NIMA REPORT
NPR-11-21-01
NOVEMBER 2021

SOUTH ASIA PAKISTAN TERMINALS (SAPT)



National Institute of Maritime Affairs (NIMA), Karachi.
Bahria University Karachi Campus

Category: NIMA Project Report

Title: South Asia Pakistan Terminals (SAPT)

Author:

[1]Commodore (Retd) Ali Abbas SI(M) Director NIMA-K

[2]Dr. Afshan Yasmeen, Assistant Professor, NIMA-K

Acknowledgment:

Authors are grateful to NIMA's team members for support to complete this study.

Property Rights: National Institute of Maritime Affairs, Islamabad

Disclaimer:-

The content of this publication does not necessarily reflect the views or policies of NIMA and neither do they imply any endorsement. The opinions expressed in the paper are solely those of the author, and publishing them does not in any way constitute an endorsement of the opinion by the NIMA. Authors are responsible for their citing of sources and the accuracy of their references and bibliographies. The editors / reviewers cannot be held responsible for any lacks or possible violations of third parties' rights.

All rights reserved. No part of this Report may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording or information storage and retrieval system, without prior written permission of the publisher.

[1]Director National Institute of Maritime Affairs (NIMA), Karachi.
Email: director.ncmpr@bahria.edu.pk
[2]Assistant Professor at National Institute of Maritime Affairs (NIMA), Karachi.
Email: afshanyasmeen.ncmpr@bahria.edu.pk

A publication of the National Institute of Maritime Affairs (NIMA) - an independent and non-profit think tank.

In the Report/Paper series, the NIMA publishes solicited / unsolicited research findings meant to stimulate discussion and create awareness on issues in the sphere of maritime affairs and sustainable development. The reports / papers are written by NIMA's regular or affiliated staff / consultants and are meant to provide clear-cut action oriented outlines which would promote peace, prosperity and sustainable development.

National Institute of Maritime Affairs (NIMA) is a constituent unit of Bahria University. The establishment of NIMA under the aegis of Bahria University was conceived in order to meet the objectives of National Maritime Policy. The NIMA is envisioned to serve as a focal point in Pakistan, as well as in the region for the promotion of maritime sector by defining and translating the debates of the region into peace, prosperity and sustainable development.

Bahria University Head Office, Shangrilla Road, Sector-E-8, Islamabad, Ph: +92-51-9261968 **Fax:** +92-51-9261968, **Email:** dnima@bahria.edu.pk **URL:** http://www.bahria.edu.pk/nima **Facebook:** www.facebook.com/nimaisb

Bahria University Karachi Campus, 13, National Stadium Road, Karachi, 021- 99240816 Ext. 366, 273, Cell: 0333-5452346Email: dd.ncmpr@bahria.edu.pk

Table of Content

S.No	Contents	Page No.
01	Introduction	1
02	Ist Phase of Development	1-2
03	IInd Phase of Development	2
04	Current Status	2-3
05	The Cargo handling capacity of different ports in Pakistan	3
06	Capacity and Transit / Transshipment potential of SAPT	3-4
07	Future Plans	4
08	Current issues at SAPT	4
09	South Asia 2020 Award	5
10	Conclusion	5
11	Recommendations	5

South Asia Pakistan Terminals (SAPT)

1. Introduction

The sea ports of the world are responsible for handling 90% of global trade happening all over the world. Countries having access to sea rely on the shipping infrastructure to support the national and international trade, which plays a vital role as a contributing element in the national economy. The development of CPEC is a strong evidence that highlights the significance of Pakistan as a cargo destination in this part of the world. Pakistan offers right to use sea to landlocked countries providing them opportunity for sea trade.

One of the foremost advantages that countries derive through ports in the development of infrastructural facilities like road networks, railway lines, utility supply, and inland waterways. Apart from this, ports contribute directly towards growth in employment opportunities. Moreover, they also play a role in indirect employment, such as banking, insurance, and others.

These are some of the reasons that allow ports to be increasingly important for countries and are becoming extremely vital for some of the fastest-growing economies in the world. During the last few years, we have seen tremendous development of seaports and terminals in Pakistan which are playing a substantial role in reducing the country's trade deficit with PICT, SAPT, QICT, KICT and Gwadar being some big names in the market, contributing to change Pakistan's economic landscape for the better.

