

BUSINESS CASE REPORT

May, 2024



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Introduction and Background

The Chaman region, strategically positioned near the Afghan border, is crucial for boosting economic and trade activities. This area plays a key role in cross-border trade and acts as an essential transit route, linking Pakistan with Afghanistan and providing a pathway to Central Asian countries.

The Government of Balochistan (GoB) has invested PKR 1,656 million for developing truck terminal & cargo depots, bus terminal and taxi stand, shops, cold storage and auction sheds (collectively known as the "Chaman Master Plan") across 94 acres in Chaman, Balochistan.

The Balochistan Public-Private Partnership Authority (BPPPA) intends to outsource the operations, maintenance, and management of the Chaman Master Plan to a private entity under a Public-Private Partnership (PPP) model. This initiative aims to improve the efficiency and quality of services, which will in turn boost trade between Pakistan and Afghanistan and support local businesses.

The project consists of the following three facilities:

- a. a. Shops, Cold Storage and Auction Sheds:** 128 shops (18'x14' shop size) have been constructed along with cold storage (12,400 sq ft) and auction sheds (15,000 sq ft) over 9.99 acres.
- b. Truck Terminal along with Cargo Shed:** The Truck adda with the parking facilities for incoming and outgoing trucks, Mazda/shehzor, crane/tractor along with Goods cargo shed and Goods Transporter's warehouse with covered area of 26 Acres.
- c. Bus & Taxi Stand along with Departure and Arrival Sheds:** A bus adda constructed with the parking facilities for incoming and outgoing buses, Van/Mini bus, Car/Taxi with covered area of 20 Acres.
- d. Land to be utilized for development:** Additional land space of around 15,000 sq ft has been allocated for further development, of guest rooms (2 storey x 5,000 sq ft), medical health unit (5,000 sq ft) and firefighting unit (5,000 sq ft).
- e. Land available for additional zoning:** Additional land space of around 18.6 acres and 13.6 acres is available for further development of Zone A and B respectively.



Scope of work - Business Case

Business Case Report for Chaman Master Plan has been developed based on desktop study / secondary data as well as primary research (field visits) along the following lines:

1. **Executive Summary:** Key findings and recommendations regarding the business potential and suitable business case.
2. **Project Context:**
 - a. Pakistan and Balochistan's Trade Landscape deliberating on its strategic location and current trade activities
 - b. Current state of cross-border trade at Chaman
 - c. Primary challenges faced in trade operations
 - d. Current trade model operating at Chaman
3. **Project Description:**
 - a. Overview of the Chaman Master Plan project, outlining its key features and functionalities.
 - b. Total project cost and designated development area (94 acres).
4. **Market Analysis:**
 - a. Market Opportunity Analysis - Markets through Chaman route and their trade potential (Afghanistan and Central Asian countries)
5. **Proposed Business Case for Chaman Master Plan**
6. **Similar models:**
 - a. Exploring Similar Facilities in Pakistan and Elsewhere
 - b. Rationale for PPP mode

Executive Summary

Overview

The Chaman Master Plan is a strategic initiative aimed at developing a comprehensive trade and logistics hub near the Afghanistan border, facilitating cross-border commerce and strengthening regional economic ties. The project encompasses various components, including a bus and taxi stand, truck stand, cargo shed, fruit and vegetable market, and cold storage facilities.

This executive summary provides a high-level overview of the plan's key aspects, market opportunities, and critical success factors.

Chaman's Strategic Importance

Chaman's strategic location at the crossroads of Pakistan, Afghanistan, and Central Asia positions it as a vital trade route. The plan leverages this location to boost cross-border trade and create new economic opportunities. The Chaman crossing offers the shortest land route from Pakistan's key seaports in Karachi and Gwadar to Afghanistan as well as Central Asian regions such as Azerbaijan and Turkmenistan, enabling efficient movement of goods and services across South Asia and Central Asia.

Total area of Chaman District as per 2017 Census is 1,341 sq. KMs while total population is 434,561 people with an average household size of 8.27 persons. The total households are 52,546 in District Chaman.

Being the economic and trade hub of the region, population of the district has multiplied in the last two decades and its annual average growth rate from 1998 census to 2017 census is 5.68%.

Estimates suggest that about 40% of the trade between Pakistan and Afghanistan is conducted through the Chaman border, with 60% through Torkham.

The average number of trucks used for exports is nearly double the number used for imports, the export value is also considerably higher. This indicates a trade surplus for Pakistan at the Chaman border.

The majority of the traders belong to the Achakzai clan in Pashtoon, with others from minority groups. These traders bring in second-hand electronic equipment, used cars, and other goods from Japan and elsewhere. However, due to ongoing border issues, many traders have relocated their businesses to other parts of Pakistan, like Punjab.

Economically, the district is limited in natural resources, with antimony being one of the few extracted minerals. Many families depend on agriculture, but this sector has faced significant declines due to water scarcity and other issues. The majority of Chaman's population relies on business activities tied to the goods and commodities from Afghanistan.

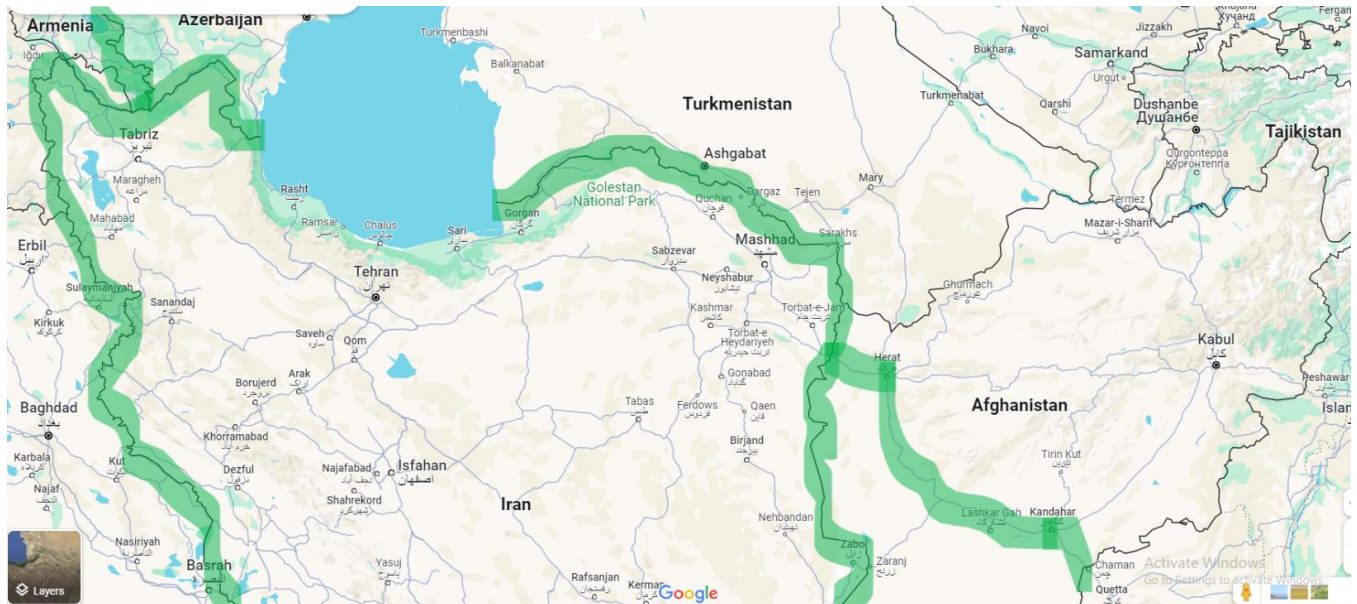
Key issues

1. **Socio-Economic Problems:** Chaman grapples with high rates of poverty, unemployment, and illiteracy. Water scarcity and agricultural decline further strain the local economy.
2. **Border Closures:** Frequent closures have a severe impact on trade and livelihoods. The 2019 closure led to 50,000 job losses among small and medium traders, costing the local economy PKR 150 million daily, with a broader impact on government revenues.
3. **Fencing and Informal Trade:** Border fencing has disrupted informal cross-border trade, reducing daily earnings from PKR 2,000-3,000 to around PKR 1,000. While it has curbed smuggling, it has also led to tax evasion issues, with informal trade estimated at USD 70 billion annually.

Market Analysis – Potential

Based on analysis of the Chaman trade route, following can be targeted in respect of the Chaman Master Plan:

1. Afghanistan through Kandahar route
2. Iran
3. Azerbaijan
4. Turkmenistan



1. Afghanistan: Pakistan's largest trading partner in the region.

Opportunities: Red meat, rice, sugar, wheat, other dry goods, processed foods, pharmaceuticals, auto parts, cereals, wheat, rice, milling products, mineral fuels, oils, distillation products, plaster, lime, cement, edible vegetables and roots, fruits and nuts, salt and sulfur, animal or vegetable fats and oils, plastics, wood and charcoal, and iron and steel, figs, grapes, almonds, onions, cumin seeds, apples, beans, cotton, and gemstones.

Challenges: Smuggling, security issues, border unrest, political instability.

Pakistan's exports have historically been inclined towards western economies, China, and the Gulf Cooperation Council region. However, the country now seeks to explore new export markets including the Central Asian Republics (CARs) for the purpose of export diversification.

Pakistan also exports to Central Asia through Afghanistan, with most of this transit trade originating in Punjab and Lahore. Approximately 500,000 metric tons of fresh fruit are sent from Pakistan to Central Asia through Afghanistan. Pakistan's trade with the CARs has been facing upheavals, mainly due to continuous insecurity in Afghanistan, money exchange issues, banking and transaction problems, tariff issues.

2. Iran: Strong complementarity due to differing economic focuses.

Opportunities: Potential for increased trade, but currently below potential. Needs exploration. Iron Pipes, Medical Instruments, Electrical equipment, cereals, red meat (particularly lamb and mutton), vegetable and oils.

Challenges: Complex political relations, sanctions on Iran.

3. Azerbaijan: Smaller market but potential for niche goods.

Opportunities: Specialty grains, unique dried fruits. Iron and steel, pharmaceutical products, raw lead.

Challenges: Geographical distance, competition.

4. Turkmenistan: Limited market size, potential for specific dry goods.

Opportunities: Specialty dried fruits, nuts, unique spices. Iron and steel, plastics, pharmaceutical products, soap, cereals and cotton.

Challenges: Geographical distance, competition.

Recommendations: Proposed Business Cases for the Chaman Master Plan

The success of Chaman Master Plan's conceptual framework hinges on key approvals and government support. An analysis has been performed on each component of the plan to identify areas of opportunity and ensure the maximum utilization of resources, infrastructure, and partnerships.

Given the existence of competing market and another fruit and vegetable market potentially under development, the fruit & vegetables shops and auction shed component is considered to not be the most strategic use of the designated area.

It is therefore envisioned to leverage the Chaman Master Plan's existing infrastructure as well as additional available land to create a Multipurpose Trade Facility:

1. **Dry Goods Warehousing, Light Processing and Distribution Center:** Establish a dry goods warehousing, light processing and distribution center for goods in demand such as pulses, lentils, rice, dry fruits and spices.
2. **Cold Chain Infrastructure and Perishables Processing Zone:** Develop a cold chain infrastructure for storage and light processing of perishable goods, preferably focusing on meat and other perishable products.
3. **Mineral Processing and Trading Zone:** Create a mineral processing and trading zone to add value to raw materials extracted from the region.
4. **Scrap Processing and Recycling Center:** Develop a facility for processing, sorting, and trading minerals extracted from the region, focusing on iron and steel scrap.
5. **Pharmaceutical Distribution Hub:** Establish a facility focused on distribution and storage of finished pharmaceutical products, leveraging Pakistan's well-established pharmaceutical industry.

This facility would combine warehousing capabilities, light-manufacturing options, and function as a regional distribution center for items with high trade volumes such as rice, steel scrap, dry fruits, construction material, pharmaceuticals, etc. thus enabling strategic trade.

Additionally, the available land for further development may be further developed into specialized zones for activities like scrap processing, meat processing, poultry hatcheries, and potentially additional specialized shops.

The expansion area is also envisaged to developed to include essential facilities like guest rooms for drivers, medical unit and a firefighting system, creating a self-contained and well-supported trade hub.

Taxi and Bus Stand Component:

- **Current Situation:** Chaman has a significant inflow and outflow of taxis and buses, with an estimated 800 taxis and 125 buses operating daily. The Master Plan offers integrated passenger transportation infrastructure.
- **Proposed Business Case Use:** Operate a designated taxi and bus stand with integrated facilities for passenger transportation, parking, and other services. This would improve the passenger experience, streamline operations, and generate revenue through parking fees, rental income, and other service fees.
- **Revenue Streams:** Rental income for parking and from vendors.

Truck Stand and Cargo Shed Component:

- **Current Situation:** The truck stand has a capacity for 500 trucks, with an average current daily inflow/outflow of 130 trucks. The cargo shed has 47,000 sq ft of space.
- **Proposed Business Case Use:** Transform the facility into an integrated trade and logistics hub with services such as truck parking, consolidation/deconsolidation, customs clearance facilitation, warehousing, and truck maintenance.
- **Revenue Streams:** Rental income for parking. Potentially also from consolidation/deconsolidation fees, and other value-added services.

