Pakistan," *The World Factbook*, June 2020, <https://www.cia.gov/library/publications/the-world-factbook/geos/pk.html>. Because urbanization is low in Pakistan, Chinese experts from the National Development and Reform Commission believe that their infrastructure will have a multiplier effect as Pakistan's large population seeks more productive work in cities. See Lu and Shen, "Critical Issues in the China-Pakistan Economic Corridor From a Long-term Perspective."

because of its low tariffs into the American market.²²² Chinese trade specialists meanwhile emphasize the “significant trade complementarities” between imports of Pakistan’s minerals and agriculture, and exports of China’s consumer goods and technology products.²²³

Inland Industrial Parks

The CPEC program intends to help Pakistan move up the value chain from commodity exports into light manufacturing and industry. This development would potentially facilitate “industrial transfer” from China to Pakistan and creating consumers for Chinese exports.²²⁴ During a meeting of the China-Pakistan Joint Cooperation Committee in December 2016, nine special economic zones were proposed, each to be established with China’s financial and managerial assistance. These zones require stable power, water, labor, and administration, and therefore depend upon the success of “early harvest” projects.²²⁵ Many in Pakistan are advocating for an even larger-scale effort in industrialization with the creation of 46 special economic zones.²²⁶

None of these zones are yet operational, but the official CPEC website currently lists the nine zones in various stages of planning and development.²²⁷ One more mature example with a Chinese investor and operator is the Rashakai Economic Zone. It is the result of an MOU signed between the Khyber Pakhtunkhwa provincial government and China National Electric Engineering Company in January 2017.²²⁸ This zone is meant to eventually cover 1,000 acres and is meant to feature industrial clusters in garment and textile products, home building materials, general merchandise, electronics and appliances, automobiles and mechanical equipment.²²⁹ It is reportedly the first zone to begin attracting Chinese business, offering customs relief, ten years of income tax exemption, permission for full foreign ownership of assets, and other incentives tailored to Chinese investors.²³⁰ There are

²²² Pakistan’s trade agreements with the EU and United States give it a lower effective tariff rate than goods exported directly from China. See Renmin/Caijing report, p. 7. Under the U.S. Generalized System of Preferences, over 3,500 products from Pakistan can enter the U.S. duty-free—including manufactured items, minerals, and other consumer products. See U.S. Embassy Pakistan, “Pakistan and the U.S. Generalized System of Preferences Program,” 2017, <https://pk.usembassy.gov/wp-content/uploads/sites/76/2017/01/GSP-Brochure.pdf>.

²²³ 赵志文 [Zhao Zhiwen], 基于 SWOT 分析南疆四地州参与中巴经济走廊建设 赵志文 [“SWOT Analysis of the Participation of Four Prefectures in Southern Xinjiang in the Construction of the China-Pakistan Economic Corridor”], 新疆职业大学学报 [Journal of Xinjiang Vocational College], vol. 23, no. 3 (2015), p. 18; 殷永林 [Yin Yonglin], 中巴商品贸易发展研究 [“Research on China-Pakistan Commodity Trade Development”], 南亚研究季刊 [South Asia Research Quarterly], no. 1 (2015), pp. 55-59

²²⁴ Lu and Shen, “Looking at the key issues in the construction of the China-Pakistan Economic Corridor.”

²²⁵ See Erica Downs, “The China-Pakistan Economic Corridor Power Projects: Insights Into Environmental and Debt Sustainability.”

²²⁶ 中国推动巴基斯坦设立经济特区 [“China Promotes Pakistan in Establishing Special Economic Zones”], 瓜达尔临沂商城-市场部 [Gwadar-Linyi Mall-Marketing Department], July 20, 2017, <https://mp.weixin.qq.com/s/3Efe-g1MSSn6f17MEVbc9w?>.

²²⁷ Some are still undergoing feasibility studies while others have acquired land and are in the bidding process. See “CPEC Special Economic Zones (SEZs),” CPEC – China Pakistan Economic Corridor, <http://cpec.gov.pk/special-economic-zones-projects>, (accessed August 3, 2020).

²²⁸ “CNEEC Pakistan Rashakai MOU Signing,” 中电工巴基斯坦工程有限公司 [CNEEC Pakistan Engineering Co., Limited], Undated, <http://cneec.com.pk/company/Rashakai.html>, (accessed July 15, 2020).

²²⁹ The official CPEC website states that this project will break ground during the visit of Chinese General Secretary Xi Jinping in 2020. See: “Rashakai Economic Zone, M-1, Nowshera,” CPEC – China Pakistan Economic Corridor, <http://cpec.gov.pk/project-details/53>, (accessed 3 August 2020).

²³⁰ 中巴经济走廊首个产业园区开始招商, 欢迎中国企业入驻 [“First Industrial Park of the China-Pakistan Economic Corridor Begins Attracting Investment and Welcoming Chinese Enterprises”], 经济日报 [Economic Daily], February 19, 2020, <https://www.investgo.cn/article/gb/tzbg/202002/477435.html>.

also special economic zones or industrial parks spanning a variety of industries planned at sites in Bostan, Islamabad, Faisalabad, the Port Qasim area and elsewhere.²³¹

Balochistan's Resources



Image 4: Map of Major Mineral Distribution in the Islamic Republic of Pakistan.²³²

Balochistan is Pakistan's largest and poorest province. Its substantial mineral resources present a tempting commercial opportunity, but political instability and significant security risks have kept most investors at bay. Chinese firms, however, have invested in Balochistan's mineral resources since the 1990s. Chinese analysts note that geologic surveys reveal that Pakistan is not as poorly endowed with minerals as was once believed, and that there is a great potential for further development.²³³ Chinese analysts identify some 40 minerals as abundant in Balochistan.²³⁴ Metals

²³¹ "CPEC Special Economic Zones (SEZs)," CPEC—China Pakistan Economic Corridor.

²³² This image was located in a 2010 article authored by the Chinese Academy of Geologic Sciences Institute of Mineral Resources. See 吴良士 [Wu Liangshi], 巴基斯坦伊斯兰共和国矿产资源及其地质特征 ["Mineral Resources and their Geological Characteristics in the Islamic Republic of Pakistan"], 矿床地质 [Mineral Deposits], no. 2 (2010), p. 379.

²³³ 姚文光, 洪俊, 计文化 [Yao Wenguang, Hong Jun, and Ji Wenhua], 巴基斯坦和阿富汗矿产资源投资前景比较 ["Comparison of Investment Prospects of Mineral Resources in Pakistan and Afghanistan"], 矿物学报 [Acta Mineralogica Sinica], no. S2 (2013), p. 1074; 宋国明 [Song Guoming], 巴基斯坦金属矿产资源及开发现状 ["Pakistan's Metallic Mineral Resources and Current Development"], 中国金属通报 [China Metal Bulletin], no. 19 (2009), p. 34.

²³⁴ 李家成, 姜宏毅 [Li Jiacheng and Jiang Hongyi], 解析瓜达尔港建设的巴基斯坦国内阻力 ["Examining the Pakistani Political Obstacles to the Construction of Gwadar Port"], 区域与全球发展 [Regional and Global Development], no. 5 (2018), p. 126.

(especially copper and gold) and natural gas are found largely in Balochistan, while other minerals like coal are concentrated in central Pakistan.²³⁵ Balochistan is the source of nearly 80 percent of Pakistan's oil and gas reserves, by some estimates.²³⁶ The largest gas field in Pakistan, at Sui in eastern Balochistan, is past its peak but still active and being developed by Pakistani firms.²³⁷

Metallurgical Construction Corporation of China (中国冶金建设集团公司) was one of the earliest Chinese developers of Pakistan's mining industry, building the Saindak copper and gold mine in the 1990s, near Pakistan's border with Iran and Afghanistan. It gained the rights to operate this mine in late 2001, and has exported copper and other minerals to China. Further to the east, the firm also established the Duddar lead and zinc mine in November 2008, operated jointly by three Chinese firms. Both of these projects in Balochistan are tax-exempt.²³⁸

However promising the mineral wealth, thus far it has not been successfully exploited and marketed. Even optimistic Chinese observers concede that a host of issues—security prominently among them—continue to frustrate Balochistan's potential.²³⁹ The “lack of physical, institutional, and regulatory infrastructure” in Balochistan means that agriculture, livestock, and fisheries remain the principal industries in the province.²⁴⁰ Chinese efforts to develop a Gwadar fishing industry may be mostly an attempt to mollify worsening sentiments among the local population.²⁴¹ Gwadar Free Zone Company is pushing for “relevant enterprises” to outfit Gwadar fishermen with upgraded ocean-going fishing vessels and training in their operation on a “partial donation” basis.²⁴² Displaced local fishermen will be “absorbed” into fish processing and other activities related to their own occupation once the factories are set up.²⁴³

Chinese analysts further lament that “low-grade transportation channels” have so far limited the exploitation of Balochistan's mineral wealth.²⁴⁴ Chinese engineers with experience at the port believe that the effort to connect the port to markets and resources further afield is unlikely to succeed in the

²³⁵ Wu Liangshi, “Mineral Resources and their Geological Characteristics in the Islamic Republic of Pakistan,” pp. 379-381.

²³⁶ Syed Fazl-E-Haider, “Making Balochistan's Gas, Oil Findings Worthy,” *Pakistan & Gulf Economist*, April 22, 2019, <https://www.pakistangulfeconomist.com/2019/04/22/making-balochistans-gas-oil-findings-worthy/>.

²³⁷ “Sui Gas Field,” Pakistan Petroleum Limited, <https://www.ppl.com.pk/content/sui-gas-field-overview> (accessed Aug 3, 2020).

²³⁸ Song Guoming, “Pakistan's Metallic Mineral Resources and Current Development,” p. 35.

²³⁹ Li and Jiang, “Examining the Pakistani Political Obstacles,” p. 133.

²⁴⁰ United Nations Development Program, “Balochistan: Millennium Development Goals,” 2011, https://www.pk.undp.org/content/pakistan/en/home/library/mdg/publication_1.html, p. 4.

²⁴¹ Chinese enterprises are attuned to the local resistance to Gwadar development. For example, Gwadar fishermen staged a 3-week-long protest in early 2019 and physically prevented construction of the East Bay Expressway connecting the port to the Chinese-built highway, claiming that the construction hindered their access to the sea and their livelihood. “Fishermen reject Gwadar's East Bay Expressway model,” *Dawn*, January 28, 2019, <https://www.dawn.com/news/1460214>.

²⁴² 梁桐 [Liang Tong], 中巴经济走廊 一带一路头炮何时真正打响 [“When the China-Pakistan Economic Corridor Belt and Road Initiative really started”], 观察者网 [Observer Net], June 3, 2015, <http://news.takungpao.com/mainland/focus/2015-06/3018638.html>.

²⁴³ Zofeen Ibrahim, “Gwadar Fisherfolk Worry About One Belt One Road,” *thethirdpole.net*, May 18, 2017, <https://www.thethirdpole.net/2017/05/18/gwadar-fisherfolk-worry-about-one-belt-one-road/>. China International Engineering Company broke ground for this project on December 16, 2019. See CPEC Authority, “Pak-China Technical and Vocational Institute at Gwadar,” *China-Pakistan Economic Corridor*, <http://cpec.gov.pk/project-details/39> (accessed July 31, 2020).