On September 28, DG NIMA Vice Admiral (R) Abdul Aleem HI(M) visited SAPT along with Director and NIMA Team. During the visit a briefing was given by Capt. Jamal-ud-din, Manager Marine & Coordination and Mr. Ahmer, Manager Operations, Zafar-Ullah-Jan, head of logistics Business Development. SAPT. The administration offered all support to NIMA in its endeavor of research for the promotion of maritime economy in the country.

South Asian Pakistan Terminal (SAPT) was built in collaboration with KPT, with an investment of $1.4 billion to meaningfully enhance berth productivity in line with international standards. South Asian Port Terminal (SAPT) is a subsidiary of Hutchison Port Holdings Group (HPH) which is the world's leading port investor, business of ports, and shipping since 1969. The HPH network of port operations comprises 319 berths in 52 ports, spanning 26 countries throughout Asia; The Middle East, Africa, Europe, America, and Australasia.

2. Ist Phase of Development

SAPT is Pakistan's largest and first deep water container Terminals in the region of South Asia & the Middle East, situated at the estuary of Keamari Groyne

basin, providing the most convenient access to ultra-large container ships entering Karachi since 2016, with two-berth having a length of 800 meters and a capacity of 1 million TEUs per year. Hutchison Ports Pakistan invested $600 million in the first phase of SAPT's development. The federal government via KPT has spent approximately $800 million on its infrastructure that includes waves- breakers, dredging in deep water, road and bridge, etc.

3. IInd Phase of Development

In November 2017, IInd phase of development of SAPT was initiated with plans to invest $240 million to expand existing facilities with two more berths of 700m in length and state of art equipment. The capacity of a fully developed port has doubled to 3.2m TEUs per Annum, and it's capable of servicing the latest generation of vessels with capacities of up to 20,000 TEU.

4. Current Status

Currently, SAPT operates four berths having length of 1500m, depth 16m, turning basin diameter 700m. SAPT is the state of art facilities including the most efficient and modern terminal container handling equipment to cater for initiation of super Post-Panamax-sized ships to visit Pakistan.

- Road link has been developed out of which two lanes in and two lanes out of the road along with solar panel and lighting arrangements has been completed.
- Web invoice facility is available but for payment the facility is not yet established.
- The current status of the railway link include that on dock railway facility already available at East wharf from custom cleared cargo. Railway link from existing railway's East wharf track, with 1.1km total length. A total three tracks from within SAPT to connect the main railway track have been completed and will become functional by November 2021.
- Significant investment has been made in areas related to information technology, hardware and software akin to that being used at some of the most productive terminals globally. The terminal's equipment is par excellence, with 11 remote-controlled ships to shore (STS) cranes capable of handling the latest 22k TEUs vessels, supported by 31 hybrid Rubber Tire Gantry Cranes (RTGs) operated by nGen.
- SAPT offers 480 reefer plugs with world class monitoring services for the safety of perishable cargo.
- SAPT has a world class in-house scanning facility. It is a dual view, dual- energy scanner that rapidly scans vertically and horizontally.

- The benefits of automation include lower operational costs, improved terminal productivity, capacity, and reduction in carbon footprint.
- SAPT has its own power house of 32 megawatts.

SAPT is spreaded over 85 hectares of land and has opened new trade horizons for Pakistan. In past, a percentage of Pakistan's export and import cargo containers were not being transported directly from Karachi to final destinations, as large and very large mother ships could not pass through the old container terminals. So this cargo was transported in small container vessels to deep seaports like Jebel Ali and then unloaded and reloaded onto the mother ships. This led to many problems such as extra costs, time delays, high risk, over documentation, and overall inefficiencies. Often on short notice, exporting ships faced difficulties in losing order due to unavailability of space. This deficiency was offset by the large mother ships with huge capacity calling at SAPT. The port has been able to accommodate the mother ships directly, which led to a significant increase in exports and rapid receipt of imported cargo.