Critical Success Factors for Chaman Master Plan

1. **SEZ + Incentives:** Locate within an SEZ to attract businesses with tax breaks and subsidies.
2. **Security & Stability:** Ensure a secure external environment for workforce, trade and financial transactions.
3. **Simplified Regulations:** Streamline bureaucracy to ease business operations and investment.
4. **Local Employment:** Prioritize local workers for construction, operation, and maintenance.
5. **Support Local Businesses:** Foster growth of local businesses within the Master Plan.
6. **Facilitate Relocation:** Government support and enforcement measures needed for smooth transfer of bus & taxi stands operations.
7. **Basic Amenities:** Provision of essential services like roads, banking, and a basic health unit.
8. **Regulatory Reforms:** Implement reforms for ease of doing business and cross-border trade.
9. **Value Chain Development:** Focus on segments like agriculture and livestock to create jobs and economic opportunities.

Project Context

Pakistan's Trade Landscape

Pakistan's Strategic Location

Pakistan's geographical setting places it at the crossroads of South Asia and Central Asia, with a 2,600-kilometer border with Afghanistan and coastal access via the ports of Karachi and Gwadar. This strategic position gives Pakistan the potential to serve as a major hub for trade routes in the region, linking the Middle East, South Asia, and Central Asia.

Additionally, the country's proximity to the Central Asian Republics (CARs), facilitated through Afghanistan, opens up a wide range of possibilities for regional trade and connectivity. Pakistan and Afghanistan share 18 trade crossings, with the most notable being Torkham in Khyber-Pakhtunkhwa and Chaman in Balochistan. Torkham serves as a gateway to Afghanistan's Jalalabad province, while Chaman connects to Kandahar.

Balochistan's Strategic Location

Out of Balochistan's 34 districts, 12 are situated along the international border, encompassing 53% of Balochistan's total population. Among these 12 districts, nine share a physical border with Afghanistan, while the other four are along the border with Iran.

The nine districts in Balochistan that border Afghanistan have a combined population of approximately five million people, based on 2022 estimates. This figure represents 40% of the province's total population. Out of this total, nearly 0.7 million people live within 50 kilometers of the international border. Additionally, the estimated number of households within 50 kilometers of the border is about 100,000. Among these districts, Chaman, Chagai, Nushki, and Zhob have the largest percentages of their populations residing within this 50-kilometer range.

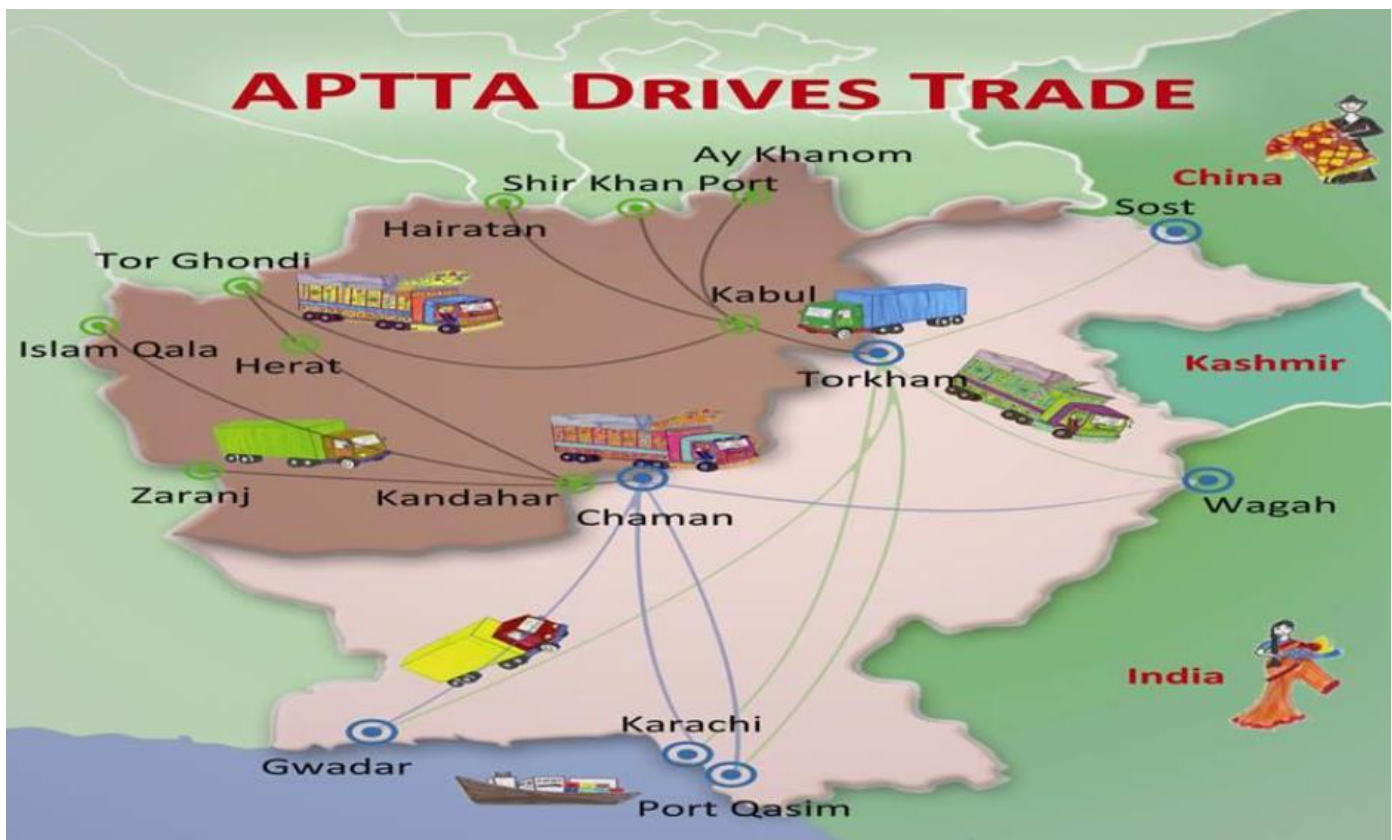
The reliance on cross-border trade in Balochistan extends beyond the border districts and impacts the economy of the entire province.

An analysis of Balochistan's economic structure shows that the services sector plays a dominant role, accounting for just under half of the Provincial Gross Domestic Product (PGDP). This sector employs about 46% of the province's total labor force, with a significant portion of the services sector operating in the informal and undocumented space, heavily reliant on border trade.

The wholesale and retail sub-sector, which drives nearly one-third of Balochistan's entire economy, is the main engine of growth in the services sector. Transport, the second key growth driver, also plays a critical role. Together, the wholesale and retail, along with the transport sub-sectors, account for nearly 40% of the provincial economy, both being highly dependent on cross-border trade.

The Chaman crossing is particularly strategic, providing the shortest land route from Pakistan's key seaports in Karachi and Gwadar to Turkmenistan. This connection is poised to significantly influence trade dynamics between South Asia and Central Asia, offering a direct pathway for goods and services.

Entry and Exit Points for Afghanistan and Pakistan under APTTA



Source: Ministry of Commerce and Industries of Afghanistan

Chaman – Existing Trade Model

The Chaman Border Crossing

Chaman, located about 120 kilometres from Quetta in Balochistan, serves as a critical border crossing between Pakistan and Afghanistan. It is the second-largest commercial trade border between the two countries, after Torkham. The town has strategic significance as it connects Pakistan to Afghanistan's Kandahar province, and through Afghanistan, potentially to Central Asia. It also holds substantial economic importance for many local residents who rely on cross-border trade for their livelihoods.

Total area of Chaman District as per 2017 Census is 1,341 sq. KMs while total population is 434,561 people with an average household size of 8.27 persons. The total households are 52,546 in District Chaman.

Being the economic and trade hub of the region, population of the district has multiplied in the last two decades and its annual average growth rate from 1998 census to 2017 census is 5.68%.

Population density per square kilometer of the district is 324.06 people which is far greater than the overall population density of 35.53 of the province.

Estimates suggest that about 40% of the trade between Pakistan and Afghanistan is conducted through the Chaman border, with 60% through Torkham.

The average number of trucks used for exports is nearly double the number used for imports, the export value is also considerably higher. This indicates a trade surplus for Pakistan at the Chaman border. The following are average exports and imports annually through Chaman border in preceding three years:

- ✓ Average Exports = **PKR 39,206 Million**
- ✓ Average Truck (exports) = **31,646**
- ✓ Highest Exported Item = **Rice 178,737 MT**

- ✓ Average Imports = **PKR 26,966 Million**
- ✓ Average Trucks (Imports) = **15,700**
- ✓ Highest imported item = **Iron & Steel scrap 118,775 MT**

FY	Export value (in million)	No. of Vehicles
FY 2021	21,941.925	26,683
FY 2022	34,789.603	32,688
FY 2023	60,887.32	35,566

FY	Import value (in million)	No. of Vehicles
FY 2021	15,542.5	13,816
FY 2022	17,139.9	13,816
FY 2023	48,214.3	19,468

Sr. No.	Major Items Exported
1.	Rice
2.	Pharmaceutical Medicines
3.	Vegetable Ghee
4.	Black Tea
5.	Food Supplements

Sr. No.	Major Items Imported
1.	Iron and Steel – remelt able scrap
2.	Pomegranate
3.	100% Cotton Grey Cloth
4.	Fresh Grapes and Apples
5.	Dried Fruits

Economic Landscape of Chaman

In recent years, the Government of Pakistan has introduced a series of measures aimed at enhancing border management, including the construction of physical fences along the border, anti-smuggling initiatives, and stricter regulation of cross-border movement. While these efforts have improved the security situation, they have also caused disruptions to the livelihoods of local communities living near the border, negatively impacting Balochistan's overall economy.

The border fencing has led to several adverse effects. It has disrupted social connections, limited or entirely blocked people's access to their agricultural lands, water sources, and grazing areas located across the border. This has significantly affected local communities, many of whom rely on these resources for their sustenance. The impact is also evident in the reduced volume of formal and informal trade with Afghanistan and Iran, critical for the province's economy.

These border management changes have exacerbated existing poverty in border districts, where many residents were already living in challenging conditions. The combination of fencing, the Covid-19 pandemic, and prolonged drought has pushed more people into extreme poverty, leading to an unprecedented rise in poverty

levels along border regions. This increasing economic strain poses substantial risks to livelihoods, stability, and security in these strategically important areas. If not addressed, these challenges could undermine the broader efforts to maintain security and foster sustainable development in the region.

Chaman's dependence on cross-border commerce comes with inherent risks and challenges, particularly due to shifting border policies, smuggling, and the impact of recent closures.

Social and Business Shifts: The town faces challenges such as

1. Poverty
2. Unemployment
3. Illiteracy
4. Agricultural decline
5. Water scarcity
6. Limited access to essential services
7. Inadequate infrastructure
8. Security concerns

The majority of the traders belong to the Achakzai clan in Pashtoon, with others from minority groups. These traders bring in second-hand electronic equipment, used cars, and other goods from Japan and elsewhere. However, due to ongoing border issues, many traders have relocated their businesses to other parts of Pakistan, like Punjab.

Agricultural and Business Dependency: Economically, the district is limited in natural resources, with antimony being one of the few extracted minerals. Many families depend on agriculture, but this sector has faced significant declines due to water scarcity and other issues. The majority of Chaman's population relies on business activities tied to the goods and commodities from Afghanistan. Daily, tens of thousands of people cross the border into Wesh and Spin Boldak in Afghanistan, where they run shops, conduct business, or work as daily laborers.

Unemployment and Poverty: Chaman has high unemployment and poverty rates, with many residents relying on informal cross-border trade for daily wages. The region's economic stability has been compromised by stricter border regulations and unpredictable closures. The Chaman sit-in, which began in October 2023, was a response to the new passport and visa requirements, affecting local traders and daily-wage workers. This social unrest underscores the need for a balanced approach to border security and trade facilitation which is also an important factor for the success of the Chaman Master Plan.

Border Closures and Economic Impact: Border closures have had a detrimental impact on Chaman's economy. The Pakistan Chamber of Commerce noted that the 2019 closure of the Chaman border led to the loss of around 50,000 jobs among small and medium traders. These have led to protests from the community reliant on cross-border trade and lengthy truck clearance delays, hindering both trade and local livelihoods.

Furthermore, the closure costs local traders approximately PKR 150 million daily. The economic impact is also significant for the government, with a reported monthly revenue loss of about PKR 2 billion due to border closures in early 2024.

Fencing and Informal Trade: The recent construction of border fences has further complicated cross-border commerce. Before fencing, informal business was relatively straightforward, with minimal border checks. People could earn PKR 2,000 to 3,000 daily through informal trade, but after the fence construction, this has

been reduced to around PKR 1,000 daily. The fencing has significantly curbed smuggling but has also hurt the livelihood of daily wage workers who previously relied on informal trade.

Informal Trade and Tax Evasion: The informal trade of goods through the Chaman border, estimated at around USD 70 billion annually, has negatively affected Pakistan's economy. Issues of tax evasion are also significant, with vehicles from Nushki and Chaman reportedly avoiding taxes of up to PKR 2,500,000.