²⁴⁴ Li Jiacheng and Jiang Hongyi, “Examining the Pakistani Political Obstacles to the Construction of Gwadar Port,” p. 126-127.

near term because of long and costly effort required to build transportation infrastructure.²⁴⁵ Thus they conclude that industrialization on site at the port and its immediate surroundings is the optimal development goal, with potential for “petrochemicals, automobile assembly, and construction material processing...and as conditions mature, gradually expanding to shipbuilding, equipment manufacturing, and other heavy industries.” The commercial case for developing Gwadar as a means for accessing Pakistan’s markets and resources, then, is not a powerful one—even among Chinese advocates.

Other Markets and Resources Beyond Pakistan

Gwadar figures prominently as “the exit to the sea for the five Central Asian countries.”²⁴⁶ Among these, Afghanistan has been the Central Asian state of most interest. Pakistan has been part of the regional trade and transport organization, Central Asia Regional Economic Cooperation (CAREC) since 2010 (and China is a founding member). Industry analysts believe that “Pakistani seaports (Karachi, Bin Qasim and Gwadar) are becoming promising gateways for CA [Central Asia], including the XUAR [Xinjiang Uyghur Autonomous Region], because most cities in CA are closer to the Pakistani seaports than the ports in Russia, China, Iran, Georgia and the Baltic countries.”²⁴⁷ Gwadar will require extensive development of transport infrastructure to facilitate trade to landlocked Central Asian states, but this potential broader market is part of its appeal.

Afghanistan is the first, and most proximate, landlocked Central Asian state to see trade from Gwadar port. In January 2020, Gwadar was officially opened for use under the Afghanistan-Pakistan Transit Trade Agreement (APTTA).²⁴⁸ This overland transit to landlocked Afghanistan used the N-65 road from Gwadar, one of a small handful of completed CPEC transport infrastructure projects in the area (see Image 7 below). The first shipment of chemical fertilizer was delivered by a COSCO ship in January 2020, then trucked up to the border at Chaman in northern Balochistan,²⁴⁹ with subsequent shipments continuing in May.²⁵⁰ Pakistani officials have been looking to shift NATO cargoes to Afghanistan from Karachi to Gwadar since at least 2018,²⁵¹ and Chinese-built infrastructure appears to be making this a possibility. However, such limited commercial activity at Gwadar port is demonstrative rather than profit-driven. It enabled officials to highlight the use of local labor and once again to hold out hope for expansion beyond fertilizers into other bulk cargoes like sugar and wheat. But at present the enterprise remains quite small in scale.²⁵²

²⁴⁵ Zhou Jinghui, et al, “Research on the Development and Layout of Gwadar Port,” p. 126-127.

²⁴⁶ Zhou Jinghui, “Research on the development and layout of Gwadar port,” p. 128

²⁴⁷ Shibasaki et al, “Could Gwadar Port in Pakistan be a new gateway?”

²⁴⁸ This agreement had previously included only Karachi and Qasim as points of transshipment for transit trade.

“Pakistan’s Gwadar port offers new opportunity for Afghan economy,” *Xinhua*, January 22, 2020, http://www.xinhuanet.com/english/2020-01/22/c_138725837.htm.

²⁴⁹ Adnan Aamir, “Beijing-Backed Pakistan Port Opens As Hub for Afghanistan Trade,” *Nikkei Asian Review*, January 30, 2020, <https://asia.nikkei.com/Spotlight/Belt-and-Road/Beijing-backed-Pakistan-port-opens-as-hub-for-Afghanistan-trade#:~:text=In%20October%202019%2C%20Pakistan's%20Ministry,cargo%20to%20and%20from%20Afghanistan>.

²⁵⁰ “Gwadar Port to Boost Pakistan-Afghanistan Trade: Envoy,” *Xinhua*, May 29, 2020, http://www.xinhuanet.com/english/2020-05/29/c_139099235.htm.

²⁵¹ Ismael Dilawar, “China’s Flagship Port in Pakistan Shackled by Heavy Security,” *Bloomberg*, February 7, 2018, <https://www.bloomberg.com/news/articles/2018-02-26/china-s-flagship-port-in-pakistan-shackled-by-heavy-security>.

²⁵² The May 2020 shipment was 16,000 tons of urea, of a national inventory of 900,000 tons of urea designated for export. “Gwadar port to boost Pakistan-Afghanistan trade: Afghan envoy,” *Xinhuanet*, May 29, 2020, http://www.xinhuanet.com/english/2020-05/29/c_139099235.htm; Usman Hanif, “Pakistan’s excess urea can fetch \$250m in exports,” *The Express Tribune*, November 26, 2019, <https://tribune.com.pk/story/2106428/pakistans-excess-urea-can-fetch-250m-exports>.

In aggregate, the markets and resources of Pakistan and its Central Asian neighbors are potentially significant but unlikely to be accessed via Gwadar at scale without much more substantial investment. Analysts differ on the magnitude of the commercial opportunity and the probability that the transport networks will make it possible. However, in surveying the Chinese discourse on the economic purposes of Gwadar port and the broader CPEC endeavor, the most consistent themes are concerns about security, both internal and external. While PRC reporting on Gwadar and CPEC dutifully hypes the business case for the projects, nearly all Chinese analysis calls attention to the abundant risks that attend any development in Pakistan. Chinese officials, businesspeople, and analysts are actively debating whether Pakistan's various "non-economic problems" can be overcome by Chinese capital and expertise.²⁵³ Those problems—especially terrorism and political instability—are even more acute in Balochistan, which must be developed if Gwadar is to thrive.

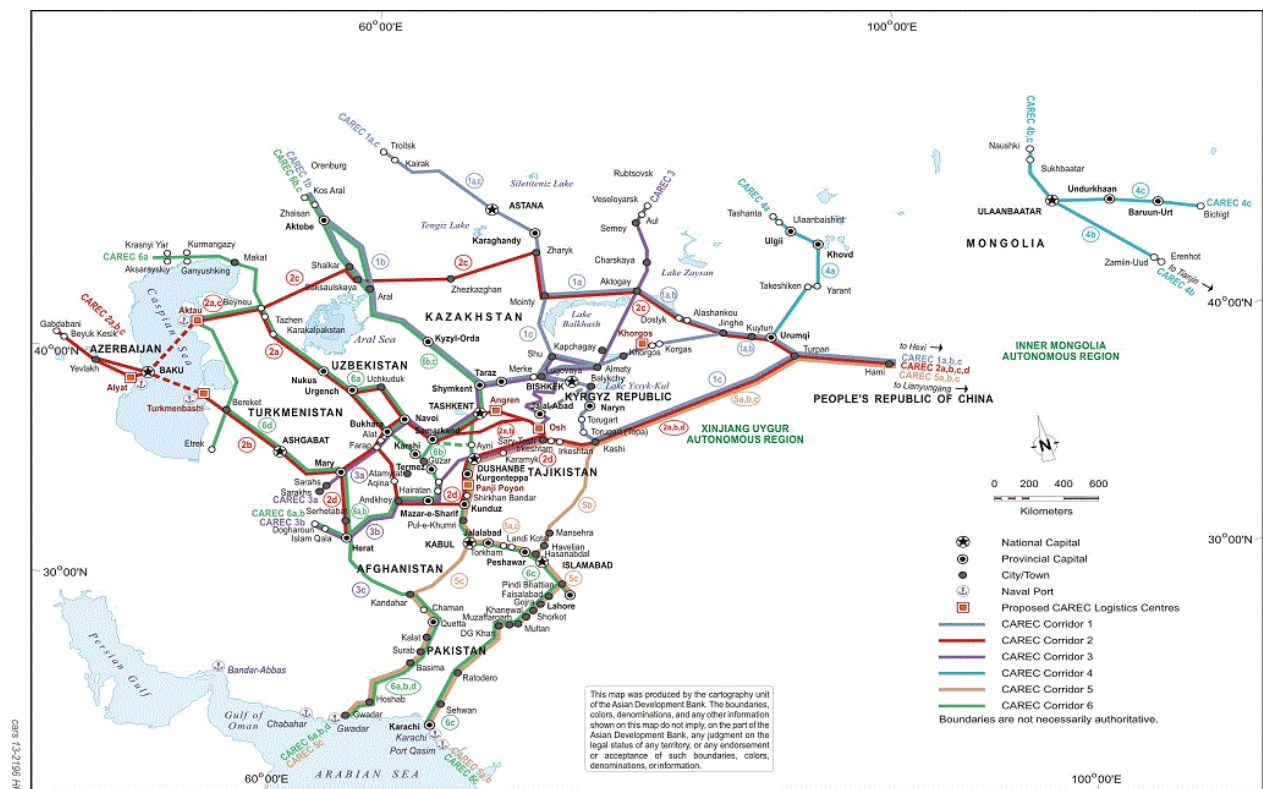


Figure 6. Six Central Asia Regional Economic Cooperation Corridors²⁵⁴

²⁵³ Tang Mengsheng, "One Belt One Road's Flagship and Benchmark"

²⁵⁴ Central Asia Regional Economic Cooperation Program, "Six Central Asia Regional Economic Cooperation Corridors," 2013 (archived October 2018, <https://web.archive.org/web/20170809211642/http://www.carecprogram.org/index.php?page=carec-countries>).

The Xinjiang Connection

Chinese interest in Pakistan's economic development becomes more comprehensible when considered as part of China's "holistic" outlook on internal and external security policy. Though Gwadar is distant from the PRC border, it is the essential node linking China's western regions to the Indian Ocean. It is therefore vital to the realization of Beijing's second strategic objective identified in the introduction to this case study—namely, to secure its periphery and stabilize Xinjiang.

The ambitious PRC development projects underway across Pakistan are recognizable as extensions of long-standing social and economic development policies in its far-flung western regions, Xinjiang in particular. Xinjiang is officially designated a "core area" of the BRI because it sits at the heart of Central Asia's regional transport networks.²⁵⁵ It is also Beijing's central concern in two decades of policy programs to develop the less prosperous western regions of China. Chinese security officials and analysts believe that terrorism and unrest in Xinjiang is a consequence of its connections to people, ideas, and resources beyond its borders, especially in Pakistan. China's continuing efforts to promote Pakistan's development thus reflect this first order security priority more so than the highly uncertain prospects of realizing the touted commercial goals for Gwadar and CPEC. This section first examines the security threats facing by Chinese businesses operating at Gwadar and Balochistan, then explores the connections drawn between terrorism and development in Chinese thinking about its relationship with Pakistan.

Security Risks in Pakistan

The commercial prospects for the Chinese projects at Gwadar are uncertain in significant part because of the local security situation.²⁵⁶ Terrorism in particular poses a direct threat to Chinese workers and projects, which have been targeted by Baloch nationalist groups hostile to China's presence.²⁵⁷ This risk has not, however, deterred Chinese investment in Pakistan—in fact, perhaps counterintuitively, it may have spurred increased investment since bringing about a more secure and stable Pakistan through development is the underlying strategic motivation.

The willingness to invest despite known security costs in Balochistan is not necessarily out of step with Chinese risk acceptance across the Belt and Road portfolio. Indeed, Chinese outbound investment concentrates in countries and regions with relatively high levels of security, political, and

²⁵⁵ 杨明方 [Yang Mingfang], 书写一带一路建设新疆篇章——访新疆维吾尔自治区主席雪克来提·扎克尔 ["Writing a Chapter On Building the Belt and Road in Xinjiang—Interview With The President of Xinjiang Uygur Autonomous Region"], 人民日报 [People's Daily], September 18, 2017, <http://cpc.people.com.cn/n1/2017/0918/c64102-29540746.html>.