South Asia Pakistan Terminals (SAPT) is Pakistan's premier container terminal designed to accommodate the largest vessels afloat with capacities of up to 20,000 TEUs. Currently, the ports across Pakistan can accommodate vessels carrying up to 8,000 TEUs of containers. With the operations of SAPT, mother vessels carrying up to 19,000 TEUs and can berth at any state of tide and at any time of the day. Offering quayside depth of 16 meters to meet the growing shipping needs in the country, the terminal has the potential to compete with regional deep-sea transshipment hubs including Jebel Ali Port in Dubai, Salalah Port in Oman, Nhava Sheva, and Mundra Port in India, when it comes to depth, handling big vessels, and technology. This will not only lead to efficiency in time and cost but also play a vital role in unlocking Pakistan's trade potential through revolutionizing sea trade for Pakistan.

5. Cargo handling capacity of different ports in Pakistan

Ports	SAPT	KICT	PIBT	KPT	Gwadar	Port Qasim
Per annum TEUs	32,00,000	1,000,000	350,000	2,400,000	3,000,000	600,000

SAPT handles 7 ships per week. A ship gets offloaded in less than 24h. The working of a single crane is 28 moves/h while the last record is 42 moves/h which is very efficient. Unloading depends on the crane intensity.

6. Capacity and Transit/Transshipment potential of SAPT

The SAPT has a potential of 3.2 million TEU's to handle but the potential of transshipment is still not being fully utilized mainly due to lack of rules and governance issues. There is a need to have proper procedures and rules defined for

transshipments moreover, the KPT has yet, to issue tariffs, and the issue of customs with repand to transship needs to be formalized.

7. Future Plans

Future plans of SAPT includes:

- The depth of the outer approach channel will be enhanced to 18m.
- Plan to establish IC3 facility is under consideration amongst maritime, port and government stakeholders.
- The Harbor crossing bridge was a part of the plan which is yet to be built by KPT but yet to materialize. It is expected that the construction of the aforementioned bridge will be beneficial for SATP. It will increase SAPT accessibility in the country. As per the current situation, the trucks cannot be driven during the day due to traffic restrictions. They need to follow their specified timings. With the construction of the bridge, these trucks will be able to bring goods whenever they want and this problem will be resolved.

8. Current issues at SAPT

- Right now the only major issue SAPT faces is the connectivity issue due to congestion on the roads. This issue shall also be resolved to a great extent when the railway would become operational. It is expected to be operational by Nov 2021. This track will connect SAPT to different cities of Pakistan. This will make the transportation of containers upcountry easier and quicker.
- The KPT is responsible to handle all marine operations at SAPT especially for providing tugs and pilot boats but currently, KPT has a lacks the equipment. The Tugs takes 45min to come from KPT to SAPT. KPT has 4 tugs 2 of them were manufactured in 2010 and the other two in 1998. The tugs provided by KPT are not suitable for the ship being handled at SAPT. The tugs do not possess the power to completely manage the ships and are underpowered for the ships calling at SAPT. For smooth operations SAPT need 3 dedicated tugs of 75 bollard pull, which need to be provided by the KPT.

9. South Asia 2020 Award

SAPT is the country's leading container terminal operator, has been acknowledged as the 'Port/Container Terminal of the Year – South Asia 2020' Award. This accolade is an acknowledgment of the innovative steps being undertaken by the terminal including the introduction of state-of-the-art machinery, tools, and techniques to create a hassle-free supply chain.

10. Conclusion

This port has tremendous scope when it comes to shipping infrastructure development and nourish the competitive landscape. Since the port has the capability of handling cumulative country's throughput, if it works at full potential, cargo flow to and from the port may become a hindrance. To cope with it, the government needs to develop more expressways to connect to highways for competing with global peers concerning transit trade and transshipment hubs. Whereas, other ports should adopt advanced characteristics to magnify Pakistan's potential, transforming it into a prime Asian hub for trade and transport activities. There is a need to focus on providing smart solutions to all its seaports in terms of improving and monitoring port infrastructure, optimizing cargo handling, automating customs clearance, encouraging intermodal transportation services, improving port and cargo safety.

11. Recommendations

- Should transform customs clearance system on a modernized line to save time.
- Evolve efficient road infrastructure for terminal connectivity with hinterland.