Chaman's economic landscape is heavily influenced by cross-border trade with Afghanistan. The town's strategic importance makes it a crucial trade hub, but ongoing challenges like border closures, new regulations, and economic instability pose significant risks to its prosperity. Addressing these challenges is critical for improving the local economy and social conditions in Chaman.

Current Border Terminal Operations

The Chaman Border Terminal project is being implemented by the National Logistics Cell (NLC) as part of the Integrated Transit Trade Management System (ITTMS) to facilitate trade and movement of goods and people across the border with Afghanistan.

The project began construction on September 24, 2019. As of December 31, 2023, the construction of the border crossing facility at Chaman BCP has achieved a cumulative financial progress of 84.96%. The contract value for the Chaman Border Terminal project is USD 36.8 million which is almost 10 times the size of Chaman Master Plan.

The goal of the project is to decrease the time it takes for cargo clearance, streamline the clearance process, and boost trade flows without compromising security checks. The implementation of integrated procedures is aimed at providing a unified IT platform for all organizations involved at the border, leading to a one-window operation.

The project also includes upgrades to the border crossing facilities, including buildings, infrastructure, and associated ICT and security systems.

Currently, GD is raised by customs agent and then uploaded in system. Once the goods are inspected and examined, GD is sent to appraisal department. Once appraisal is done, out pass is issued and goods are good to go.

The Border Terminal project focuses primarily on the border crossing itself. The Chaman Master Plan might encompass a broader vision for the entire region, including logistics facilities, warehousing, and other trade-related infrastructure. The success of the Border Terminal project might necessitate further investment to fully realize the Master Plan's potential.

Project Description

The Chaman Master Plan project has been developed at a total cost of PKR 1,656 million on 94 acres land. The following are three major components of the project along with necessary details:

Sr. Description		Area	Amount spent in Millions (PKR)	Physical Status
1	Fruit & Vegetable Market	10 acres	472.4	Nearly complete
	Shops: 08 Blocks containing 128 wholesale shops Auction sheds: 02 (7500 SFT each) Cold Storages: 02 Blocks containing 5 shops each	Covered area of one block 6500 SFT 7500 SFT each Covered area of one block 6200 SFT Shop size: 23.50 x 30.50		
2	Truck Stand along with cargo shed	28 Acres	429.3	Nearly complete
	Maximum trucks capacity: 500 Cargo Sheds	26 acres 47000 SFT		
3	Bus & Taxi stand along with departure and arrival sheds	19.4 Acres	377.8	Nearly complete
	Maximum Bus capacity: 300 Bus Arrival Shed Bus Departure buildings Maximum Taxi capacity: 200	13 acres 12,500 SFT Covered area of one block 14,500 SFT 8 acres		
	Other components			
	Dual Carriage Way & Storm Water Drain Mosque		119.1 22.0	Nearly Complete Awarded

Market Analysis

The following sections provide a comprehensive analysis of the trading landscape, focusing on the potential markets relevant to the Chaman Master Plan.

Afghanistan – Trade Potential

Pakistan has historically been one of Afghanistan's largest trading partners. The primary types of trade between Pakistan and Afghanistan are bilateral trade and transit trade. Alongside these formal avenues, there's a significant volume of undocumented and illegal trade, commonly referred to as smuggling. Smuggling accounts for a substantial portion of cross-border commerce and serves as a significant source of income for the residents of border settlements.

Afghanistan is one of the ten land-locked countries in Asia along with Mongolia, Nepal, Lao People's Democratic Republic, Bhutan, Kazakhstan, Kyrgyzstan, Turkmenistan, Tajikistan, and Uzbekistan.

As of 2022, Afghanistan was the 9th largest trade partner with Pakistan in terms of exports from Pakistan (total share in Pakistan's exports: 3.2%) worth around USD 988.9 million whereas Pakistan was the 3rd largest trade partner with Afghanistan in terms of imports to Afghanistan (total share in Afghanistan's imports: 13.1%%).

Pakistan's exports to Afghanistan are diverse, encompassing a wide array of products, including cereals, sugar and sugar confectionery, wheat, rice, milling products, mineral fuels, oils, distillation products, plaster, lime, cement, edible vegetables and roots, fruits and nuts, salt and sulfur, animal or vegetable fats and oils, plastics, pharmaceutical products, wood and charcoal, and iron and steel.

The Trade Development Authority of Pakistan (TADAP) estimates that the export potential to Afghanistan is around USD 4 billion, while Dr. Raza Khan, an expert on Afghanistan affairs, suggests that the real figure could be as high as USD 20 billion.

In terms of imports, imports from Afghanistan worth USD 957.9 million were made in 2022. Afghanistan's key exports to Pakistan include figs, grapes, almonds, onions, cumin seeds, apples, beans, cotton, and rough gemstones, providing a unique trade mix between the two countries. They also include other varieties of fruit and nuts, handwoven carpets, wool, hides and pelts and precious gems.

As of April 2024, bilateral trade between Pakistan and Afghanistan is currently valued at USD 522 million, with 70% of trade conducted via Lahore. Pharmaceuticals, rice, and auto parts are among the major exports from Lahore to Afghanistan.

The Afghanistan-Pakistan Transit Trade Agreement (APTTA), signed in 2010, aimed to streamline the movement of goods between the two countries. However, despite such agreements, the trade relationship continues to face obstacles such as:

1. Smuggling
2. Security issues
3. Border Unrest
4. Stricter border controls
5. Political instability
6. Changes in trade regulations

According to a Pakistan-Afghanistan Joint Chamber of Commerce survey, bilateral trade reached USD 2.5 billion in 2010. In 2020, bilateral trade stood at just 870 million USD. From 2010 to 2020, Pakistan's exports to

Afghanistan fell by 200%, while imports increased by 62%. In 2022-23, trade rebounded to reach USD 1.8 billion. Over the years, Iran and China overtook Pakistan in exports to Afghanistan while India shows a continuous rise in its exports to Afghanistan.

Top Importers from Pakistan (USD billion)		
1. USA	6.3	(20.1 %)
2. China	2.6	(8.2 %)
3. UK	2.0	(6.5 %)
4. Netherlands	1.8	(5.8 %)
5. Germany	1.8	(5.7 %)
6. UAE	1.5	(4.9 %)
7. Spain	1.4	(4.5 %)
8. Italy	1.2	(3.9 %)
9. Afghanistan	0.98	(3.2 %)
10. Bangladesh	0.85	(2.7 %)

Top Exporters to Pakistan (USD billion)		
07. Kuwait	3.1	(4.3 %)
08. Japan	1.7	(2.4 %)
09. Thailand	1.5	(2.0 %)
10. Brazil	1.4	(2.0 %)
11. Korea	1.3	(1.8 %)
12. South Africa	1.2	(1.7 %)
13. Malaysia	1.1	(1.5 %)
14. Morocco	1.0	(1.4 %)
15. Oman	0.98	(1.4%)
16. Afghanistan	0.96	(1.3%)

Source: ITC Trade Map

Following table shows the top exporters to Afghanistan with Pakistan ranking at number 3:

Sr.no	Country	Value in 2022 (USD million)	Share in value in Afghanistan's imports, % in 2022
1	Islamic Republic of Iran	1.65	21.8
2	UAE	1.22	16.2
3	Pakistan	0.99	13.1
4	Kazakhstan	0.98	12.9
5	China	0.55	7.3
6	Uzbekistan	0.53	6.9
7	India	0.48	6.4
8	Malaysia	0.36	4.7
9	Turkiye	0.27	3.6
10	Belgium	0.13	1.7

Source: ITC Trade Map

Following table shows the top items imported by Afghanistan from around the world:

AFGHANISTAN IMPORTS (Product wise)	2022	2018
------------------------------------	------	------

Sr.no	Description	Value (in billion USD)	Value (in billion USD)	CAGR
1	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral etc	0.887	0.970	-2.2%
2	Products of the milling industry; malt; starches; inulin; wheat gluten	0.859	0.777	2.5%
3	Animal, vegetable or microbial fats and oils and their cleavage products; prepared edible fats etc	0.584	0.415	8.9%
4	Cereals	0.397	0.295	7.7%
5	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television etc	0.387	0.269	9.5%
6	Tobacco and manufactured tobacco substitutes; products, whether or not containing nicotine etc	0.381	0.921	-19.8%
7	Pharmaceutical products	0.363	0.896	-20.2%
8	Plastics and articles thereof	0.266	0.116	23.1%
9	Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	0.233	0.368	-10.8%
10	Edible vegetables and certain roots and tubers	0.206	0.146	9.1%

Source: ITC Trade Map

In 2022, Pakistan exported USD 975 million to Afghanistan. The main products that Pakistan exported to Afghanistan are:

1. Rice (USD 176 million)
2. Packaged Medicaments (USD 88.3 million)
3. Other Vegetable Oils (USD 83.2 million)

During the last 19 years the exports of Pakistan to Afghanistan have increased at an annualized rate of 4.69%.

In 2022, the main products that Afghanistan exported to Pakistan were:

1. Coal Briquettes (USD 337 million)
2. Raw Cotton (USD 188 million)
3. Grapes (USD 57.5 million).

During the last 19 years the exports of Afghanistan to Pakistan have increased at an annualized rate of 19.3%.

Central Asia – Trade Potential

Pakistan's exports have historically been inclined towards western economies, China, and the Gulf Cooperation Council region. However, the country now seeks to explore new export markets including the Central Asian Republics (CARs) for the purpose of export diversification.

Central Asia boasts a combined GDP of over USD 400 billion and a population exceeding 70 million, offering a lucrative market for Pakistani goods.

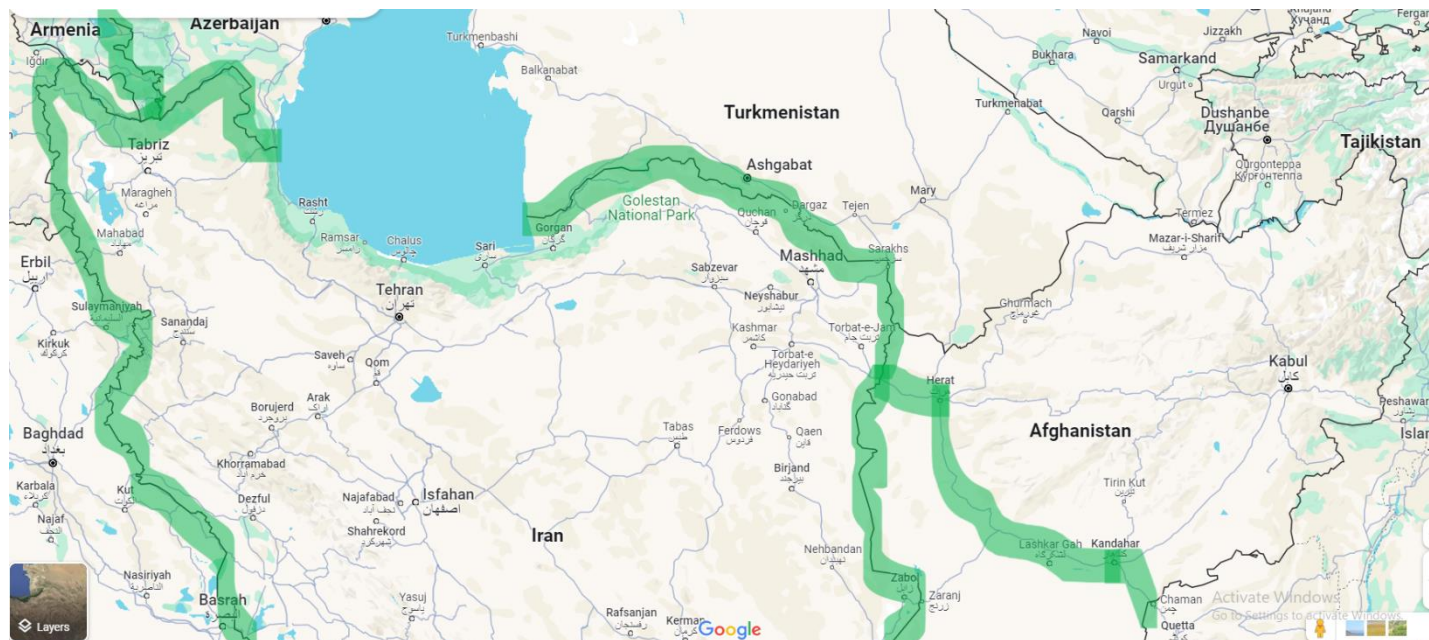
Pakistan also exports to Central Asia through Afghanistan, with most of this transit trade originating in Punjab and Lahore. Approximately 500,000 metric tons of fresh fruit are sent from Pakistan to Central Asia through Afghanistan. Pakistan's trade with the CARs has been facing upheavals, mainly due to continuous insecurity in Afghanistan, money exchange issues, banking and transaction problems, tariff issues.

Pakistan can expand its export portfolio beyond fresh fruit to include textiles, garments, pharmaceuticals, and engineering products, which are in high demand in the CARs.

Pakistan has comparative advantage in different products like cotton and cotton products, pharmaceuticals, sports items, surgical items, cement, sugar, IT and telecommunication.