²⁵⁶ For updated data and analysis on the frequency and severity of terrorist attacks in Pakistan, see South Asia Terrorism Portal, "Datasheet—Pakistan," <https://www.satp.org/datasheet-terrorist-attack/fatalities/pakistan>. For a detailed discussion of Chinese struggles with terrorism in Pakistan, see 李丽, 苏鑫 [Li Li and Su Xin], 巴基斯坦安全形势对中亚经济走廊建设的影响 ["The Impact of Pakistan's Security Situation on the Construction of the China-Pakistan Economic Corridor"], 国际经济合作 [Journal of International Economic Cooperation], no. 5 (2015), pp. 17-21.

²⁵⁷ For a review of selected terrorist incidents and persistent threats to Chinese workers and projects, see 李忠 [Li Zhong], 中方在巴海外利益恐怖主义威胁统计分析 ["Statistical Analysis of the Threat of Terrorism for China's Overseas Interests in Pakistan"], 警学研究 [Police Science Research], no. 2 (2018), pp. 51-54. Another study found increasing risks of terrorist attacks in Balochistan. See 程灿阳, 陈文静 [Cheng Canyang and Chen Wenjing], 基于空间统计的巴基斯坦恐怖袭击分析 ["Analysis of Pakistan Terrorist Attacks Based on Spatial Statistics"], 现代计算机-专业版 [Modern Computer—Professional Edition], no. 5 (2019), p. 25. There is no open source collection that specifies all of the attacks, kidnappings, and other threats against Chinese citizens in Pakistan. According to open-source reports compiled by authors, there have been regular small-scale attacks, and at least 21 with loss of life or major injury to PRC citizens since 2002.

economic risk.²⁵⁸ China Export and Credit Insurance Corporation (Sinasure), the leading Chinese state-owned insurance firm, rated overall risk for investing in Pakistan at a 7 out of 9 (with 9 as the highest risk), and judged terrorism in the South Asian region overall makes it “one of the most risky in the world.”²⁵⁹ Nonetheless, China’s officially pledged \$62 billion investment in CPEC is the highest such figure among BRI countries since 2013, and Pakistan has been China’s third largest target for outbound FDI and construction.²⁶⁰

To manage these risks, Chinese people working across the country are protected by dedicated security personnel. Pakistan provide a “Special Security Detachment” (SSD) headquartered in Karachi and Rawalpindi of between 15,000 and 17,000 armed personnel detailed specifically to protect Chinese nationals and projects.²⁶¹ Between 3,000 and 5,000 of these have been detailed to Gwadar²⁶² and the rest to the developed eastern part of the country.²⁶³ Chinese analysts have also urged Chinese firms to hire private security contractors.²⁶⁴ Typically, Chinese personnel and firms are protected by a mix of military, paramilitary, police, and private security contractors and secure housing and work areas.²⁶⁵ Most of the security contractors are Pakistani, but the Chinese private security firm Dewei Security Service Group was reportedly hired to implement security measures at Gwadar port.²⁶⁶ Enhanced security is evidently required at Gwadar and along the Makran coastal highway. Visits to Gwadar must be preapproved by the Pakistan Government and military, and danger along the coastal highway has led Pakistani authorities to prohibit Chinese from taking the road from Karachi to Gwadar, requiring them to fly instead,²⁶⁷ and as recently as January 2020, the

²⁵⁸ One study by scholars from the Chinese Academy of Sciences analyzes 74 Belt and Road countries and finds “an ‘investment paradox’ in some [BRI] countries, namely, a large amount of investment and a high level of risk” 刘海猛 [Liu Haimeng], et al., “一带一路”沿线国家政治-经济-社会风险 综合评估及防控 [“A Comprehensive Assessment Of Political, Economic, And Social Risks And Their Prevention For The Countries Along The Belt And Road”], 地理研究 [Geographic Research], no. 38 (March 2019), pp. 15-16.

²⁵⁹ 中信保国别风险研究中心 [Sinasure Country Risk Research Center], 一带一路 65 个国家风险状况分析 [“Analysis of the Risk Status of 65 Countries Along The Belt And Road”], 中国海洋发展研究中心 [China Oceans Academy Research Center], October 12, 2018, <http://aoc.ouc.edu.cn/3f/1c/c9824a212764/pagem.psp>.

²⁶⁰ At \$46.2 billion, Pakistan trails only Australia (\$58.89b), the UK (\$70.76b), and the US (\$142.56b). See “China Global Investment Tracker,” *American Enterprise Institute*, <https://www.aei.org/china-global-investment-tracker/>, accessed June 20, 2020.

²⁶¹ Renmin/Caijing Report, p. 22.

²⁶² A Pakistani analyst cites 5,700 personnel of the paramilitary Frontier Corps. Maham Hameed, “The politics of the China—Pakistan economic corridor,” *Palgrave Communications*, vol. 4, no. 64 (2018), <https://www.nature.com/articles/s41599-018-0115-7.pdf>, p. 7. A Chinese analyst cited a Pakistani army officer who claimed 3,000 army personnel were deployed to Gwadar port alone. See 濠州 [Hao Zhou], 中巴经济走廊的卡西姆难题 [“CPEC’s Qasim Problem”], 财经杂志 [Caijing Magazine], April 6, 2017, <https://finance.sina.cn/2017-04-06/detail-ifyecfnu7476475.d.html?from=wap>.

²⁶³ For example, a special detail is assigned to the Chinese power project and coal berth at Port Qasim. 彭光桥, 张文斌 [Peng Guangqiao and Zhang Wenbin], 中巴经济走廊特别安保部队新长官到卡西姆项目视察 [“New Security Chief of CPEC Special Security Detachment Inspects Qasim Project”], 卡西姆港发电有限公司 [Qasim Port Power Generation Co. (Subsidiary of Power China Corp)], <http://pr.powerchina.cn/g163/s927/t7799.aspx>.

²⁶⁴ 张新平, 张立国 [Zhang Xinping and Zhang Ligu], 中巴经济走廊”建设中的俾路支问题 [“The Baloch Question and the Construction of the China-Pakistan Economic Corridor”], 和平与发展 [Peace and Development], no. 5 (2018), p. 48.

²⁶⁵ 金华 [Jin Hua], 巴基斯坦恐怖袭击威胁分析与防范策略探讨 [“Pakistan terrorist attack threat analysis and discussion of prevention strategy”], 中国安防 [China Security and Defense], no. 12 (2018), pp. 35-40.

²⁶⁶ 用科技护航海外利益, 中国安保勇迈 ‘高风险区’ [“Use Technology to Escort Overseas Interests, Chinese Security Moves Forward into ‘High-risk Areas’”], 凤凰国际智库 [Phoenix International Think Tank], June 28, 2017, https://pit.ifeng.com/a/20170628/51334082_0.shtml.

²⁶⁷ “Connecting Pakistan—Helping Pakistan Build an Airport, I Took Part in the Largest Free Foreign Aid Project.”

PRC Ministry of Foreign affairs renewed a standing warning for Chinese citizens not to go to Balochistan at all.²⁶⁸

Security measures may mitigate the risks, but they do not make Pakistan—Balochistan in particular—a safe place for commerce. A geospatial analysis of terror attacks in Pakistan by researchers at China’s People’s Public Security University found the spread of terror attacks in Balochistan to be worsening over time.²⁶⁹ The PRC government reportedly offered to dedicate an additional 1 percent of each project to support security costs.²⁷⁰ The port’s free trade zone has better security than the city itself,²⁷¹ but even this “green zone” is not immune from terrorist attacks. In May 2019, Baloch gunmen stormed the only upscale hotel in Gwadar where Chinese business travelers stay, killing five Pakistanis.²⁷² The Balochistan Liberation Army’s video statement following the attack was unequivocal: “BLA [forces] will attack Chinese officials and installations in Balochistan.... The CPEC will fail miserably on the Baloch land. Balochistan will be a graveyard for your expansionist motives.”²⁷³

Perceived Transnational Terrorist Threat to China

Chinese security analysts are fixated by the potential for Pakistan-based terrorism and social instability to spill over into China. The “Chinese War on Terror” concentrates on Pakistan because its loosely governed border regions appear to be a major vector for radicalization and training of Chinese Muslims.²⁷⁴ Pakistan’s security forces have been long-time collaborators with China in its efforts to eradicate a succession of purported Uyghur terrorist groups operating in Pakistan and Afghanistan, beginning as early as the 1990s.²⁷⁵ Domestically, Beijing’s perception of an increased threat of terrorism has led to a dramatic intensification of its already harsh policies of repression of Uyghurs and other ethnic minorities in Xinjiang.²⁷⁶

The transnational element of the perceived terrorist threat—whether accurate or not—evidently provides powerful impetus to Beijing to pursue aggressive policies in Xinjiang and the countries bordering it.²⁷⁷ Leading Chinese security officials, like Qin Tian, deputy commander of the

²⁶⁸ 再次提醒中国公民近期暂勿前往巴基斯坦俾路支省 [“Additional Reminder to Chinese Citizens Not to Travel to Balochistan in the Near Future”], PRC Embassy in Islamabad, Pakistan, January 13, 2020, <http://cs.mfa.gov.cn/gyls/lsgz/lsyj/t1731374.shtml>.

²⁶⁹ Cheng Canyang and Chen Wenjing, “Analysis of Pakistan Terrorist Attacks Based on Spatial Statistics,” p. 25.

²⁷⁰ Renmin/Caijing Report, p. 23.

²⁷¹ Hao Zhou, “Gwadar Port Sets Sail.”

²⁷² Asad Hashim, “Gunmen Attack Hotel in Pakistan’s Gwadar, Kill Five People,” *Al Jazeera*, May 12, 2019, <https://www.aljazeera.com/news/2019/05/gunmen-attack-hotel-pakistan-port-city-gwadar-190511134034253.html>.

²⁷³ Shahzad Hussain (@SHussainShokat). 2019. Twitter, May 19, 2019, 5:53 p.m. <https://twitter.com/SHussainShokat/status/1130230043991523328>.

²⁷⁴ See Small, “The China Pakistan Axis,” pp. 67-91 for a study of China’s “war on terror” from the 1990s onward, including extensive PRC collaboration with Pakistan’s military and intelligence services.

²⁷⁵ 刘双瑜, 吴绍忠 [Liu Shuangyu and Wu Shaozhong], 浅析中国与巴基斯坦开展反恐合作的缘由及实现路径 [“Reasons and Achieving Paths of China’s Cooperation with Pakistan on Anti-Terrorism”], 贵州警官职业学院学报 [Journal of Guizhou Police Officer Vocational College], no. 6 (2016), pp. 101-106; see also Small, “The China Pakistan Axis,” pp. 67-91, and Small, “Terrorism and Counterterrorism in China.”

²⁷⁶ For an extensive review of these policies, see Adrian Zenz, “Thoroughly Reforming Them Towards a Healthy Heart Attitude”: China’s Political Re-Education Campaign In Xinjiang,” *Central Asian Survey*, vol. 38, no. 1 (2019), pp. 102-128.