Based on analysis of the Chaman trade route, following can be targeted in respect of the Chaman Master Plan:

1. Afghanistan through Kandahar route
2. Iran
3. Azerbaijan
4. Turkmenistan



Source: Google Maps

The trade potential between Central Asia and Pakistan, particularly through the Chaman route, is promising. However, significant challenges need to be addressed.

1. Improved Security: Enhancing regional security and border cooperation can create a more stable environment for trade.
2. Infrastructure Upgrade: Investing in upgrading the Chaman route's infrastructure, including roads, border facilities, and logistics systems, can facilitate higher trade volumes.
3. Streamlining Trade Processes: Simplifying visa and trade permit procedures can reduce bureaucratic burdens for businesses.
4. Financial Solutions: Exploring alternative banking and financial mechanisms to circumvent sanctions could be crucial, especially for Pakistani businesses.

Iran

Following table shows items imported by Iran from around the world:

Iran Overall Product Import			
Sr.no	Product label	Value imported in 2022 (USD Billion)	Annual growth in value between 2018-2022 (% p.a.)
1	Cereals (maize or corn, wheat, rice, barley)	8.49	19
2	Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof	7.54	0
3	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television	7.03	18
4	Commodities not elsewhere specified	3.23	13
5	Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	2.81	22
6	Animal, vegetable or microbial fats and oils and their cleavage products; prepared edible fats;	2.69	30
7	Organic chemicals	2.24	11
8	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal	2.11	9
9	Pharmaceutical products	1.95	8
10	Plastics and articles thereof	1.75	7

Iran has a strong oil and gas industry, while Pakistan focuses on textiles and agricultural products. This complementarity creates natural demand for each other's goods. Current trade volume between the two countries is well below its potential.

The main products that Pakistan exported to Iran in 2022 are:

1. Iron Pipes (USD 10,600)
2. Medical Instruments (USD 7,940)
3. Utility Meters (USD 3,750)

During the last 25 years the exports of Pakistan to Iran have decreased at an annualized rate of 24%, from USD 21M in 1997 to USD 22.3k in 2022.

During the latest fiscal year (FY 2023), Pakistan's goods exports Iran totalled just USD 28,000.

In 2022, Iran exported USD 762M to Pakistan. The main products that Iran exported to Pakistan were:

1. Petroleum Gas (USD 478 million)

2. Electricity (USD 48.5 million)
3. Petroleum Coke (USD 43.6 million)

During the last 25 years the exports of Iran to Pakistan have increased at an annualized rate of 13.9%, from USD 29.5 million in 1997 to USD 762 million in 2022.

Azerbaijan

Following table shows items imported by Azerbaijan from around the world:

Azerbaijan Product Import			
Sr.no	Product label	Value imported in 2022 (USD Billion)	Annual growth in value between 2018-2022 (% p.a.)
1	Nuclear reactors, boilers, machinery and mechanical appliances	1.78	0
2	Vehicles other than railway or tramway rolling stock	1.37	19
3	Mineral fuels, mineral oils and products of their distillation; bituminous substances	1.29	2
4	Electrical machinery and equipment, sound recorders and reproducers, television	1.11	7
5	Pharmaceutical products	0.67	25
6	Articles of iron or steel	0.60	-8
7	Cereals	0.52	15
8	Plastics and articles thereof	0.49	5
9	Iron and steel	0.45	2
10	Wood and articles of wood, wood charcoal	0.38	7

In 2022, Azerbaijan exported USD 8.88 million to Pakistan. The main products that Azerbaijan exported to Pakistan are:

1. Nitrogenous Fertilizers (USD 6.59 million)
2. Refined Petroleum (USD 1.07 million)
3. Raw Lead (USD 684,000)

During the last 26 years the exports of Azerbaijan to Pakistan have increased at an annualized rate of 25%, from USD 26,600 in 1996 to USD 8.88 million in 2022.

In 2022, Pakistan exported USD 32 million to Azerbaijan. The main products that Pakistan exported to Azerbaijan were:

1. Rice USD 5.86 million
2. Tropical Fruits USD 5.14 million
3. Potatoes USD 3.73 million

During the last 26 years the exports of Pakistan to Azerbaijan have increased at an annualized rate of 14.5%, from USD 935,000 in 1996 to USD 32 million in 2022.

Turkmenistan

Following table shows items imported by Turkmenistan from around the world:

Turkmenistan Product Import			
Sr.no	Product label	Value imported in 2022 (USD Billion)	Annual growth in value between 2018-2022 (% p.a.)
1	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television	1.18	52
2	Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof	0.78	7
3	Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	0.40	30
4	Articles of iron or steel	0.29	2
5	Plastics and articles thereof	0.18	5
6	Iron and steel	0.15	22
7	Pharmaceutical products	0.14	18
8	Cereals	0.13	30
9	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical	0.13	25
10	Furniture; bedding, mattresses, mattress supports, cushions and similar stuffed furnishings	0.94	16

In 2022, Pakistan exported USD 1.27 million to Turkmenistan. The main products that Pakistan exported to Turkmenistan are:

1. Soap (USD 410,000)
2. Hydrogen peroxide (USD 344,000)
3. Packaged Medicaments (USD 320,000).

During the last 23 years the exports of Pakistan to Turkmenistan have decreased at an annualized rate of 3.91%, from USD 3.19 million in 1999 to USD 1.27 million in 2022.

In 2022, Turkmenistan exported USD 8.77 million to Pakistan. The main products that Turkmenistan exported to Pakistan were:

1. Raw Cotton (USD 6.62 million)
2. Sheep Hides (USD 1.01 million)
3. Cotton Waste (USD 753,000).

During the last 23 years the exports of Turkmenistan to Pakistan have increased at an annualized rate of 1.67%, from USD 5.99 million in 1999 to USD 8.77 million in 2022.

Key Findings

Analysis of Trade Potential:

5. Afghanistan: Pakistan's largest trading partner in the region.

Opportunities: Red meat, rice, sugar, wheat, other dry goods, processed foods, pharmaceuticals, auto parts, cereals, wheat, rice, milling products, mineral fuels, oils, distillation products, plaster, lime, cement, edible vegetables and roots, fruits and nuts, salt and sulfur, animal or vegetable fats and oils, plastics, wood and charcoal, and iron and steel, figs, grapes, almonds, onions, cumin seeds, apples, beans, cotton, and gemstones.

Challenges: Smuggling, security issues, border unrest, political instability.

6. Iran: Strong complementarity due to differing economic focuses.

Opportunities: Potential for increased trade, but currently below potential. Needs exploration. Iron Pipes, Medical Instruments, Electrical equipment, cereals, red meat (particularly lamb and mutton), vegetable and oils.

Challenges: Complex political relations, sanctions on Iran.

7. Azerbaijan: Smaller market but potential for niche goods.

Opportunities: Specialty grains, unique dried fruits. Iron and steel, pharmaceutical products, raw lead.

Challenges: Geographical distance, competition.

8. Turkmenistan: Limited market size, potential for specific dry goods.

Opportunities: Specialty dried fruits, nuts, unique spices. Iron and steel, plastics, pharmaceutical products, soap, cereals and cotton.

Challenges: Geographical distance, competition.

Business Potential Analysis for Chaman Master Plan

The success of Chaman Master Plan's conceptual framework hinges on key approvals. The following section analyzes each component of the plan to identify areas of opportunity and ensure the maximum utilization of resources, infrastructure, and partnerships. This exploration aims to uncover the strategies and tactics necessary for the plan's effective implementation and sustainable growth.

It also delves into the critical success factors that will drive the project's success.

Why Invest in Chaman?

- **Strategic Location:** The Chaman border is strategically located, serving as a gateway for trade not only between Pakistan and Afghanistan but also facilitating trade with Central Asian countries. Its proximity to major cities like Quetta in Pakistan and Kandahar in Afghanistan enhances its significance.
- **Local Population of Traders:** The fact that the local population in Chaman consists mainly of traders signifies a built-in market and understanding of trade dynamics. Businesses investing in the Chaman border master plan can leverage this local expertise and market knowledge to establish partnerships, distribution channels, and customer networks more efficiently.
- **Bulk Warehousing Close to the Border:** Businesses involved in import-export activities can benefit from establishing bulk warehousing facilities close to the border. This proximity streamlines logistics operations, reduces ordering and transportation costs, and enables faster clearance of goods through customs, enhancing overall efficiency and competitiveness.
- **Procurement from Multiple Sources:** Chaman's strategic location not only allows businesses to export goods to Afghanistan but also provides access to diverse procurement sources. Businesses can procure raw materials, merchandise, Fruits and vegetables, Grains and pulses as well as Pakistani (local and industrial products) and from Afghanistan, and beyond, optimizing supply chain resilience and cost-effectiveness. Businesses can source a diverse range of products in bulk from various regions, optimizing procurement and reducing costs.
- **Value-Added Processing:** Integrating light-processing facilities within the proposed warehousing complex allows businesses to enhance the value of their products before export. This could involve activities like sorting, grading, packaging, and labeling, catering to specific Afghan and Central Asian market preferences.
- **Reduced Transit Time and Costs:** Compared to alternative routes, such as sea routes or other land routes, using the Chaman border can significantly reduce transit time and costs for exporters and importers. This is particularly advantageous for items traded through Chaman border, perishable goods or time-sensitive shipments. By positioning the center closer to target markets, businesses can reduce transit times, expedite order processing, and enhance overall customer satisfaction.
- **Cultural Familiarity:** Many exporters and importers may already have established networks and relationships with counterparts on the other side of the Chaman border. This cultural familiarity can help in negotiating deals, understanding market preferences, and building trust, leading to more successful trade partnerships.
- **Potential for Cross-Border Investments:** Utilizing the Chaman border for trade can also open up opportunities for cross-border investments. Exporters and importers may explore investing in distribution centers, warehouses, or manufacturing facilities near the border to optimize supply chain operations and capitalize on market demand.
- **Government Incentives and Support:** If the Chaman border master plan is supported by government incentives and policies aimed at promoting trade and economic development, businesses may receive

various forms of support, including tax incentives, subsidies, and regulatory assistance, fostering a conducive investment environment.

Taxi and Bus Stand Component

- Current Situation:
 1. Buses:
 - i. 25 companies operating, each with a minimum of 5 buses (total 125 buses).
 - ii. Current parking capacity: 300
 2. Taxis:
 - i. Daily inflow/outflow of 800 taxis.
 - ii. Current parking capacity: 200
- Challenges:
 1. Underdeveloped and potentially congested bus and taxi terminals outside the Master Plan.
 2. Lack of integrated facilities for passenger transportation.
- Proposed Business Case Use:
 1. This model proposes the development of a designated taxi and bus stand within the Chaman Master Plan to:
 - i. Improve Passenger Experience: Provide secure and well-maintained waiting areas, restrooms, and refreshment options for passengers.
 - ii. Enhanced Efficiency: Streamline passenger boarding and disembarking processes.
 - iii. Integration with Trade Hub: Facilitate easy access to the trade and logistics hub for cargo movement.
 2. Services Offered:
 - i. Designated Parking: Secure parking spaces for buses and taxis, with differentiated fees based on vehicle size and duration of stay.
 - ii. Passenger Amenities: Clean waiting areas, restrooms, prayer rooms, and refreshment options for passengers.
 - iii. Ticketing Counters: Can integrate ticketing counters for major bus companies operating in the region.
 - iv. Information and Other Services: Provide travel information, currency exchange, and other relevant services for passengers.
 - v. Security: Implement robust security measures, including CCTV surveillance and security personnel.
 3. Potential Revenue Streams:
 - i. Parking Fees: Rental income for parking
 - ii. Rental Income: Lease space to vendors for bus offices, parking, refreshment stalls and convenience stores within the terminal.
 - iii. Service Fees: Can charge commission on ticket sales for bus companies using the ticketing counters.
 - iv. User Fees: Potential user fees for specific services like luggage storage or porter services.
 4. Optimizing Capacity:
 - i. Shared Space: Strategically allocate space for bus and taxi parking, passenger amenities, and vendor areas to ensure efficient utilization of the entire facility.
 - ii. Flexible Operations: Adapt services and space allocation based on seasonal variations in passenger traffic.
 5. Integration with Master Plan:

- i. Improved Connectivity: Facilitate seamless passenger movement between the taxi and bus stand, cargo handling areas.
 - ii. Security Integration: Integrate security measures of the taxi and bus stand with the overall security plan of the Master Plan.
- 6. Government Support and Considerations:
 - i. Relocation of Existing Stands: Collaboration with local and district governments is crucial for relocating existing bus and taxi stands to the Master Plan site. This might involve incentives for transportation companies and drivers to ensure a smooth transition.
 - ii. Public Awareness Campaigns: Public awareness campaigns are necessary to inform passengers and transportation providers about the new location and benefits of the integrated taxi and bus stand.
 - iii. Security Measures: Robust security measures are essential to ensure passenger safety and security within the terminal.
- 7. Potential First Mover Advantage:
 - i. The taxi and bus stand component, compared to other aspects of the Master Plan, could be implemented relatively quickly with strong government support. This can:
 - a. Generate initial revenue streams to support further development of the Master Plan.
 - b. Showcase the benefits of the Master Plan and attract investment for other components.
 - c. Demonstrate the effectiveness of Public-Private Partnership (PPP) model for the overall project.

Truck Stand (as well as Cargo Shed) Component

- Current Situation:
 - 1. Average daily truck inflow/outflow: 130
 - 2. Truck stand capacity: 500
 - 3. Cargo shed space: 47,000 sq ft
- Potential challenges:
 - 1. Low truck stand occupancy rate (26% based on historical data estimates)
 - 2. Underutilized cargo shed space
- Proposed Business Case Use: This model aims to optimize truck stand and cargo shed capacity by transforming the facility into an integrated trade and logistics hub catering to regional trade needs.
 - 1. Services Offered:
 - i. Truck Parking and Rest Area: Consider offering secure parking with basic amenities (restrooms, refreshment shops) for incoming and outgoing trucks.
 - ii. Consolidation and Deconsolidation Services: Facilitate the consolidation of smaller shipments into full truckloads for export and the deconsolidation of imported full truckloads into smaller shipments for regional distribution. This service can utilize underutilized cargo shed space and generate additional revenue.
 - iii. Customs Clearance Assistance: Partner with customs brokers to provide on-site assistance, streamlining the clearance process and reducing delays.
 - iv. Warehousing: Offer short-term warehousing solutions for temperature-sensitive goods or those awaiting onward distribution. Explore the possibility of repurposing existing fruit and vegetable shops within the truck stand complex for warehousing solutions.

- v. **Truck Maintenance and Repair:** Partner with local mechanics to establish a basic truck maintenance and repair facility within the truck stand.
- 2. **Potential Revenue Streams:**
 - i. **Parking Fees:** Charge rental income from truck parking facility.
 - ii. **Consolidation/Deconsolidation Fees:** Can implement a fee structure for consolidation and deconsolidation services based on cargo volume and handling complexity.
 - iii. **Value-Added Service Fees:** Can charge for customs assistance, warehousing, and truck maintenance services based on service utilization.
- 3. **Optimizing Capacity:**
 - i. **Shared Space:** Strategically allocate space for parking, cargo handling, and other services to ensure efficient utilization of the entire facility (truck stand and cargo sheds).
 - ii. **Flexible Operations:** Adapt services and space allocation based on seasonal variations in truck traffic and cargo flow.
- 4. **Integration with Master Plan:**
 - iii. **Cold Chain Infrastructure:** Leverage existing (or planned further extended) cold chain infrastructure for perishable goods storage and transportation.
 - iv. **Improved Logistics Network:** Partner with regional distribution companies to create an efficient logistics network for efficient movement of goods beyond the border.
 - v. **TIR System Integration:** If a TIR system is established, the truck stand can position itself as a key processing point for sealed containers (can be as an extension or in collaboration to the Border Crossing Terminal Project), further enhancing its role as a trade and logistics hub.

Fruit & Vegetables Shops (as well as Cold Storage) Component

Market Viability Concerns:

Existing Competition: A well-established fruit and vegetable mandi already exists within the city center, creating significant competition for a new market located 5 km away from the main city.

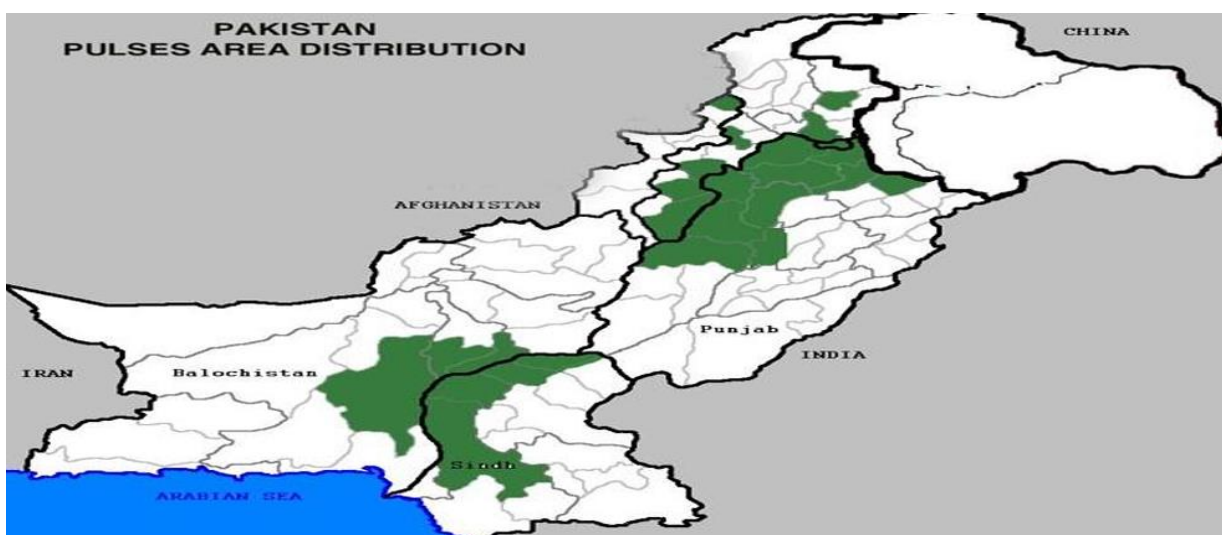
Duplication of Efforts: Another fruit and vegetable market is also under development, further diminishing the need for an additional market within the Master Plan.

Given the current market saturation and distance from the city center, dedicating space solely for fruit and vegetable shops and auction sheds might not be the most strategic use of the designated area within the Chaman Master Plan. We propose to utilize the Chaman Master Plan to develop a multipurpose facility encompassing warehousing, light-processing capabilities, and functioning as a regional distribution center.

This sub-section explores alternative activities with higher growth potential, aligning with the overall strategy of identifying and prioritizing high-growth sectors for the project.

1. Dry Goods Warehousing, Light Processing and Distribution Center

I. Pulses, Lentils, and Beans



Current Situation:

- Pulses are traditional foods in Pakistan among its population of 240 million. The pulses consumed in Pakistan are chickpeas, mung beans, mash beans and lentils. The country primarily imports pulses from Australia, Canada, the USA, the African region, and Myanmar through Port Qasim.

S.No	Product	Annual Demand in 2023 "Tonnes"	Production in 2023 Annual Demand in 2023 "Tonnes"	Production in 2022 Annual Demand in 2023 "Tonnes"	% Changes
1	Gram	700,000	238,000	316,000	-24.7%
2	Masoor	150,000	3,800	3,900	-2.6%
3	Moong		135,000	264,000	-49.0%
4	Mash	90,000	4,200	6,100	-31.0%

- With output stagnant, and consumption continuing to grow, Pakistan remains a net pulse importer, whereas pulse exports are banned. Imports are forecast to reach over 1 million tons in the coming years.

Business Case for Chaman:

- With operational costs lower than in major cities due to presence of infrastructure and availability of cheap labor, Chaman offers businesses a cost-effective location to set up storage and warehousing and potentially light processing facilities, focusing on pulse grading, splitting, and packaging.
- Import shipments from Port Qasim as well as locally produced pulses in eastern Balochistan belt can bypass the congestion and delays often associated with busier routes, allowing for faster transit times and reduced transportation costs.

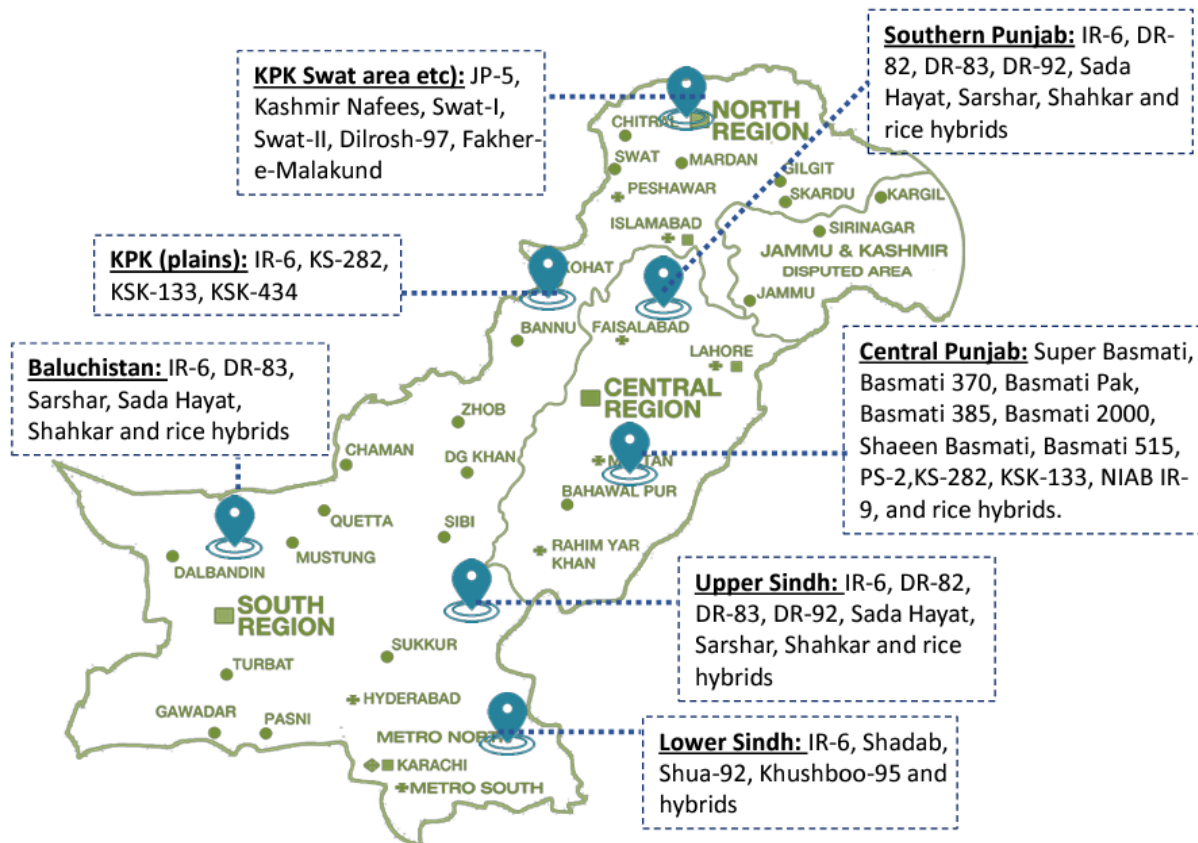
- This efficient connectivity, combined with Chaman's road links, facilitates smooth distribution of pulses to key markets in Punjab and Khyber Pakhtunkhwa (KP). The growing demand, lower congestion and overall operational costs contribute to a compelling case for investing in Chaman's infrastructure.
- As demand for pulses grows, consumers are seeking more processed and convenient options beyond bulk, unprocessed pulses. This shift in consumer behavior, driven by changing lifestyles and the rise of modern retail outlets, creates opportunities for pulse value addition in Chaman. By focusing on grading, processing, and marketing, Chaman can become a hub for producing split pulses (dall), whole pulses, and pulse-based snacks. The flexibility to create these further-processed products aligns with evolving consumer preferences, emphasizing health and nutrition.

II. Rice

Current Situation:

- Rice is the second most important staple food in Pakistan and Afghanistan after wheat. It is the 2nd largest exportable commodity after cotton and cotton products. Pakistan is a significant regional producer and an essential international rice exporter.
- Pakistan is one of the lowest consumers of rice in South-Asia. The average local consumption of rice in Pakistan hovers around 3.1-3.2 million metric tons whereas production hovers around 8.5-9 million tons.
- As of January 2024, Pakistan currently exports USD 1.4 billion worth of rice globally, while the world's total rice imports amount to USD 19.2 billion. Notably, semi-milled or wholly milled rice presents a substantial opportunity for additional exports worth USD 715.3 million.
- Rice production consists of two major varieties: coarse and non-coarse types. The coarse varieties include irri-6, irri-9 etc. While the non-coarse varieties consist of Basmati rice such as Basmati 370, Super Basmati, etc. IRRI is the most exported category of rice in Pakistan, followed by Basmati and broken rice.
- The coarse varieties are mainly grown in Sindh while the non-coarse varieties are grown in Punjab.
- Punjab is the capital of rice production in Pakistan. Punjab, being the agrarian region is suitable for production of water intensive crop like rice. The second most rice producing region in Pakistan is Sindh, followed by Balochistan and KPK.
- The major rice producing districts in Punjab include Gujranwala, Sheikhupura, Okara, Hafizabad, Jhang, Sialkot, Bhawalnagar, Nankana Sahib, Pakpattan etc.
- The major rice producing regions in Sindh include Badin, Larkana, Shikarpur, Jacobabad, Kashmore, Kambar Shahdad kot, Thatta, Dadu and TM Khan.
- Kachhi, Chaghai, Jaffarabad, Awaran and Panjgoor are major rice producing districts in Balochistan.