²⁷⁷ For a nuanced analysis of this phenomenon as it bears on Chinese policy in Xinjiang, see Greitens et al., “Counterterrorism and Domestic Repression.” For further discussion of the actual incidences of transnational terrorism involving Chinese citizens, see Mathieu Duchatel, “China’s Foreign Fighters Problem,” *War on the Rocks*, January 25, 2019, <https://warontherocks.com/2019/01/chinas-foreign-fighters-problem/> and Small, “Terrorism and Counterterrorism in

paramilitary People's Armed Police, are focused on the Uyghur linkages with terrorist groups and other "hostile forces" abroad:

In light of the terrorist incidents that occurred in Xinjiang and the way many carried out planning and command overseas for attacks within our borders, a pattern of collusion has formed. The terror incidents occurring along the frontier border regions are based out of transnational terrorist organizations and backed by hostile forces. Foreign terrorist organizations mainly support [China's] domestic terrorist organizations in terms of organization, public opinion, funding, technology, and strategy.²⁷⁸

Terrorist activity in Pakistan and the instability in Xinjiang are therefore intrinsically linked in the minds of China's leaders. Xi Jinping's "holistic security outlook" (总理国家安全观) prescribes coordination between "the two security situations at home and abroad" and thus carries on a long tradition in Chinese strategic thought linking internal and external security.²⁷⁹ Applying this "holistic" approach, Chinese analysts call attention to domestic and international causes and consequences of the perceived terrorist threat in Xinjiang. Purported terrorist cells in China "use West Asia as a base camp, Central Asia as a bridgehead, South Asia as a training base, Europe and the United States as their coordination and command center, and China as the main battlefield."²⁸⁰ Internal security, in this line of thinking, requires management of external threats. The preferred mode of managing those threats is through economic development.

The notion that economic development is the "cure" for the "disease" of terrorism is one corollary of Xi's prescribed security outlook.²⁸¹ The view that "economic security is the foundation of holistic national security"²⁸² leads China to pursue policies of economic development precisely to manage Pakistan's unfavorable security situation. A leading Chinese diplomat and former PRC Ambassador to Pakistan dismissed the American post-9/11 military approach to counterterrorism as "treating symptoms but not curing the disease" and prescribing instead "gradual implementation of the projects of CPEC so that economic and social conditions of the backward areas of both Pakistan and

China." While there is an increasing incidence of Uyghur fighters overseas, the number and severity of terrorist attacks in China remains quite low. This does not, however, mitigate Beijing's belief in a Uyghur threat and aggressive measures to stifle it with "preemptive repression." See Greitens et al., "Counterterrorism and Domestic Repression," pp. 37-44.

²⁷⁸ Qin Tian, "The Anti-Terrorism Situation," p. 52

²⁷⁹ See, for example, Chusei Suzuki, "China's Relations with Inner Asia: The Hsiung-Nu, Tibet," David M. Farquhar, "The Origins of the Manchus' Mongolian Policy," and Joseph F. Fletcher, "China and Central Asia, 1368-1884," in John King Fairbank (ed.), *The Chinese World Order: Traditional China's Foreign Relations*, (Cambridge: Harvard University Press, 1968).

²⁸⁰ 王宏伟 [Wang Hongwei], 国家安全治理的内外整合: 以打击'东突'恐怖主义位列 ["Integration of Domestic and International Factors in National Security Governance: A Case Study of China's Combat Against East Turkistan Terrorist Forces"], 国际安全研究 [International Security Research], no. 3 (2019), p. 88.

²⁸¹ 习近平 [Xi Jinping], 习近平关于总体国家安全观论述摘编 ["Excerpts from Xi Jinping's Discussion on the Holistic National Security Outlook"], 人民日报 [People's Daily], April 26, 2018, <http://opinion.people.com.cn/n1/2018/0426/c1003-29952393.html>. This medicalization of terrorism extends to Pakistan as well. According to two Chinese scholars, "Balochi terrorism is like a cancer that hinders the development of Pakistan. If it is allowed to grow and develop, it is tantamount to 'cultivating a tumor.' See Li Jiacheng and Jiang Hongyi, "Examining the Pakistani Political Obstacles to the Construction of Gwadar Port," p. 136.

²⁸² Xi emphasized this point in the first meeting of the Central National Security Committee in April 2014. 习近平 [Xi Jinping], 坚持总体国家安全观 走中国特色国家安全道路 ["Adhere to the Holistic National Security Outlook and Take the Road of National Security with Chinese Characteristics"], 新华网 [Xinhuanet], April 15, 2014, <http://cpc.people.com.cn/n/2014/0415/c64094-24899781.html>.

China will be improved, and the hotbed of terrorism—poverty—will be gradually reduced.”²⁸³ Economic development is often the primary prescription for how to treat the real and imagined ailments of the Chinese body politic.

Pakistan’s Role in China’s “Develop the West” Campaign

Pakistan is vital to Chinese ambitions to cure the “disease” of terrorism with economic development. Beijing’s vision to develop and thereby stabilize its far western provinces, especially Xinjiang, explicitly involves efforts like Gwadar and CPEC. Chinese economic attention to Pakistan should be understood as part of the gradual development of China’s campaign to develop its western regions, which have badly lagged the coastal, eastern parts of the country. The desire to develop and stabilize China’s western provinces explains much of China’s sustained economic program in Pakistan. The widely publicized Silk Road Economic Belt (i.e., the land “belt” in the Belt and Road) is in many respects the extension of these domestic stability and development policies. The “Great Western Development” (西部大开发) or “Go West” (西进) strategy, initiated in 1999, is the domestic precursor to BRI, and the programs are now intertwined.²⁸⁴

The objective of a stable, prosperous Xinjiang lies at the heart of both programs. China’s leaders explicitly link Gwadar’s development and the CPEC program to these efforts. When Li Keqiang announced CPEC in 2013, he stated that China and Pakistan “agreed to establish an interface between China’s strategy to develop its western region and Pakistan’s domestic economic development.”²⁸⁵ The former PRC Ambassador to Pakistan, Zhou Gang, explained the impetus for this linkage:

Pakistan’s security is China’s security.... Pakistan has critical significance for safeguarding peace and tranquility in China’s Xinjiang Region, steadily advancing the Great Western Development strategy and the development of friendly relations with Central Asia, South Asia, and the Gulf countries.”²⁸⁶

The tight coupling of security and development in Xinjiang and Pakistan is plain across official and scholarly commentary on CPEC.²⁸⁷ Official guidance reinforced this linkage in a May 2020 “Guiding

²⁸³ Lu Shulin, “China Pakistan Economic Corridor: A Flagship and Exemplary Project of the Belt and Road,” p. 56.

²⁸⁴ Then-president Jiang Zemin proposed the program in June 1999, which was unveiled during the Fourth Plenary Session of the Fifteenth Central Committee of the Chinese Communist Party, and marked for its implementation during the Central Economic Work Conference later that year. See 共和国的足迹——1999年：西部大开发 [“The Footprints of the Republic—1999: Great Western Development”], 中央政府门户网站 [Central Government Portal], October 10, 2009, http://www.gov.cn/test/2009-10/10/content_1435029.htm. For discussion of the internal-external policy connections, see 董志敏 [Dong Zhimin], “一带一路”与“西进”战略的关系 [“The relationship between ‘One Belt One Road’ and ‘Go West’ Strategies”], 边疆经济与文化 [The Border Economy and Culture], no. 2 (2016), pp. 24-25.

²⁸⁵ 中国和巴基斯坦关于深化两国战略合作的联合声明 [“China and Pakistan Joint Statement on Deepening Bilateral Strategic Cooperation”], 新华 [Xinhua], May 24, 2013, http://www.gov.cn/jrzq/2013-05/24/content_2410193.htm.

²⁸⁶ 张蔚然 [Zhang Weiran], 李克强将访巴基斯坦 “四好”关系续新篇 [“Li Keqiang to Visit Pakistan, Continuing the ‘Four Goods’ Relationship”], 中国新闻 [China News], May 15, 2013, <http://www.chinanews.com/gn/2013/05-15/4821007.shtml>.

²⁸⁷ Lu Shulin, another former Ambassador to Pakistan and later think tank expert and author, provides a clear example: “For China, the significance of building the China-Pakistan Economic Corridor is also very obvious. After more than 30 years of reform and opening up, the economy in eastern my country has developed rapidly, and the western region has also improved significantly, but it is still relatively behind the eastern coastal regions. Now China is vigorously advancing the ‘Great Western Development’ strategy in order to achieve balanced development of the east and the west and achieve long-term stability of the country.” Lu Shulin, “China Pakistan Economic Corridor: A Flagship and Exemplary Project of the Belt and Road,” p. 51.

Opinion on Promoting Development of the Western Regions in the New Era,” which exhorted officials to “coordinate the two major issues of development and security, and make better use of the national security barrier in the western region.”²⁸⁸ That recent authoritative statement also referred to Xinjiang as a “core region” of the BRI and urged cadres to “accelerate” the “west-facing transportation hub and trade logistics center.”²⁸⁹ Rebranded in this Guiding Opinion as “Go West,” China’s domestic western development plans dovetail with their foreign BRI program, with a nexus in Xinjiang.

China’s domestic priorities further designate Xinjiang a conduit for energy from abroad that bolsters growth (and promotes security) in western provinces. As one group of scholars put it, “to push forward China’s Great Western Development strategy we need an ‘exit to the Indian Ocean.’”²⁹⁰ This demand for Xinjiang’s Indian Ocean connectivity was captured in policies such as the 2007 PRC State Council’s determination that Xinjiang should be an “energy import corridor” to the west.²⁹¹ This long-held ambition has yet to produce a pipeline through Pakistan to the Indian Ocean.²⁹²

In summary, the inland markets and resources of Pakistan and neighboring countries present some theoretically attractive commercial prospects, but these have not borne fruit largely because of the high costs associated with instability and security risks. In PRC public discourse, despite scattered dissent,²⁹³ the most commonly expressed view is that Pakistan’s development is instead a matter of PRC “border security.” In the words of two academic analysts, PRC goals in Pakistan are to secure “stability and prosperity in Pakistan through the participation of Xinjiang, such that China’s anti-terrorist barrier and security outpost can maintain its stability on the western frontier, ensuring long-term security in Xinjiang.”²⁹⁴ Beyond securing China’s troubled border areas, however, the prospect for naval utilization of the port remains a tantalizing possibility.

²⁸⁸ 中共中央 国务院关于新时代推进西部大开发形成新格局的指导意见 [Guiding Opinion of the CCP Central Committee and PRC State Council on Promoting Development of the Western Regions in the New Era], 新华社 [Xinhua News Agency], May 17, 2020, http://www.gov.cn/zhengce/2020-05/17/content_5512456.htm?mc_cid=216ccf8998&mc_eid=1c94aeb772.

²⁸⁹ Ibid.

²⁹⁰ Li Jingyu, “The Strategic Concept of Selecting Points,” p. 30.

²⁹¹ Customs and procedures along Xinjiang’s borders with Central Asian and South Asian countries were subsequently streamlined to improve cross-border trade. See 海关总署: 支持新疆维吾尔自治区提高对外开放水平 [“General Administration of Customs: Support Xinjiang Uighur Autonomous Zone Enhance Opening Up”], 海关总署网站 [PRC General Administration of Customs website], February 28, 2009, http://www.gov.cn/gzdt/2009-02/28/content_1246828.htm; “大通关”助推新疆成为西部外贸 “大通道” [“‘Great Customs Clearance’ Drives Xinjiang to Become a ‘Great Corridor’ of Trade in the West”], 新华社 [Xinhua], September 22, 2009, http://www.gov.cn/jrzq/2009-09/22/content_1423641.htm.

²⁹² Official media states that this import corridor was achieved via completion of “China’s northwestern oil and gas strategic passage” (中国西北部油气战略通道). See 新疆“西进东输”打造丝绸之路能源大通道 [“Xinjiang’s ‘West to East Transfer’ Creates a Major Energy Corridor on the Silk Road”], 新华社 [Xinhua], June 26, 2014, http://www.gov.cn/xinwen/2014-06/26/content_2708718.htm; 新疆成为 “西进东送” 能源大通道 [“Xinjiang to Become ‘West to East’ Major Energy Corridor”], 新华社 [Xinhua], September 3, 2014, http://www.gov.cn/xinwen/2014-09/03/content_2744853.htm.

²⁹³ 罗建波 [Luo Jianbo], “莫当‘救世主’! 国内问题应为中国关注重点 [“Don’t be the ‘Saviour of the World’! Domestic Issues Take Priority in China”], 中国选举与治理 [China Elections and Governance], June 18, 2017, <http://www.chinaelections.org/article/141/245978.html>.

²⁹⁴ Lei Ming, et al. “Current Situation and Recommendations for Pakistan Economic Cooperation,” p. 49. This belief in Pakistani development accruing to the stability of Xinjiang is widely shared. For example, one professor from Sichuan University argues that “a Pakistan with economic prosperity and social progress and stability is conducive to the stability and prosperity of Xinjiang. The ethnic and religious situation in Xinjiang is complex and susceptible to the external

Naval & Military Component

Reports of Gwadar's use as a Chinese naval or military facility are premature.²⁹⁵ The port's location, its low commercial utilization, and the close bilateral political-military relationship make it a perennial favorite for analysts predicting China's next overseas military base. Yet there have been no PLA deployments to Gwadar to date, nor even a single observed PLAN port call. The reasons for this lack of military utilization may outweigh those recommending it. This section first considers the physical capacity of Gwadar to support PLAN operations, then analyzes its military utilization to date, and assesses future possibilities for the facility.

Suitability for Hosting PLAN Vessels

From the standpoint of physical capacity, Gwadar could readily be repurposed for use as a PLA military facility. If no commercial traffic is permitted, the draught (12.5m) and quay wall (602m) dimensions mean Gwadar's port facilities could support the PLAN's largest vessels, such as the Type-075 amphibious assault ship (LOA 235m, draft 7-8m), Type 071 landing platform dock (LOA 210m, draft 7m), and the Type-901 fleet replenishment ship (LOA 241m, draft 10.8m).²⁹⁶ PLAN aircraft carriers could also call on Gwadar, though conditions such as tidal variation, wind, and atmospheric pressure could push depth at the port below PLAN under-keel clearance limitations.²⁹⁷ Any major surface combatant (Type 055 cruisers, Type 052D destroyers, Type 054A frigates) could berth simultaneously with the carrier. Periodic dredging can manage Gwadar's siltation issue and make the port navigable for all PLAN vessels under most conditions.

environment. Radical thoughts and social movements from outside will be transmitted back to Xinjiang. The good situation in Pakistan will play a positive role in promoting long-term security in Xinjiang. China's policies in Xinjiang also require a mild external environment. The Western Development and China-Pakistan Energy Channel go hand in hand.” 戴永红 [Dai Yonghong], 以跨喜马拉雅合作为战略支点构建中国西部边疆“安全三”角 [“Developing Cross-Himalayan Cooperation: Toward a ‘Security Triangle’ Along China's Western Frontier”], 南亚研究季刊 [South Asian Studies Quarterly], no. 2 (2017), p. 90.

²⁹⁵ It is common for news reports in the U.S., India, and elsewhere to state that there is already a Chinese base, either at Gwadar or nearby at Jiwani (where there is no construction at all, as of August 2020). See, for example, Manish Shukla, “Amid Standoff With India, China Strengthening Naval Base in Pakistan's Gwadar Port,” *Zeenews India*, June 3, 2020, <https://zeenews.india.com/india/amid-standoff-with-india-china-strengthening-naval-base-in-pakistan-s-gwadar-port-2287678.html>; Rajeswari Pillai Rajoagopalan, “A New China Military Base in Pakistan?” *The Diplomat*, February 9, 2018, <https://thediplomat.com/2018/02/a-new-china-military-base-in-pakistan/>; Maria Abi-Habib, “China's ‘Belt and Road’ Plan in Pakistan Takes a Military Turn,” *New York Times*, December 19, 2018, <https://www.nytimes.com/2018/12/19/world/asia/pakistan-china-belt-road-military.html>.

²⁹⁶ The Type-075's draft determined from imagery of its draft lines published online; the waterline reads 8.1m. This was when the vessel was presumably empty, so the draft will be deeper when carrying its full complement of embarked aircraft, vehicles, and personnel. See 吃水线曝光! 我首艘 075 型两栖攻击舰好似巍然巨兽 [“Draft Lines Revealed! China's First Type-075 Amphibious Assault Ship is Like a Behemoth”], 新浪图片 [Photo.sina.com.cn], September 29, 2019, http://slide.mil.news.sina.com.cn/h/slide_8_203_73986.html#p=2; “Type-071 Landing Platform Dock (LPD),” Naval Technology, <https://www.naval-technology.com/projects/type-071-landing-platform-dock-lpd/>, (accessed May 28, 2020); Xavier Vavasseur, “China's Type 901 Large Supply Vessel Alongside 2nd Aircraft Carrier Type 002,” *Naval News*, April 30, 2019, <https://www.navalnews.com/naval-news/2019/04/chinas-type-901-large-supply-vessel-alongside-2nd-aircraft-carrier-type-001a/>.

²⁹⁷ Gwadar's tidal station indicates a max tidal range of 3.01m/9.9 ft. This could be further driven down by prolonged winds and atmospheric pressure. “Gwadar West Tide Times & Tide Charts,” Surf-Forecast, <https://www.surf-forecast.com/breaks/Gwadar-West/tides/latest>, (accessed May 28, 2020). The Type-001 Liaoning carrier draws 8.97m, while the Type-002 Shandong carrier reportedly draws ten or more meters. Under keel clearance limits in the PLAN are unavailable; however, PLAN carrier bases in China are reported to be around twenty meters deep. See “Type 001 Liaoning Class,” Sino Defence, August 19, 2017, <https://sinodefence.com/type-001-liaoning-class/>; 郭媛丹 [Guo Yuandan], 中国国产航母入列创造五个“首次” [“China's Domestic Aircraft Carrier Marks Five ‘First’ When Commissioned”], 环球网 [Global Times], December 18, 2019, <http://yuqing.people.com.cn/n1/2019/1218/c209043-31511090.html>.

Beyond the pier, Gwadar possesses a sizeable laydown yard for marshalling military equipment and materials. If the free zone adjacent to the terminal fails to attract business, the vacant warehouses, administrative buildings, and living quarters could be provided for military use. While the PLA could likely deliver reliable power to such a facility and thus the ships at quay, it may not be necessary if Dongfang Electric Corporation's turbine generators are installed in the expected Gwadar Coal Power Plant. Additionally, bunkering services, water supply, ship chandlery, medical services, and crew arrangements are among the services reportedly provided by Gwadar Marine Services Limited, a COPHC subsidiary.²⁹⁸ Especially given low levels of commercial utilization, Gwadar could provide a number of regular services to naval ships operating in theater without much economic disruption to the terminal.

Potential Value as a Military Base

Despite sufficient capacity, the PLA has not made use of Gwadar to date. No officials have commented on why this is the case, nor have Chinese analysts speculated about why the facility has not been utilized by the navy. However, there are several circumstances under which the PLA might request and receive access to facilities at Gwadar. These are worth considering in operational terms, even if they are politically uncertain.

PLAN vessels could stage from Gwadar to operate in and around the Persian Gulf, or to assist in conveying commercial vessels across the Indian Ocean during times of crisis or conflict. Security issues and the lack of connectivity with the rest of Pakistan are major obstacles in the commercial development of Gwadar, but these conditions make for a more secure location from a military perspective.²⁹⁹ With no significant commercial activity or international presence in Gwadar, PLA activities could be concealed from foreign observers. Gwadar's port and airport sites are tightly guarded compounds, walled off from outsiders and manned with the help of Pakistan forces.³⁰⁰

China's primary SLOC and first overseas military base in Djibouti are far-flung for the PLAN, and not supported directly by any other Chinese military facilities. Stronger logistical support in the northern Indian Ocean would be useful. Running through the South China Sea and across the Indian Ocean, it takes ten or more days for PLAN task forces to reach the Gulfs of Aden or Oman.³⁰¹ PLAN forces are tasked with diverse overseas missions, from humanitarian/disaster relief efforts to the projection of power to secure overseas interests and citizens.³⁰² However the geographic distances involved present major problems for equipping and supplying PLAN ships for all contingencies, especially in urgent situations. Ships will not likely be carrying everything they need when a crisis arises.

²⁹⁸ "Gwadar Marine Services Limited," COPHC Website, <http://cophcgwadar.com/gmsl.aspx>, (accessed May 24, 2020).

²⁹⁹ The case can be made that such isolation and insecurity also make supplying a navy base there more difficult. However, if all that is required is basic parts support, fuels and lubricants, and husbanding services, the resident infrastructure is more than sufficient. If the port is to be used for more complex wartime operations, however, its poor connectivity will limit how well personnel and heavy equipment can be transported overland. Air and sea transport direct to Gwadar are not limited by poor road and rail connection, so the facility could well be adequately supplied for some period of time.

³⁰⁰ For a project manager's impression of security at work sites in Gwadar, see "Connecting Pakistan—Helping Pakistan Build an Airport, I Took Part in the Largest Free Foreign Aid Project."

³⁰¹ The 1st Anti-piracy Escort Task Force reportedly took ten days and nights to travel from Sanya, Hainan to the Gulf of Aden. Other points of departure, weather conditions, and technical issues could prolong the journey. 中国海军舰艇编队抵达任务区正式开始护航 ["Chinese Naval Task Force Arrives in Mission Area and Formally Begins Escorts"], 中广网 [China National Radio], January 6, 2009, http://www.cnr.cn/military/tebie/smlhd/ywsd/200901/t20090106_505201148.html.

³⁰² PRC State Council Information Office, *China's Military Strategy*.

Prepositioning parts, supplies, and other materials at Gwadar would be a productive use of the facilities. Such measures would complement other supply points around the region and mitigate the political risks that one or more might be unavailable at a given time. It would also allow task forces to optimize their loadouts for more immediate mission requirements. Even a low-footprint warehousing agreement in Gwadar would provide significant benefit to PLAN forces. Two PLA Army logistics experts recently recommended flexible overseas prepositioning methods, including rental or construction agreements with overseas commercial ports and airports to embed such support amongst commercial operations.³⁰³ Additionally, general-use goods could be stored in Gwadar's warehouses, freeing up more secure locations such as the underground facilities of the Djibouti Support Base to store munitions, parts, and other high-end materials.³⁰⁴ Furthermore, Chinese naval vessels need not go to Gwadar themselves to retrieve stored materials. Merchant vessels contracted as part of the strategic projection support shipping fleets could provide regular service for the PLAN to reduce any negative responses from international observers.³⁰⁵ COPHC or any other PRC logistics provider would be competent in managing prepositioned inventories in Gwadar port's newly constructed warehouses. While there is no evidence as yet to demonstrate that the PLAN intends to use Gwadar as a logistics hub, the possibility bears careful observation. Additionally, COPHC would be legally bound to render support to PLA overseas operations according to article 38 of the PRC's National Defense Transportation Law.³⁰⁶

Similarly, the PLA could make use of Gwadar's new international airport. The construction of the East Bay Expressway will provide an improved link between the port terminal and the airport. The length of the new airport under construction at Gwadar (12,000 feet) and secure housing and medical facilities on site could accommodate any PLA aircraft. The airfield is within the maximum range of the Y-20 PLA strategic transport aircraft flying from the Chengdu-Qionglai airbase in western China.³⁰⁷ It could thus provide a site for these aircraft to land, refuel, and rest their crews, and to deliver parts, personnel, and combat and support vehicles.