Geographical Distribution of Types of Rice in Pakistan



- Without on-farm storage, paddy is typically sent to stockists or aggregators with dedicated facilities for storage. The major stakeholders in this value chain are commission agents and wholesalers, who drive the entire process. These agents are also key financiers for small and medium-sized growers, providing the capital they need to operate. After the paddy is dried, it is moved up the value chain to processing facilities.
- Rice millers in Pakistan play a central role in the value chain by handling tasks like cleaning, drying, husking, and polishing rice. There are many medium-scale millers (about 1,388), but only a few large-scale ones, mainly located in Punjab and Sindh, such as Guard Rice in Lahore, Al-Asad in Karachi, and Asif Rice Mill in Sindh. Millers obtain raw materials domestically but import milling machinery from countries like China. Rice mills require significant capital investment and skilled labor to operate the complex machinery.
- Paddy reaches millers through two primary channels. The direct channel involves millers purchasing paddy directly from farmers, allowing them to engage in the cultivation process, offer advice, and link farmers to yield-enhancing services. The indirect channel, which is more common, involves intermediaries or wholesalers. These wholesalers buy paddy from farmers and sell it to millers, typically through makeshift wholesale markets, or "mandis." Millers process the paddy into various final products like husked rice, parboiled rice, and wholly or semi-milled rice, which are then distributed to domestic and international markets. In this system, wholesalers and commission agents are highly influential, often determining the price and quantity of rice being traded in the local market.

Business Case for Chaman:

- Stiff competition from Indian Basmati exports in the EU and Middle East markets, and India's strong position as the world's largest rice exporter, makes it crucial for Pakistan to explore other regions for its rice exports. This sets the stage for Chaman to emerge as a key hub for rice storage and processing, with a focus on value addition for exports to neighboring countries like Afghanistan and Iran.
- Afghanistan's rice imports have been growing at an average annual rate of 11% over the past five years, with nearly 100% of its rice sourced from Pakistan.
- Iran, the world's second-largest rice importer, has seen its imports from Pakistan grow at a rate of 19%, in contrast to a negative 14% growth in imports from India. This rapid growth in rice imports from Pakistan indicates a strong preference for Pakistani rice in these markets, presenting a significant opportunity for further expansion. Furthermore, rice remains the number one item exported through Chaman border (178,737 MTs per annum).
- Chaman can play a central role in the rice value chain. By serving as a hub for warehousing produce and sourcing rice from millers across Pakistan at a location having strategic access to these markets, especially from Sindh, Balochistan, and the western parts of Punjab, Chaman can offer warehousing and additional processing services, including polishing, fortification, flavoring, and seasoning. This value addition can enhance the quality and appeal of rice products, making them more attractive to international buyers.

III. Spices

Current Situation:

- Spice industry in Pakistan is an agricultural commodity based, high demand, and growth-oriented sector. Currently, the target market for Pakistani Spice Mixes is the Pakistani and North Indian diaspora in the major markets of the West and the Middle East.
- The sector has been split into packed cum branded and unpacked cum unbranded spices. The packed spices generally tend to be wholesome and processed in standardized fashion. On the other hand, the unpacked/open/loose spices generally tend to be unwholesome, substandardized, and adulterated that cause serious ailments and health hazards.
- Areas producing chillies in abundance include Thar, Mithi and Sukkur in Sindh. Fresh coriander seeds, black cumin and turmeric are produced in Punjab. Turmeric is a tropical perennial plant and is cultivated mainly in provinces of Punjab and KPK in Pakistan.

Business Case for Chaman:

- Spice consumption in Afghanistan is expected to reach 15 thousand metric tons by 2026, this is an increase of 3.6% year on year since 2021, when the country reached 12 thousand metric tons. Whereas, production is expected to decrease by 1.5% YoY compared to 2021.
- Afghanistan has a high demand for spices like turmeric, cumin, coriander, black pepper and cardamom, with imports reaching USD 23 million for cumin seeds alone in 2022.
- By establishing itself as a spice storage and distribution hub, Chaman can efficiently meet Afghan demand for high-quality spices.
- Traditionally, Afghan spice markets rely heavily on unpackaged spices, raising concerns about quality and consistency. Chaman can focus on storing and distributing pre-packaged, branded spices from Pakistan. This ensures consistent quality, safety, and transparency for Afghan consumers.
- The spice industry in Pakistan is characterized by two main types of products: packed/branded and unpacked/unbranded spices. Chaman's focus on packed and branded spices can address concerns about quality and safety, offering consumers a more standardized product. The processing infrastructure in

Chaman can support value-added activities, such as creating pre-made spice blends (like garam masala and curry powder) and offering single-origin specialty spices in airtight packaging to maintain freshness.

- Chaman's proximity to Afghanistan and Central Asian markets can help ensure faster delivery, minimizing spoilage and guaranteeing fresh, high-quality spices for Afghan consumers.
- Chaman can act as a central storage facility, streamlining the distribution process for Pakistani spices. Bulk quantities can be efficiently transported from Sindh and Punjab to Chaman for storage and then distributed in smaller quantities to Afghan importers and retailers. This reduces transportation costs (Transporting larger quantities of spices in bulk is generally cheaper per unit than transporting smaller individual shipments directly to Afghan importers) and simplifies logistics for both Pakistani exporters and Afghan businesses.
- With a central storage facility, businesses can also have better visibility into their spice inventory. This allows for more efficient stock management.

IV. Nuts and Dried Fruits (sourced strategically)

Current Situation:

- Afghanistan is the number one exporter of dry fruits into Pakistan with major exports being raisins (USD 60 million and 62,205 tons in 2022) and dried apricots (USD 6.1 million and 19,748 tons) followed by almonds, walnuts, dates, figs, etc.
- Pakistan also produces various kinds of dried fruits and nuts, e.g., dried Apricots, Pears, Plums, Almonds, and Walnuts etc.
- In Pakistan, the dried fruits and nuts are mainly grown in Balochistan, Khyber Pakhtunkhwa, and Gilgit-Baltistan. Quetta, Pishin, Zhob, Kalat, and Loralai in Balochistan; Peshawar, Swat, Mardan, Bunir, and Chitral in Khyber Pakhtunkhwa; and Hunza, Skardu, Shigar, Roundu, Khaplu, and Baltistan in Gilgit-Baltistan, are the main dried fruits and nuts producing districts of the country.
- Dried fruits are widely used by the confectionery, baking, and sweets industries. These industries use dried fruits and nuts in various sauces, soups, marinades, garnishes, puddings, chocolates, bakery items and food for infants and children. The costs associated with packaging, processing, and transportation also contribute to dry fruit prices.
- Pakistan has been exporting dried fruits and nuts in a sizeable quantity. The dried fruits and nuts, exported from the country is of premium quality as they are selected, graded, processed and packaged very carefully in order to meet the requirement of the customers in various countries, and in accordance with international standards.
- The global Dry Fruit market size was valued at USD 9713.57 million in 2022 and is expected to expand at a CAGR of 6.94% during the forecast period, reaching USD 14529.36 million by 2028. Top world importers include US, China, Germany, UK, France, Canada, Russia.

Business Case for Chaman:

- Given Afghanistan's role as the number one exporter of dry fruits to Pakistan, Chaman can play a crucial role in the regional supply chain, serving both local distribution needs and as a conduit for exports to global markets via Port Qasim.
- Raw materials can be warehoused, and processed closer to their point of origin. This proximity reduces the need for long-haul transport to processing centers in other parts of Pakistan, thereby lowering logistics costs.
- Chaman's dry fruit processing center can focus on value-added activities like cleaning, grading, roasting, and packaging. This value addition ensures that the dry fruits meet international quality standards,

which is critical for export markets. The emphasis on quality control, coupled with airtight packaging, guarantees product freshness and helps maintain premium pricing in domestic and international markets.

- Chaman's location also provides access to key dry fruit-producing regions, including Quetta, Pishin, Zhob, Kalat, and Loralai. Chaman can efficiently collect dry fruits from these areas and prepare them for local distribution and export.

2. Cold Chain Infrastructure and Perishables Processing Zone

Current Situation in Afghanistan:

- The agriculture sector plays a vital role in Afghanistan's economy, contributing up to 40% of the GDP and providing livelihoods for over 80% of the population. While wheat remains the primary crop, horticultural crops serve as significant sources of additional income for farmers. However, a critical challenge facing this sector is the shortage of cold storage facilities.
- During the peak season, agricultural products flood the market, leading to a sharp decline in prices and making it difficult for farmers to cover their expenses. Cold storage facilities address this issue by enabling farmers to store their products and sell them out of season at significantly higher prices, often ranging from 2 to 5 times the seasonal rates.
- Comparatively, Afghanistan's area under refrigeration stands at a mere 24,000 square meters, starkly contrasting with India's extensive 131 million square meters. Presently, Afghanistan hosts a total of 3,164 cold storages, with an overall capacity exceeding 120,000 metric tons, representing a cumulative investment of USD 35 million. Impressively, 92% of these cold storage units, totaling 2,923, remain active, serving as crucial infrastructure for preserving agricultural produce.
- Afghanistan faces a substantial problem of agricultural wastage, with approximately 20% to 40% of agro-products lost annually, notably comprising 30% of fresh fruit and 20% of fresh vegetables.

Current Situation in Pakistan:

- Pakistan's agriculture sector harbors vast potential for exporting fruits and vegetables, yet logistical inadequacies inflate trade costs, undermining the competitiveness of Pakistani produce. These challenges result in substantial physical and quality losses for perishable goods.
- Reports indicate prevalent inefficiencies in existing cold storage units due to outdated technology, exacerbating spoilage issues. Furthermore, the absence of adequate warehouse and cold storage facilities at major border points hinders export flow, leading to domestic sales or rapid discard of fresh produce.
- Pakistan's dismal ranking of 122 out of 160 economies in the World Bank's Logistics Performance Index underscores the severity of its logistical hurdles.
- Shifting consumer preferences toward organic produce underscore the urgent need for substantial investments in post-harvest services and temperature-controlled storage.
- Cold storage infrastructure plays a pivotal role in preventing spoilage of perishable commodities like fruits and vegetables, ensuring availability off-season and enabling farmers to avoid selling produce at throwaway prices.
- Without cold storage, fruits and vegetables deteriorate rapidly, resulting in significant wastage, estimated to range from 10% to an alarming 50% of total food production in Pakistan.
- According to the Ministry of National Food Security & Research, Pakistan loses a staggering 26% of its food annually or 19.6 million metric tons, valued at USD 4 billion. Specific crop losses, such as dates, are also notable, with up to 80% of the crop damaged during adverse weather conditions.

- Given that agriculture and SME sectors collectively contribute 62.9% to Pakistan's GDP, with agriculture alone constituting 22.9%, investing in cold storage infrastructure presents a significant economic opportunity.
- In Pakistan, the inadequacy of wheat storage infrastructure is glaring, with a total capacity of only 11.52 million metric tons, covering just 41.2% of the wheat produced in 2023. Post-harvest losses for rice and maize compound this issue, amounting to 16% and 13% respectively, due to various factors including storage, transportation, and pilferage.
- Calculations reveal a significant storage demand gap of 18.9 million metric tons, distributed as 16.1 million metric tons for wheat, 1.4 million metric tons for rice, and 1.36 million metric tons for maize. In addition, with potato production reaching 8.3 million metric tons annually and a cumulative production of fruits and vegetables at 2.9 million metric tons, there exists an opportunity gap of 2.8 million metric tons for cold storage facilities, assuming only 25% of these crops require storage.
- Currently, Pakistan boasts over 555 identified cold storage units with a combined capacity of about 900,000 metric tons. However, a feasibility study by the Government of Punjab suggests a need for substantial expansion, with an estimated requirement of 54.9 million square yards of new storage space for grains and 5.5 million square yards for cold storage of potatoes, fruits, and vegetables.
- Addressing these storage deficiencies is critical not only for reducing post-harvest losses but also for enhancing the efficiency and competitiveness of Pakistan's agricultural sector on both domestic and international fronts.

Business Case for Chaman:

- Investing in cold storage infrastructure at the Chaman border offers a multitude of benefits for Afghanistan and Pakistan. Positioned as a vital trade nexus, Chaman facilitates the import and can potentially offer re-export of high-demand fruits such as pomegranates, grapes, and apples, providing a strategic advantage for both nations. By strategically reducing post-harvest losses and enhancing export competitiveness, the cold storage facilities at Chaman can catalyze economic growth in the region.
- The strategic location of Chaman enables efficient management of imported Afghan produce and enhances the storage capacity of Pakistan, ensuring consistent availability of fresh produce and bolstering food security. Furthermore, the enhanced storage capabilities empower Pakistan to diversify its exports by re-exporting Afghan produce to Afghanistan and additional markets, thereby fostering increased trade opportunities and revenue streams.
- Beyond trade facilitation, the cold chain infrastructure at Chaman can enable value addition through processing fruits and vegetables, generating additional income for farmers and creating employment opportunities on both sides of the border. By promoting regional economic integration, reducing food wastage, and ensuring a reliable supply of fresh produce, the Chaman cold chain infrastructure emerges as a transformative investment with far-reaching economic benefits for Afghanistan, Pakistan, and the broader region.