³⁰³ Authors are from the PLA Army Logistics University. 刘俊, 段志云 [Liu Jun and Duan Zhiyun], 境外行动中的军事物流保障研究 ["Military Logistics Support for Overseas Operations"], 军事交通学院学报 [*Journal of Military Transportation University*], no. 5 (May 2019), p. 61.

³⁰⁴ While not specifically referring to Gwadar, the ideas of warehousing agreements to reduce the load on overseas support bases is discussed by PLA logistics experts in 李守耕, 陈铁祺, 王丰 [Li Shougeng, Chen Tieqi, and Wang Feng], 战备物资预置储备模式研究 ["On Preset Reserve Mode for Combat Readiness Material"], 军事交通学院学报 [*Journal of Military Transportation University*], no. 7 (July 2019), p. 60.

³⁰⁵ Anti-piracy escort task forces operating in the Gulf of Aden already use merchant shipping to bring along required materials or coordinate enterprises in the region to make local purchases. However, they do not have sufficient fixed infrastructure used for military prepositioning. See 刘俊, 段志云 [Liu Jun and Duan Zhiyun], 境外行动中的军事物流保障研究 ["Military Logistics Support for Overseas Operations"], 军事交通学院学报 [*Journal of Military Transportation University*], no. 5 (May 2019), p. 60. For more information on the development of strategic projection support force, see Conor M. Kennedy, "Civil Transport in PLA Power Projection," CMSI China Maritime Report No. 4 (December 2019), <https://digital-commons.usnwc.edu/cmsi-maritime-reports/4/>.

³⁰⁶ This would include assistance in the replenishment and rest of PLA vessels, aircraft, vehicles, and personnel. See 中华人民共和国国防交通法 [Law of the People's Republic of China on National Defense Transportation], 中国人大网 [Npc.gov.cn], September 3, 2016, http://www.npc.gov.cn/zgrdw/npc/xinwen/2016-09/03/content_1996764.htm. For discussion by PLAN officers of the applicability of the National Defense Transportation Law to overseas port calls, see 高志文 [Gao Zhiwen], 中国战舰靠国外港口实现一站式服务 中企帮大忙 ["Chinese Warships Rely on Foreign Ports for One-Stop Service"], 中国军事网 [*China Military Online*], September 30, 2016, <https://mil.sohu.com/20160930/n469427123.shtml>.

³⁰⁷ Chad Peltier, "China's Logistics Capabilities for Expeditionary Operations," *Jane's*, April 15, 2020, <https://www.uscc.gov/files/001301>, p. 30.

Further, the airfield could allow inflow of Chinese military forces to the region. Indeed, the head of the PLA Air Force (PLAAF) Transport and Delivery Bureau noted in 2017 the improving conditions of overseas ground support from overseas agents and Chinese enterprises. He recommended greater use of their services to support aircraft overseas through bidding and contractual agreements.³⁰⁸ Another officer in his bureau sees the construction of airports along the Belt and Road as a great opportunity to strengthen China's overseas aviation projection capabilities.³⁰⁹ The PLA lacks fixed-wing support capabilities at its support base in Djibouti, increasing the possibility that Gwadar may someday be used for China's growing strategic lift fleet of Y-20s.³¹⁰

Indeed, for these reasons many PLA analysts consider Gwadar to be a suitable site for military support. Several PLA authors noted in 2015 that under COPHC's lease the port could "absolutely" become a long-term rest and replenishment point for PLAN escort task forces.³¹¹ Other PLA experts find Gwadar to be an obvious choice for establishing an overseas strategic strongpoint, owing to its geographic location, military importance, and Chinese port operator.³¹² Some state outright that the PLA is exploring the construction of a support base in Gwadar.³¹³ Other Chinese military observers believe PLA access to Gwadar is as good as established. One PLA officer said of the PLAN's option for using Gwadar as a base, "The food is already on the plate; we'll eat it whenever we want to."³¹⁴

Pakistan Navy Utilization of Gwadar

Capacity for berthing warships and meeting logistics requirements only establishes conditions of possibility. It tells us very little about how the facility is likely to be employed. One Pakistani Navy (PN) officer hopes "China would also deploy its naval ships in coordination with Pakistan Navy to safeguard the port and trade under the CPEC."³¹⁵ This raises the possibility of a combined facility used by both militaries. The actual PN utilization gives us some sense of the current naval and military utility of Gwadar and indicates areas where such cooperation might occur.

³⁰⁸ 张方, 李剑肆, 何建涛 [Zhang Fang, Li Jiansi, and He Jiantao], 加强空中战略投送地面保障体系建设的思考 ["Thoughts on Accelerating Ground Security System Construction for Air Strategic Projection"], 军事交通学院学报 [Journal of Military Transportation University], no. 4 (April 2017), pp. 1-3.

³⁰⁹ 陈瑜, 李剑肆, 曾宇 [Chen Yu, Li Jiansi, and Zeng Yu], 境外空中战略投送能力建设研究 ["Research on Development of Overseas Strategic Airlift Capability"], 军事交通学院学报 [Journal of Military Transportation University], no. 2 (February 2019), pp. 7-8.

³¹⁰ For recent discussion on the production of Y-20 aircraft, see Tyler Rogoway, "A Whopping 20 Y-20 Airlifters Seen at Chinese Aircraft Plant and Test Base," *The Drive*, December 30, 2019, <https://www.thedrive.com/the-war-zone/31667/a-whopping-20-y-20-airlifters-seen-at-chinese-aircraft-plant-and-test-base>.

³¹¹ 李鹏, 罗雷, 宋健, 乔浩伟 [Li Peng, Luo Lei, Song Jian, and Qiao Haowei], 我军海上投送海外保障支撑点的建设 ["Construction of Overseas Support Locations for Maritime Projection"], 军事交通学院学报 [Journal of Military Transportation University], no. 3 (2015), p. 4.

³¹² 胡中健, 胡欣 [Hu Zhongjian and Hu Xin], 布局与破局: 中国的海外战略支撑点 ["Making and Breaking the Status Quo: China's Overseas Strategic Strong Points"], 现代军事 [Contemporary Military], no. 12 (2015), pp. 34-36.

³¹³ 梁峰, 甘明, 王丰 [Liang Feng, Gan Ming, and Wang Feng], 美军海外战备物资储备模式及启示 ["Overseas War Readiness Materials Reserve Mode in US Army and Enlightenment"], 军事交通学院学报 [Journal of Military Transportation University], no. 11 (November 2017), pp. 51-52.

³¹⁴ Unnamed PLA officer cited in 金吴 [Jin Wu], 吉布提: 人民解放军首个海外基地 ["Djibouti: The PLA's First Overseas Base"], 凤凰军事 [Phoenix Military], April 11, 2016, http://news.ifeng.com/a/20160411/48414276_0.shtml.

³¹⁵ "China Deflects Queries Over Naval Deployment at Gwadar Port in Pakistan," *The Economic Times*, November 30, 2016, https://economictimes.indiatimes.com/news/defence/china-deflects-queries-over-naval-deployments-at-gwadar-port-in-pakistan/articleshow/55706511.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst.

In the absence of commercial activity, Gwadar port's operations appear to be dominated by the PN.³¹⁶ The PN prizes Gwadar port because its distance from the Indian border provides a degree of strategic depth that Karachi does not enjoy.³¹⁷ Gwadar is home to the small Pakistan Naval Station Akram, established in 1987 as a depot for naval detachments.³¹⁸ PNS Akram occupies a large amount of land on the peninsula's cliffs, with only a small pier on the far east end of the Gwadar peninsula. It also serves as a surveillance station, part of Pakistan's network for monitoring the North Arabian Sea.³¹⁹ Further, a 500-man 3rd Marine Battalion was commissioned in March 2013 and is stationed in Gwadar to provide security for the port and its operations.³²⁰

While Gwadar port is a commercial venture, a 2016 Pakistan Senate briefing by deputy chief of naval staff for operations reports that the facility offers the PN "substantial operational flexibility." According to the report, the PN has been given 600 meters of berthing space at the port and the establishment of a naval base at Gwadar is "high on priority."³²¹ This means the entirety of the Gwadar terminal's current frontage is available for the use by the PN.

Accordingly, Pakistan's naval forces are making extensive use of the facility. PN Task Force-88 was established in December 2016 to secure the sea lanes and maritime areas around Gwadar. It comprises ships, fast-attack craft, aircraft, drones, and other surveillance assets.³²² From February 2019 through April 2020, Pakistan Navy vessels called at the port every month an average of three times.³²³ In a third of these port calls, at least one of the 2,500 ton, Chinese-built F-22P "Zulfiqar" frigates was among the vessels at the pier.³²⁴ These vessels are export versions of the PLAN's Type-

³¹⁶ There appears to be some precedence for this. A 2006 World Bank report noted "the dominance of the Navy in port management is unusually high by international standards," recommending changes to the role of the navy in Pakistan's ports. See "Pakistan—Transport Competitiveness in Pakistan: Analytical Underpinning for National Trade Corridor Improvement Program," World Bank Report No. 36523, July 18, 2006, p. 37, <http://documents.worldbank.org/curated/en/961511468289228268/pdf/36523.pdf>.

³¹⁷ Hu Zhongjian and Hu Xin, "Making and Breaking the Status Quo," p. 35; Hasan Yaser Malik, "Strategic Importance of Gwadar Port," *Journal of Political Studies*, vol. 19, no. 2 (2012), pp. 57-69.

³¹⁸ "PN History," Pakistan Navy, Undated, https://www.paknavy.gov.pk/history_more.html, (accessed May 22, 2020).

³¹⁹ Pakistan can operate fixed-wing aircraft out of air stations in nearby Pasni and Turbat, both east and northeast from Gwadar respectively. There is another surveillance station located west of Gwadar in Jiwani. See Shazia Hasan, "Naval Network Providing Security to Gwadar Port," *Dawn*, March 15, 2017, <https://www.dawn.com/news/1320631>.

³²⁰ "PN Commissions 3rd Pak Marines Battalion," *The Nation*, March 29, 2013, <https://nation.com.pk/29-Mar-2013/pn-commissions-3rd-pak-marines-battalion>. The Gwadar police inspector explained that this battalion would provide security for the ships, crews, and cargo. 探访瓜达尔港: 中巴经济走廊南起点 战略位置重要保安严密 ["Visiting Gwadar Port: The southern starting point of the China-Pakistan Economic Corridor is strategically located and tightly secured"], 第一财经 [Yicai], May 13, 2015, <https://www.yicai.com/video/4617331.html>.

³²¹ "Visit & Meetings of Senate Standing Committee on Defence at Pakistan Navy Installations Karachi, Ormara and Gwadar," Report of the Senate Standing Committee on Defence—Report No. 10, May 16, 2016, pp. 3-4, http://www.senate.gov.pk/uploads/documents/1463460418_416.pdf

³²² 巴军建特遣队保护瓜达尔港 中方向巴转让潜艇技术 ["Pakistani army-built task force protects Gwadar port and China transfers submarine technology to Pakistan"], 参考消息 [Reference News], December 22, 2016, <http://www.cankaoxiaoxi.com/mil/20161222/1539263.shtml>

³²³ Two Zulfiqar-class frigates, hull numbers 251 and 253, can be seen docked at Gwadar in on a Pakistani television special on the port project. "Mahaaz Gawadar ka Mahaaz, Part 2" *Dunya News*, May 22, 2016, <https://www.youtube.com/watch?v=i7RAa78ftFg>, starting at 19:30.

³²⁴ Observations based on satellite imagery provided by MAXAR.

053H3 frigate, which Chinese defense experts consider essential to Pakistan's ability to operate in the Indian Ocean in light of India's superior naval forces.³²⁵

The PN has also increased land acquisitions and augmented its presence in the Gwadar district, indicating greater Pakistan military entrenchment in Balochistan.³²⁶ Some suggest this expansion into Balochistan is part of Pakistan's Regional Maritime Security Patrol initiative, meant to enhance maritime security in the Arabian Sea and wider Indian Ocean region and boost Pakistan's role in securing the critical sea lanes in its neighborhood.³²⁷

The need for Chinese technical expertise to operate and service the PN will likely increase. In addition to the four F-22P frigates delivered between 2009 and 2013, the PN entered into a contract with China Shipbuilding Trading Company Ltd. in 2018 to deliver four Type-054A frigates by 2021. Ships developed with Chinese technical assistance account for the bulk of the PN's surface fleet and the Pakistan Maritime Security Agency's vessels.³²⁸ Technicians from China State Shipbuilding Corporation are often present in Karachi to provide assistance, and regular flights between Karachi and Gwadar mean these experts could be on site with little notice.³²⁹ Chinese technical expertise is already important to the PN, but will grow even more so after delivery of the eight contracted S-20 conventional submarines (export variant of the Yuan-class). An agreement reached in 2015 stipulates delivery of four hulls built in China between mid-2022 and 2023 with the remaining four to be constructed at the Karachi shipyard by 2028.³³⁰

Because China and Pakistan maintain close technical connections, it is possible PLAN ships may make technical stops at Gwadar to receive parts and take advantage of resident Chinese technical expertise.³³¹ COPHC is legally obligated to provide for the supply and rest of PLA forces, and controls all operations and services at the port.³³² There is also some scope for the PLA to exercise or

³²⁵ 兰舟达, 旷毓君 [Lan Zhouda, Kuang Yujun], 地缘政治视角下的中巴军事技术合作 [“Sino-Pakistani Military-technical Cooperation from a Geopolitical Perspective”], 国防科技 [National Defense Science and Technology], vol. 35, no. 5 (October 2014), p. 89.

³²⁶ Maqbool Ahmed, “The Mysterious Case of Land Acquisitions in Balochistan,” *Herald*, November 23, 2018, <https://herald.dawn.com/news/1398696>.

³²⁷ Kryzysztow Iwanek, “No, Pakistan's Gwadar Port is Not a Chinese Naval Base (Just Yet),” *The Diplomat*, November 19, 2019, <https://thediplomat.com/2019/11/no-pakistans-gwadar-port-is-not-a-chinese-naval-base-just-yet/>; Sohail Azmie, “Regional Maritime Security Patrols (RMSP),” *Pakistan Today*, June 3, 2019, <https://www.pakistantoday.com.pk/2019/06/03/regional-maritime-security-patrols-rmsp/>.

³²⁸ 巴基斯坦海军自造首艘导弹艇下水 技术源自中国 [“Pakistan Navy's First Indigenously Built Missile Craft Launches, Built with Chinese Technology”], 兵工科技 [Ordnance Industry Science Technology], December 5, 2019, <https://mil.news.sina.com.cn/jssd/2019-12-05/doc-iihnzhfz3763419.shtml>. Also see the Pakistan Maritime Security Agency's website: “Assets / Bases – Operational Assets of PMSA,” Pakistan Maritime Security Agency, <http://www.pmsa.gov.pk/pmsa-bases.php>, (accessed May 21, 2020).

³²⁹ 李鹏, 罗雷, 宋健, 乔浩伟 [Li Peng, Luo Lei, Song Jian, and Qiao Haowei], 我军海上投送海外保障支撑点的建设 [“Construction of Overseas Support Locations for Maritime Projection”], 军事交通学院学报 [Journal of Military Transportation University], no. 3 (2015), pp. 3-4; 中船集团交付巴基斯坦 1500 吨级海事巡逻船 [“China Shipbuilding Corporation Delivers 1,500-ton Maritime Patrol Vessel to Pakistan”], 中船集团 [China State Shipbuilding Corporation], July 27, 2018, <http://www.sastind.gov.cn/n112/n117/c6802428/content.html>.

³³⁰ 巴基斯坦要购中国 8 艘潜艇 [“Pakistan Wants to Purchase 8 Chinese Submarines”], 钱江晚报 [Qianjiang Evening News], April 12, 2015, http://www.xinhuanet.com/world/2015-04/12/c_127679390_2.htm; “China to Provide Eight Submarines to Pakistan,” *The News*, August 27, 2016, <https://www.thenews.com.pk/print/145701-China-to-provide-eight-submarines-to-Pakistan>.

³³¹ Lan and Kuang, “Sino-Pakistani Military-technical Cooperation from a Geopolitical Perspective,” pp. 86-90.

³³² China's 2017 National Defense Transportation Law provides that Chinese enterprises stationed abroad “shall provide assistance for the ships, aircraft, vehicles and personnel of China's overseas military operations.” See Article 38, 中华人

patrol with the PN in maritime security operations in and around the Gulf, as well as to share intelligence and surveillance data collected from the station at PNS Akram. However, the absence of PLAN at Gwadar despite these opportunities is an important (but not permanent) observation.

The Preferred Karachi Alternative

To date, the PLAN has preferred the established well-developed facilities of the port of Karachi. Chinese naval vessels visiting Pakistan have so far exclusively made port and replenishment calls there, and with some regularity (see Appendix).³³³ The commercial port at Karachi can satisfy PLAN replenishment requirements and serve among several of other preferred resupply locations that enable PLAN operations in the Indian Ocean.³³⁴ China's 2nd Anti-Piracy Escort Task Force (ETF) conducted a friendly visit to Karachi in August 2009.³³⁵ Other ETFs have visited Karachi in the years since (see Appendix), although Oman, Djibouti, and Saudi Arabia are the sites of more frequent port calls for PLAN rest and replenishment.³³⁶

The PLAN typically visits Karachi for diplomacy and joint exercises. It consistently participates in the Pakistan-hosted "Aman" series of multilateral exercises, which feature participating ships and observers from numerous nations.³³⁷ More recently, the Southern Theater Command Navy sent four ships to the China-Pakistan nine-day bilateral exercise "Sea Guardians-2020," held for the first time in Karachi.³³⁸ Sea-based exercises in the northern Arabian Sea included formation maneuver, joint patrol, air-defense, maritime interdiction, joint anti-submarine warfare, live-fire drills, and joint marine corps training. The PLAN provided overall direction for the exercise, taking the lead in efforts to improve organization and command and control for combined missions.³³⁹ Such exercises

民共和国国防交通法["National Defense Traffic Law of the People's Republic of China"], adopted at the 22nd Meeting of the Standing Committee of the 12th National People's Congress, September 3, 2016, http://www.npc.gov.cn/zgrdw/npc/xinwen/2016-09/03/content_1996764.htm

³³³ The PLAN made its first overseas foreign port call in Karachi in 1985, a time when the PLAN rarely operated in distant waters. They did not make another friendly visit to Karachi until eight years later in 1993. Regular visits to Pakistan did not occur until the mid-2000s when Pakistan began hosting the biennial Aman-series multilateral joint exercises in 2007 and the PLAN started deploying anti-piracy escort task forces to the region in late 2008. See Appendix for further details.

³³⁴ The first replenishment visit at Karachi took place in August 2009, when the 2nd Anti-Piracy Escort Task Force conducted a friendly visit and was reportedly conducting feasibility studies of regional ports for future resupply intervals. 中国海军舰队首次使用卡拉奇港补给 ["First Time Chinese Naval Fleet Uses Karachi Port for Replenishment"], 东方早报 [*Oriental Morning Post*], September 10, 2012, https://www.guancha.cn/Neighbors/2012_09_10_96585.shtml.

³³⁵ 中国护航行动进入常态化 海外多港口成休整基地 ["China's Escort Operations Become Regularized as Many Overseas Ports Become Bases for Rest"], 解放军报 [*PLA Daily*], August 23, 2009, <http://mil.news.sina.com.cn/2009-08-23/1005563478.html>.

³³⁶ For analysis of PLAN anti-piracy escort task force operations in the Gulf of Aden, see Andrew S. Erickson and Austin M. Strange, "No Substitute for Experience: Chinese Antipiracy Operations in the Gulf of Aden," *China Maritime Study* No. 10, November 2013, <https://digital-commons.usnwc.edu/cmsi-red-books/12/>.

³³⁷ 薛成清, 顾亚根 [Xue Chengqing and Gu Yagen], 我海军参加‘和平-19’多国海上联合军演 ["Chinese Navy Participates in 'Aman-19' Multilateral Maritime Joint Military Exercises"], 中国军网综合 [*China Military Online Comprehensive*], February 9, 2019, http://www.81.cn/jmywy/2019-02/09/content_9423502.htm. For more details on the "Aman" exercises, see "Exercise Aman 2019—Together for Peace," Pakistan Navy, 2019, <https://aman.paknavy.gov.pk/>, (accessed May 10, 2020).

³³⁸ "China, Pakistan Kick Off 'Sea Guardians-2020' Naval Drill in Karachi," *China Military Online*, January 6, 2020, http://eng.chinamil.com.cn/view/2020-01/06/content_9710755.htm.

³³⁹ See Appendix or the participating Chinese ships. "海洋卫士-2020" 中巴海上联合演习开幕 ["China-Pakistan Joint Maritime Exercises 'Sea Guardians-2020' Commences"], 海军新闻 [*Navy News*], January 6, 2020, http://www.xinhuanet.com/mil/2020-01/06/c_1210427264.htm.

demonstrate a substantial degree of cooperation between the PLAN and PN, providing some confidence that Gwadar might also be used by the PLAN, alone or in combination with the PN.



Image 5: *Liugongdao* submarine tender and *Weishanhu* replenishment ship at Karachi during “Sea Guardians-2020” exercise

Karachi’s proximity to India make it less desirable to some Chinese analysts.³⁴⁰ However, the PLAN continues to make extensive use of it even with a functioning port at Gwadar. China State Shipbuilding Corporation personnel in Karachi have provided unspecified “equipment repair services” to PLAN escort forces in port.³⁴¹ Other reports also find that PLAN submarines conduct stops in Karachi, with at least one occurring in May 2015, although specific submarine port calls are difficult to confirm through open sources. PLAN submarine activities in the region cause significant consternation in India.³⁴² Such sensitivities may impose significant restraints on building reliable overseas logistics support for PLAN submarines, although Pakistan could conceivably do so.³⁴³ This broader question would require political decisions in Beijing and Islamabad, and consideration not only of Indian sensibilities, but those of extra-regional powers like the United States.

Because Pakistan is such a close security partner with China, and so dependent on Chinese good will for its economic and military development, it is not far-fetched to expect that Pakistan would welcome more substantial PLA use of the facility under some conditions. Still, the most critical factor limiting the basing option at Gwadar (or Karachi, Jiwani, or elsewhere in Pakistan) is the apparent lack of political commitment between China and Pakistan to provide mutual military

³⁴⁰ “Compared to Karachi, Gwadar has the important advantage of greater strategic depth.” See Li Jingyu, et al., “The Strategic Concept of Selecting Points,” p. 31.

³⁴¹ 李鹏, 罗雷, 宋健, 乔浩伟 [Li Peng, Luo Lei, Song Jian, and Qiao Haowei], 我军海上投送海外保障支撑点的建设 [“Construction of Overseas Support Locations for Maritime Projection”], 军事交通学院学报 [Journal of Military Transportation University], no. 3 (2015), p. 4.