Meat

- Pakistan's meat industry stands as a significant player globally, ranking 11th in poultry production and yielding 5.25 million tons of meat in 2022, encompassing various types including beef, mutton, poultry, camel, and goat. Balochistan contributes approximately 10% to this national figure, primarily through extensive cattle and goat farming. However, the sector faces challenges such as

limited processing infrastructure and underutilization of resources, resulting in only 2% of the meat being exported, mostly as fresh carcasses.

- The Meat Exporters Association of Pakistan highlights a rising demand in GCC markets for premium meat products, including chilled, vacuum-packed, frozen, and competitively priced varieties. Presently, Pakistan primarily exports fresh and chilled quartered carcasses to GCC nations via air cargo, incurring high freight charges. This dependency on GCC markets presents vulnerabilities, underscoring the need for diversification towards neighboring countries such as Afghanistan.
- Afghanistan has demonstrated a significant uptick in meat imports, reaching USD 11.1 million in 2022. Historically, Afghanistan has heavily relied on livestock imports from China due to limited processing infrastructure. Chaman's proximity to Afghanistan offers a strategic advantage for Pakistani meat products, facilitating efficient transportation and bolstering market competitiveness.

Potential:

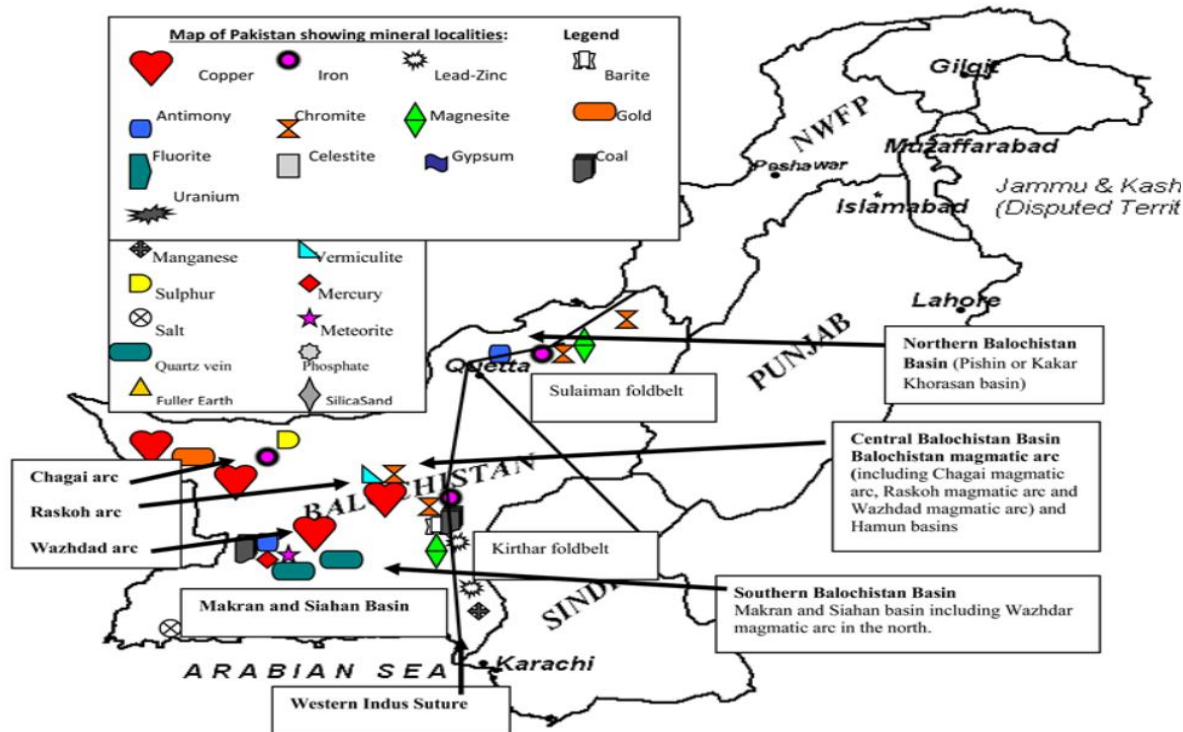
- Estimates from the 2017-18 Punjab Livestock Census suggest that Pakistan has the potential to produce one million tons of beef from approximately 7-8 million young cattle and buffalo male calves in the supply chain. Despite this, meat exports accounted for only around 80,000 tons in 2021-22, indicating significant underutilized export potential in both production and processing segments of the meat value chain.
- Balochistan boasts a significant potential in the realm of livestock, as evidenced by the 2019 census which tallied 5.29 million cattle, 16.14 million sheep, 16.42 million goats, 1.09 million buffaloes, 0.46 million camels, 0.059973 million horses, and 8.22 million poultry within its borders. This thriving livestock sector is a cornerstone of the province's economy, contributing a substantial PKR 170 billion to its GDP. Despite possessing 40 million high-quality livestock heads, representing 40% of Pakistan's total, Balochistan's contribution to the nation's meat production stands at only 10%, leaving a significant gap of 0.7 million tons annually.
- The untapped potential within Balochistan's livestock industry presents a compelling opportunity for growth and development. Balochistan, with its extensive rangelands and favorable conditions, holds a comparative advantage in beef and mutton production.
- They also highlight the potential of indigenous breeds such as the Balki and Damani sheep in KPK, along with the Bhag-Nari cattle in Balochistan and Sindh. The province's districts such as Nasirabad, Jafarabad, Musakhel, Qilasaifulla, and Loralai are rich in livestock, particularly Bhag-Nari cattle and Balki and Damani sheep.
- Around 93% area of the province comprises rangelands, out of which 28% is considered fair to good for livestock production. Hence, barring some portions of upper and lower highlands in north-eastern part of the province having best ranges which support 76% of livestock, the southern plains with big land mass have the poorest ranges supporting only 24% livestock population.
- Additionally, Punjab, Sindh, and Khyber Pakhtunkhwa (KP) offer significant potential for meat production. Lahore, Bahawalpur and Multan Mandi's are the main source of supply for meat exporters. Punjab, known for its favorable geographic conditions and abundant fodder and water availability, is suitable for large ruminants like buffaloes and cattle. Sindh excels in camel production, while KP demonstrates efficiency in mutton and chicken production.
- In Punjab, sheep farming thrives, with breeds like Bucchi, Lohi, Thalli, and Salt Range making significant contributions to the sector. Similarly, Punjab boasts notable goat breeds such as Beetal, Dera Din Panah, and Teddy. Moving to Sindh, sheep breeds like Dumbi, Kachhi, and Kooka are prominent, alongside goat breeds like Barbari and Kamori. KP hosts sheep breeds including Balkhi,

Damani, and Kaghani, while goat breeds like Kaghani and Jatal are also prevalent. In Balochistan, sheep breeds like Baluchi, Bibrik, Harnai, and Rakhsani are well-suited to the rugged terrain, while goat breeds like Khurassani, Lehri, and Pahari thrive in the region's diverse landscapes.

Business Case for Chaman:

- Establishing a meat processing and export zone at Chaman presents a strategic opportunity to capitalize on the strengths of all provinces. By integrating livestock sourcing from different regions, Chaman can ensure a steady supply of diverse meat products for processing and export.
- State-of-the-art abattoirs equipped with advanced technology can process meat sourced from Punjab, Sindh, KP, and Balochistan, ensuring high-quality products for both domestic consumption and export.
- Moreover, establishing quarantine zones for animal exports and poultry hatching zones in Chaman offer additional opportunities. This integrated approach unlocks Pakistan's true meat potential, stimulates economic growth, and enhances the country's competitiveness in the global meat market.

3. Mineral Processing and Trading Zone



Current Situation:

- Balochistan possesses immense natural resources, including mineral reserves estimated at USD1 trillion. Coal, sulfur, chromite, iron ore, barite, marble, quartzite, and limestone are all abundant in the province.
 - a. Copper and Gold: Reko Diq in Balochistan has about 5.87 billion tons of copper and 42 million ounces of gold, while Saindak holds 412 million tons of copper.
 - b. Iron Ore: Balochistan has an estimated 200 million tons of iron ore reserves, with about 75 million tons in the Chagai districts of Pachin Koh, Chigendik, and Chilgazi.

- c. Chromite: Balochistan is one of the biggest producers of chromite, producing over 90% of Pakistan's output, with approximately half a million tons annually from the Khuzdar-Pishin and Muslim Bagh-Killa Saifullah districts.
- d. Marble: Chaghi and nearby areas contain abundant onyx marble, with additional deposits at Julil (10 million tons), Mashkicha (12 million tons), and Butuk (15 million tons).
- e. Sulfur: The sulfur reserves at Koh-i-Sultan, in the Chaghi area, are estimated to be 50 million tons.
- f. Titanium: Titanium has been discovered in Ziarat, with further exploration encouraged.
- g. Gypsum: The gypsum deposits in Balochistan are abundant, particularly in Sibi, Barkan, Kohlu, and Loralai.
- h. Nickel: Muslim Bagh and Zhob districts contain nickel ore with a concentration of 0.85%.
- i. Coal: Balochistan has an estimated 185 billion tons of coal reserves, with key locations including Degari, Sinjidi, Mach, Pir Ismael, Ziarat, Duki, and Chamalang.

Business Case for Chaman:

- Chaman has the potential to become a key hub for mineral processing and trading, given Balochistan's rich mineral resources and Chaman's strategic proximity to the northern and central Balochistan basin, the Chagai Arc, and the Ras Koh Arc.
- Compared to major cities, Chaman is much closer to significant mining sites, allowing for more efficient and cost-effective processing. The shorter transportation distances could significantly reduce costs, a critical factor in the total cost of mineral processing.
- The lack of adequate processing facilities in Balochistan (with first mineral processing project of the province being initiated in 2023 for fluorite processing) has led to Pakistan exporting raw minerals with minimal value addition, resulting in lost revenue and higher transportation costs. Establishing a processing and trading zone in Chaman can address this issue by focusing on value addition near the source.
- By providing enhanced facilities, Chaman can attract both domestic and foreign direct investment (FDI), leading to job creation and economic growth. Products processed in Chaman can then be exported to international markets like China as well as Afghanistan that lacks processing infrastructure but significant mineral resources (1,400 mineral fields, containing barite, chromite, coal, copper, gold, iron ore, lead, natural gas, petroleum, precious and semi-precious stones, salt, sulfur, lithium, talc, and zinc, among many other minerals), boosting Pakistan's export revenue while reducing its reliance on raw mineral exports. This strategic approach not only benefits the local economy but also strengthens Pakistan's competitiveness in the global minerals market.
- Chaman could house copper processing plants for materials from Reko Diq and Saindak, chromite processing units for deposits in Khuzdar and Muslim Bagh, marble-cutting facilities for onyx marble from Chaghi, and sulfur processing units for sulfur from Koh-i-Sultan.
- However, the implementation of such projects would be subject to stringent regulations, necessitate substantial investments, and may be influenced by international and national stakeholders.

4. Scrap Processing and Recycling Center

- Pakistan is net importer of major raw material for steel production i.e., steel scrap. Steel scrap accounts for around 50-60% of the manufacturing cost of steel. Pakistan's steel sector is largely fragmented with over ~170 players registered with The Pakistan Steel Re-Rolling Mills Association.

Business Case for Chaman:

- Chaman has the potential to become a critical hub for scrap processing and recycling in Pakistan. Given the significant volume of iron and steel scrap imported through the Chaman border (118,775 MTs), establishing a dedicated and centralized scrap warehousing, light processing and recycling center in Chaman can address the growing demand for recycled materials.
- The primary focus on iron and steel scrap aligns with the high demand for these materials in Pakistan, with an estimated 10 million tons required in 2020, projected to grow to 15 million tons by 2025.
- The proposed processing center in Chaman can accommodate this demand by providing facilities for warehousing, sorting, shredding, and baling scrap metal, making it ready for recycling in steel mills and manufacturing units. By offering this service, Chaman can attract recycling companies and manufacturers seeking cost-effective raw materials, creating a robust market for scrap processing. This approach creates new business opportunities, contributing to the circular economy in the region.

5. **Pharmaceutical Distribution Hub:**

Current Situation:

- Pakistan's pharmaceutical market is projected to be worth PKR 748 billion, with a five-year compound annual growth rate of 15.3%. Local and national businesses hold more than two thirds of the market share, making them the dominant players.
- Local generic manufacturers supply around 70% of the nation's pharmaceutical needs; MNCs and imports account for the remaining 30% of the supply. About 48% of the market share is held by the top 10 businesses, which include Abbott Laboratories, Getz Pharma, Sami Pharmaceuticals, Martin Dow, and GlaxoSmithKline. The top 50 companies have nearly 93% of the market share.
- There are more than 650 pharmaceutical companies in Pakistan, and native businesses are growing at a faster rate than global ones.
- This suggests a robust local industry with significant potential for expansion and export to developing countries, such as those in Africa, Central Asia, and the Far East. Pakistan's current total pharmaceutical exports stand at USD 328 million, with an easy target to reach over USD 500 million in the coming years.