³⁴² See Appendix. Remote sensing data also indicates at least one other visit. See “Satellite Imagery Reveals Presence of Chinese Nuclear Submarine in Karachi,” *The Economic Times*, July 12, 2018, <https://economictimes.indiatimes.com/news/defence/chinese-nuclear-submarine-spotted-at-karachi-revealed-in-satellite-imagery/articleshow/56375723.cms?from=mdr>.

³⁴³ 汪国征, 蒲海洋 [Wang Guozheng and Pu Haiyang], 吴胜利出访埃及、南非和巴基斯坦 [“Wu Shengli Visits Egypt, South Africa, and Pakistan”], 人民海军 [People’s Navy], May 10, 2016, p. 1.

support during times of crisis or conflict. More likely in the short- to medium-term is a fuller realization of the dual-use potential of the facility. If the transport infrastructure projects mature, Gwadar could become a key peace time replenishment or transfer point for PLA equipment and personnel.³⁴⁴ But establishment of a base from which the PLAN could undertake naval operations throughout the Persian Gulf and the Indian Ocean during periods of conflict is unlikely. Ultimately, the militarization of China's Gwadar port facility requires a strategic decision in both Beijing and Islamabad that will not come without significant trade-offs.

Conclusion

Gwadar will not inevitably become a PLAN base. The strategic strongpoint concept, however, recommends serious consideration of the site's potential military utility for China. That is, Gwadar will continue as a commercial facility operated by a state-owned Chinese firm that can make arrangements for military use: guaranteed pier space, fuel and supplies, and perhaps even munitions and some level of technical support for the PLAN fleet and personnel. In this model, China's aims to put its best foot forward—namely, the huge scale of trade, investment, finance, and construction that its government and state-owned enterprises can deliver in concert. This substantial economic footprint is meant to develop and secure Pakistan for China's benefit. By leading with commercial presence, China aims to create permissive conditions for political decisions that could support military utilization of the port and its surrounding infrastructure.

Such arrangements are uniquely suited to Pakistan, which is reasonably considered a most-likely candidate for China's next military base. Pakistan is after all distinguished by its long-standing strategic alignment with China, growing dependence on Chinese trade and investment, extraordinary reliance on Chinese weapons sales, and close military and intelligence cooperation with the PLA.³⁴⁵ However, Pakistan is not a Chinese ally. China has never intervened on Pakistan's behalf in its serial conflicts with India, and evidently prefers to provide Pakistan with only sufficient capability and diplomatic cover to take care of its own affairs.³⁴⁶ Thus, mutual political commitment between the two countries that would allow for PLA basing in times of conflict cannot be assumed.

Managing China's relationship with India (however strained it is at present) is a high priority for Beijing—arguably higher than any other in the region, including Pakistan. Chinese leaders will not sacrifice that crucial bilateral relationship for the sake of a single military facility, and will carefully consider first- and second-order effects that would certainly result from a more overtly militarized PRC posture in Pakistan. As a former counsellor to the PRC Embassy in Pakistan put it, “if China builds a military base in Gwadar, no matter whether or not it signs a treaty, it will essentially form an alliance with it...this runs counter to our South Asia policy for the last 30 years.”³⁴⁷ It would indeed be an extraordinary change to China's diplomacy in the region to decide that it prefers marginal improvement in its naval posture in the region to a stable relationship with India.

³⁴⁴ Minnie Chan, “As Overseas Ambitions Expand, China Plans 400 Per Cent Increase to Marine Corps Numbers, Sources Say,” *South China Morning Post*, March 13, 2017, <https://www.scmp.com/news/china/diplomacy-defence/article/2078245/overseas-ambitions-expand-china-plans-400pc-increase>; “China May Deploy Marines to Gwadar Port,” *The Maritime Executive*, March 17, 2017, <https://www.maritime-executive.com/article/china-may-deploy-marines-to-gwadar-port>.

³⁴⁵ Pakistan has been the largest importer of Chinese arms since the 1970s, and 73 percent of its total arms imports in the period 2015-2019 came from China. Stockholm International Peace Research Institute, “SIPRI Arms Transfers Database,” <https://www.sipri.org/databases/armstransfers>.

³⁴⁶ For analysis of China's arms-length approach to Pakistan's conflicts, see Small, “The China-Pakistan Axis,” pp. 9-25.

³⁴⁷ Mao Siwei, “Three Big Mistakes in Understanding the CPEC.”

Drawing primarily on the official and academic discourse in China, this case study has focused on how Chinese experts understand the value of investing in a strategic strongpoint at Gwadar. We identify two distinct but converging objectives, one largely internal, the other external. The first, internal objective is arguably the most urgent and proximate explanation for China's largesse in Pakistan. That is, Beijing hopes to stabilize Xinjiang province by providing security and development in neighboring Pakistan. Gwadar is an anchor for this ambitious development program for Pakistan, CPEC. PRC officials and analysts view peripheral security as fundamental to internal stability, drawing on a "holistic national security concept" with deep provenance in Chinese thinking on managing its frontiers. Nominally economic programs like the "Great Western Development" (and its rebranding as "Go West"), the "Belt and Road Initiative," and the "21st Century Maritime Silk Road" all manifest this internal-external orientation, and require that both Xinjiang and its peripheral areas remain stable, secure conduits for China's relations with the rest of the Eurasian continent.

The second objective, largely external, is to ensure reliable access to the Persian Gulf to support energy flows and a strategic presence in the Middle East and across the Indian Ocean region. Gwadar has major geographic appeal as an "exit to the ocean" because Pakistan is contiguous to western China and can, in theory, provide a secure logistical corridor to the sea. Only Myanmar and India likewise share borders with China as well as the Indian Ocean. The key limitations on realization of this objective are the insecurity, instability, and underdevelopment of Gwadar and Balochistan.

China's efforts to build transport infrastructure are proceeding, albeit at a glacial pace. Road, rail, and pipeline connections require political stability and a level of security that has proved unattainable in Pakistan. This situation should not be expected to change quickly, if at all. While the untapped inland markets and resources of Pakistan and Central Asia may provide some real incentive for consolidating these transport links, the COVID-19 pandemic, continued Pakistani macroeconomic instability, and China's domestic economic slowdown combine to recommend a healthy dose of skepticism that these lofty economic purposes will be achieved.

Despite these challenges, Gwadar need not be a major commercial hub to help anchor China's military, political, and economic presence in the Indian Ocean region. Its potency as a geopolitical instrument, however, comes with significant opportunity costs. Pakistan's neighbor and rival, India, is hostile to China's expanding presence in the region. Especially with the existing strains on the Sino-Indian relationship due to their border disputes, a "second front" is sure to drive India to more aggressive balancing against Chinese power in the Indian Ocean region. The more India feels threatened by Chinese presence in the region, the more attractive the United States becomes as a security partner for historically unaligned India. Beijing may not believe that India is likely to join an alliance with Western nations, but the rapid decay of that major bilateral relationship would greatly complicate China's overall posture in the Indian Ocean region.

These wider considerations hardly rule out the possibility of a more assertive and militarized Chinese presence at Gwadar. They do, however, establish hard trade-offs for Chinese strategists considering the net gains that Beijing would reap from a Gwadar military venture. If China-India and China-US relations continue to deteriorate rapidly, China may well determine that a confrontational posture is inevitable. In this case, overt militarization of China's presence at Gwadar—perhaps in response to a terrorist incident or a threat in the Strait of Hormuz—might look appealing, even if it provoked harsh counter-measures. If, however, China is seeking to stabilize the precipitous decline in those geopolitical relationships, the internal and external security concerns analyzed here should win out. We would then expect to see China's continued pursuit of Gwadar's comprehensive development as a strategic strongpoint in the Indian Ocean.

Appendix. PLAN Port Calls to Karachi:

Date	Mission	Vessels
8 December 1985	Friendly visit	Type-051 destroyer <i>Hefei</i> and Type-905 replenishment ship <i>Fengcang</i>
November 1993	Friendly visit	Type-679 training ship <i>Zhenghe</i>
20 May 2001	Friendly visit	Type-052 destroyer <i>Ha'erbin</i> and Type-905 replenishment ship <i>Taicang</i>
21 November 2005	Friendly visit/joint exercise	Type-051B destroyer <i>Shenzhen</i> and Type-903 replenishment ship <i>Weishanhu</i>
5 March 2007	Multilateral exercise “Aman-07”	Type-053H3 frigates <i>Lianyungang</i> and <i>Sanming</i>
21 February 2009	Multilateral exercise “Aman-09”	Type-052B destroyer <i>Guangzhou</i>
5 August 2009	2 nd Anti-piracy Escort Task Force/friendly visit	Type-054A frigate <i>Huangshan</i> and Type-903 replenishment ship <i>Weishanhu</i>
24 February 2011	8 th Anti-piracy Escort Task Force/multilateral exercise “Aman-2011”	Type-054 frigates <i>Wenzhou</i> and <i>Ma'anshan</i>
8 September 2012	12 th Anti-piracy Escort Task Force/rest and resupply	Type-054A frigate <i>Yiyang</i>
15 September 2012	12 th Anti-piracy Escort Task Force/rest and resupply	Type-903 replenishment ship <i>Qiandaohu</i>
22 September 2012	12 th Anti-piracy Escort Task Force/rest and resupply	Type-054A frigate <i>Changzhou</i>
3 March 2013	14 th Anti-piracy Escort Task Force/multilateral exercise “Aman-2013”	Type-052 destroyer <i>Ha'erbin</i> , Type-053H3 frigate <i>Mianyang</i> , Type-903 replenishment ship <i>Weishanhu</i>
29 July 2013	“Harmonious Mission-2013”	Type-920 hospital ship <i>Peace Ark</i>
27 September 2014	17 th Anti-piracy Escort Task Force/friendly visit/joint exercises	Type-052C destroyer <i>Changchun</i> and Type-054A frigate <i>Changzhou</i>
22 May 2015	Rest and resupply	Type-039B conventional attack submarine No. 335
7 January 2016	21 st Anti-piracy Escort Task Force/friendly visit/joint exercises	Type-908 replenishment ship <i>Qinghaihu</i> , Type-054A frigate <i>Liuzhou</i> , and Type-054A frigate <i>Sanya</i>
15 November 2016	Joint exercises	Type-054A frigate <i>Handan</i>
14 February 2017	24 th Anti-piracy Escort Task Force/multilateral exercise “Aman-17”	Type-052 destroyer <i>Ha'erbin</i> , Type-054A frigate <i>Handan</i> , Type-903A replenishment ship <i>Dongpinghu</i>
10 June 2017	Task Force 150 friendly visit/joint exercises	Type-052C destroyer <i>Changchun</i> , Type-054A frigate <i>Jingzhou</i> , and Type-903A replenishment ship <i>Chaohu</i>
30 November 2017	Joint exercise “Friend-2017”	Type-054A frigate <i>Jingzhou</i>
7 February 2019	31 st Anti-piracy Escort Task Force/multilateral exercise “Aman-19”	Type-071 landing platform dock <i>Kunlunshan</i> and Type-903A replenishment ship <i>Luomahu</i>
4 January 2020	Bilateral exercise “Sea Guardians-2020”	Type-052D destroyer <i>Yinchuan</i> , Type-054A frigate <i>Yuncheng</i> , Type-903 replenishment ship <i>Weishanhu</i> , and Type-926 submarine support ship <i>Liugongdao</i>

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