Value Chain:

- Getz Pharma is the only major pharmaceutical company in Pakistan with a one-window distribution facility that serves the entire country, thanks to its partnership with Muller & Phillips. Other pharmaceutical companies, however, tend to work with multiple distributors to cover different locations. This fragmented approach can lead to logistical challenges and inconsistencies in distribution.
- Manufacturing and packaging for most local pharmaceutical companies in Pakistan occur under a single roof, with a few companies also importing raw materials for further processing and packaging at their facilities. Each manufacturing company has a central warehouse, usually located adjacent to its manufacturing plant, for efficient storage and distribution. While most central warehouses are located in Karachi, some companies have additional warehouses in other major cities, including Lahore and Islamabad.
- All distributors in Pakistan are required to keep a minimum stock level for 45 days, and advance payments are typically made to secure these stocks. Major distributors like Muller & Phillips (M&P), Premier, and others operate in specified regions rather than covering the entire country. This leads to a varied distribution landscape where certain areas may have robust coverage, while others may not. Marketing and distribution account for 25-35% of the revenue.

- In Balochistan, the major distribution network is in Quetta, the provincial capital. However, distribution facilities in other parts of Balochistan, such as Lorelai, Khuzdar, and Pishin, are limited. This lack of widespread distribution infrastructure in Balochistan creates a need for more centralized distribution hubs to ensure efficient coverage across the region.

Business Case for Chaman:

- Chaman can streamline the distribution process by providing a central location for warehousing, and logistics. This allows companies to consolidate operations and improve supply chain efficiency. Chaman's location also enables easy distribution to northern and western Pakistan especially hard areas, areas often lacking robust distribution networks.
- With the growing demand for temperature-sensitive products, Chaman's distribution center can offer cold chain management to ensure the efficacy and safety of products like Biologicals, insulins, and vaccines.
- Pakistan's pharmaceutical industry has experienced record export growth, reaching USD 713 million in the fiscal year 2022-23. Chaman's strategic location can support this growth, enabling more efficient exports to emerging markets like Afghanistan, where regulatory requirements are less stringent.
- Chaman's proximity to Afghanistan, which accounted for 31.7% of Pakistan's pharmaceutical product exports in 2022, makes it an ideal hub for exporting to Afghanistan, Iran, and Central Asia. This is further supported by the fact that major pharmaceutical exporting companies like Abbott Laboratories, Martin Dow, and Nexus Pharma are based in Karachi. This positioning in Karachi makes Chaman an ideal hub for streamlining export operations to Afghanistan and Central Asian Republics (CARs), where the demand for Pakistani pharmaceutical products is growing.

Critical Success Factors

To ensure the success of the Chaman Master Plan, several critical factors must be addressed. Following is an overview of the key elements that contribute to the Plan's success:

1. **Strategic Location and Special Economic Zone (SEZ):** Position the Master Plan within or adjacent to a Special Economic Zone to attract businesses and enhance market viability. This involves offering tax breaks, subsidies, and other incentives to encourage businesses and investors. The Government of Balochistan (GoB) has already established an industrial estate over 43 acres, with an additional 1,000 acres reserved for SEZ development next to the Plan.
2. **Security and Stability:** Ensure a secure environment to protect financial transactions and guarantee the safety of citizens, traders, and businesses. This is crucial for attracting traders and customers. Consistently maintain peace and effectively handle unrest situations to prevent border closures, allowing trade to continue uninterrupted.
3. **Simplified Regulatory Framework:** Streamline regulations and bureaucratic processes to simplify business operations and encourage investment. This involves reducing red tape, easing business licensing, and expediting permit approvals.
4. **Local Employment Opportunities:** Prioritize the employment of local workers in the construction, operation, and maintenance of the Master Plan's facilities. This fosters local support and boosts the regional economy.
5. **Support for Local Businesses:** Develop programs and partnerships to encourage and support the growth of local businesses within the Master Plan. This could include preferential leasing arrangements.

6. **Government Facilitation:** Facilitate the transfer of bus and taxi operations from the city to the Master Plan's designated area. This requires active cooperation between local and district governments to encourage a smooth transition.
7. **Basic Amenities and Services:** Ensure the provision of essential amenities, such as road networks connecting the border town with national highways, urban centers, and adjacent rural areas. Basic services like banking facilities, a health unit, and other infrastructure are needed to meet the needs of workers, traders, and visitors.
8. **Regulatory Reforms and Business Forums:** Implement regulatory reforms to improve the ease of doing business in the Chaman area. This may involve establishing and strengthening Pak-Afghan business forums at the local level to foster cross-border cooperation and dialogue.
9. **Agriculture and Livestock Value Chains:** Develop agriculture and livestock value chains to capitalize on the local economy's strengths. This can create additional employment opportunities and enhance the region's economic resilience.

Similar Models

Operations at Wagah Border

The Wagah border on the Pakistan side serves as the counterpart to India's Attari Land Port, providing a key transit point for trade between the two countries. However, the infrastructure at Wagah lacks the facilities needed to support a significant increase in trade volume. Inadequate cargo handling, passenger facilitation, and security infrastructure create an asymmetry compared to India's Attari, which can hinder smooth and efficient trade flows.

To address this imbalance, the Federal Board of Revenue (FBR) plans to acquire about 700 Kanal of land at the Wagah border to establish a state-of-the-art trade facilitation center under the Integrated Transit Trade Management System (ITTMS). This initiative aligns with the Asian Development Bank's Regional Improving Border Service Project. However, the construction contract for the Wagah Border Control Point (BCP) has not yet been awarded, indicating that significant work remains before the facility can be modernized.

Attari Border Model and Operations

The Attari Land Port, located near the international border with Pakistan, approximately 28 km from Amritsar, serves as a crucial gateway for trade between India and Pakistan. This land port is the only authorized route for cross-border trade at the Attari-Wagah crossing. Additionally, Attari plays an important role in facilitating the import of goods from Afghanistan into India.

Strategic Importance

Spread over 120 acres with direct access to National Highway-I, Attari acts as a significant checkpoint for cross-border trade. Historically, India and Pakistan have agreed to trade only 137 specific products through this route, but the land port has nevertheless supported substantial bilateral trade.

India's key exports to Pakistan include soya meal cake, fresh fruits and vegetables, biscuits, fresh meat, cotton bales, and polypropylene granules. Meanwhile, India imports gypsum rock, salt, dry dates, and other products from Pakistan.

In 2018-19, cotton (USD 550.3 million) and organic chemicals (USD 457.75 million) accounted for approximately half of Pakistan's imports from India. Other notable Pakistani imports from India included plastic (USD 131.19 million), tanning/dyeing extracts (USD 114.48 million), and machinery and mechanical appliances (USD 94.88 million).

India's major imports from Pakistan in the same period included mineral fuels and oils (USD 131.29 million), edible fruits and nuts (USD 103.27 million), salt, sulphur, stone, and plastering materials (USD 92.84 million).

Trade between India and Pakistan has been impacted by geopolitical developments, such as Pakistan's suspension of bilateral trade following the Indian government's abrogation of Article 370 in August 2019. Despite these fluctuations, trade remains a significant part of the Attari-Wagah crossing's importance.

Integrated Facility Model - Attari

The Integrated Check Post (ICP) at Attari, established in 2012, streamlines cargo processing with a dedicated cargo terminal building, import and export warehouses, and a large parking area for trucks. The ICP provides a one-stop service for customs, quarantine, weighbridges, and other essential facilities, enabling more efficient cargo processing.

It has a dedicated cargo terminal building measuring 4,700 square metres, import ware house measuring 7,400 square metres, export ware house measuring 3,400 square metres and a parking area of trucks measuring 5,5000 square metres for efficient cargo processing.

It provides one-stop integrated facilities such as quarantine, isolation rooms, fumigation centres, weigh bridge, public address system, boom-barriers, dormitories.

Year	Total Trade (Crores)	Total Cargo Movement (Nos)	Total Passenger Movement (Nos)
2017-18	4,148.15	48,193	80,314
2018-19	4,370.78	49,102	78,471
2019-20	2,772.04	6,655	78,675
2020-21	2,639.95	5,250	6,177
2021-22	3,002.38	4,812	10,342
2022-23	2,257.55	3,827	67,747
2023-24 (Till Dec. 2023)	3100.05	5,747	56,415

Infrastructure and Services:

1. **Customs Processing & Clearance:** Dedicated halls for efficient processing of customs and immigration requirements for both cargo and passengers.
2. **Cargo Terminal Building:** Equipped facility for handling incoming and outgoing cargo with features like:
 - a. **Warehousing:** Separate warehouses for import and export goods.
 - b. **Parking Area:** Designated parking space for trucks to facilitate cargo movement.
3. **Passenger Terminal Building:** Offers services for travelers crossing the border, including:
 - a. **Foreign Currency Exchange Counters:** Enables currency conversion for travel purposes.
 - b. **Quarantine Block and Port Health Unit:** Ensures adherence to health regulations for both passengers and imported goods.
 - c. **Other Amenities:** Facilities like restrooms, cafeteria, and potentially jatha sheds (waiting areas for large groups).
4. **Security and Surveillance:** Implements robust security measures with features like:
 - a. **Border Security Force Presence:** Ensures border security and law enforcement.
 - b. **Security & Surveillance Systems:** Utilizes CCTV cameras and other monitoring technology.

Additional Infrastructure:

1. **Weighbridge:** Equipment for verifying the weight of cargo vehicles.
2. **Area for Loose Cargo:** Designated space for handling unpackaged goods.
3. **Electric Substation:** Provides reliable power supply for the entire facility.
4. **Cold Storage:** Facility for storing temperature-sensitive goods.

India's Success Under PPP for Port Handling

India has made significant progress in port infrastructure through Public-Private Partnerships (PPP). This journey began with Jawaharlal Nehru Port (JNP), which pioneered the PPP model 25 years ago. As of July 2023, the first agreement between the concessioning authority and the concessionaire in a PPP arrangement has completed a quarter-century of success. This milestone has had a profound impact on the development of PPP projects in India's major ports, leading to increased capacity and improved productivity.

JNP has become India's first major port to operate entirely on a PPP model, transforming into a 100% landlord port, with all berths managed by private operators. This shift has contributed to JNP's consistent ranking among the top container ports globally, reaching 26th place on Lloyds List's Top 100 Ports 2021 report. The PPP approach has been so effective that India aims to have 85% of cargo at major ports handled by PPP operators by 2030. To date, 86 projects worth Rs. 55,000 Crores have been approved under this model.

India employs various structures and models to facilitate PPP projects. These include Build-Operate-Transfer (BOT), Build-Own-Operate-Transfer (BOOT), Build-Own-Lease-Transfer (BOLT), Build-Own-Operate-Share-Transfer (BOOST), Design-Build-Finance-Operate-Transfer (DBFOT), and Operate-Maintain-Share-Transfer (OMST). These models offer flexibility and encourage private sector investment and innovation in port infrastructure, driving growth and efficiency in India's port sector.

Benchmark Case Study: Prologis Park Puebla, Mexico

Company: Prologis (PLD), a global leader in industrial logistics real estate.

Location: Puebla, Mexico, situated within the Puebla Industrial Corridor, a strategic location 100 kilometers southeast of Mexico City. This corridor boasts excellent connectivity to major highways, including the Arco Norte and the Autopista México-Veracruz, linking it to key industrial centers and international trade routes like the Port of Veracruz on the Gulf Coast.

Prologis Park Puebla:

Development: Constructed in 2008 by Prologis, the park comprises over 1 million square feet of Class A industrial warehouse space across multiple buildings.

Multi-Tenancy: The Park caters to a diverse range of industries, including:

- Automotive (car parts, components)
- Aerospace (aircraft parts)
- Consumer goods (electronics, apparel, household items)

Tenants: The Park accommodates a variety of tenants, ranging from small start-ups to multinational corporations. The Park offers a variety of sized warehouse spaces to accommodate tenant needs.

Value-Added Services: Beyond warehousing, Prologis Park Puebla goes a step further by providing light manufacturing and processing capabilities for tenants. These value-added services can include:

- Packaging (assembling kits, boxing products)
- Labeling (applying custom labels, barcodes)
- Light assembly (minor component assembly)

Advanced Technology: The Park leverages a state-of-the-art Warehouse Management System (WMS) to optimize inventory control, order fulfillment, and overall operational efficiency. This system provides real-time data and visibility for both Prologis and its tenants.

Sustainability Focus: Recognizing the growing importance of environmentally responsible practices, Prologis Park Puebla incorporates energy-saving LED lighting throughout the facility. Additionally, the park implements water conservation measures to minimize its environmental footprint.

Success Factors:

- **Meeting Evolving Needs:** The Park caters to the growing demand for near-shoring and just-in-time manufacturing by offering light processing alongside warehousing. This integrated approach provides tenants with greater flexibility and control over their supply chains.
- **Streamlined Logistics:** The strategic location within the Puebla Industrial Corridor, coupled with multi-modal transportation options (highway, rail access through nearby intermodal facilities), ensures efficient movement of goods to domestic and international markets.
- **Scalability:** The availability of various sized warehouse spaces allows Prologis Park Puebla to accommodate the diverse space requirements of a wide range of potential tenants.
- **Technology Integration:** The WMS plays a crucial role in streamlining operations, enhancing visibility for tenants, and improving overall efficiency within the park.
- **Sustainability:** Prologis Park Puebla's commitment to sustainable practices aligns with the growing importance of environmental responsibility for businesses and investors alike.