



YEAR BOOK

2016 - 2017



GOVERNMENT OF PAKISTAN
MINISTRY OF MARITIME AFFAIRS
ISLAMABAD

MESSAGE



Keeping in view the international sea transportation routes, Pakistan can be a hub of all trade activities and transportation of goods from Eastern Europe and Central Asia to rest of the world. Shipping, an important sector, is the backbone of trade and economy of any country. Pakistan has immense potential for growth in maritime sector. Opportunities exist in this sector for local & foreign direct investment.

Ministry of Maritime Affairs has been contributing significantly for development of national ports according to international standards. It has been endeavoring to ensure competitive shipping for improving logistics support of the country through maritime routes. It also works for safe navigation, protection of marine environment and sustainable utilization of marine fisheries resources.

It is, indeed, a matter of satisfaction for me that this Ministry has performed well in last fiscal year and this Year Book speaks about our commitment, performance and achievements.

I congratulate Secretary, Maritime Affairs and his team for achieving goals and targets for sustainable development of ports, shipping and fisheries.

Senator Mir Hasil Khan Bizenjo
Federal Minister for Maritime Affairs

MESSAGE



Ports play a vital role in the national integration and connectivity of countries to the world. In Pakistan, export of industrial output in the hinterland also largely depends on our ports because they act as important link between sea and land transport. Shipping sector also significantly contributes to our trade because sea worthy transportation of goods in terms of load carried is the most economical mode of communications. Fisheries are essential to meet the food requirements of countries all over the world as it reduce the pressure on demand for mutton, beef and poultry. Export of sea food enables nations to earn foreign exchange.

Ministry of Maritime Affairs and its subordinate fisheries agencies are ensuring management and development of fishery resources in the interest of the nation. There is a large potential in the development of fisheries and marine resources in Pakistan. God has blessed Pakistan with sea shore of more than 1100 kilometers. Our entrepreneurs have capacity to invest in this field and to explore maximum opportunities to enhance export of fish and sea food to other countries.

Huge untapped fisheries and marine sector will be focused after modernization of Fish Harbour at Gwadar and export of fisheries will increase manifold after full operations of Gwadar Port. Achievements in the fisheries sector will further be enhanced after restructuring of Korangi Fish Harbour, Karachi and revision of deep sea fishing policy. In line with our vision, we have relentlessly pursued advancement in this sector which can be gauged from several of our achievements in this year book.

There are still pervasive and daunting challenges besetting the ports, shipping and fisheries sector but we will continue to improve the management of the aforementioned sectors with full commitment, resolve and dedication.

Chaudhary Jaffar Iqbal
Minister of State for Maritime Affairs

FOREWORD



Pakistan's economy is heavily dependent on the seaborne trade. Efficient transfer of cargo from sea to land and vice versa is critical in commercial and economic development and attracting local & direct foreign investments in the country.

Pakistani ports provide sea connectivity to Central Asian Republics and landlocked Afghanistan and handle cargo requirement of these countries as well. They, therefore, provide strategic benefits and keep Pakistan's economy on the move. Fisheries, on the other hand, are a key component of Food Security of the country, an important source of foreign exchange and livelihood of thousands of people. In this background, the role of Ministry of Maritime Affairs in economic development, regional connectivity, improved trade and livelihood becomes very significant.

During fiscal year 2016-17, the Ministry of Maritime Affairs has made efforts to fulfill responsibilities tasked by the Government of Pakistan within the national, regional and international perspective. The Year Book 2016-17 aims at providing information on activities, achievements and progress of the departments under the administrative control of Ministry of Maritime Affairs.

I am confident that the publication would provide useful information about Ministry of Maritime Affairs and also be a source of reference material. We look forward to suggestions / observations for further improving the year book.

Mumtaz Ali Shah
Secretary
Maritime Affairs

**GOVERNMENT OF PAKISTAN
MINISTRY OF MARITIME AFFAIRS
Islamabad**

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**Year Book 2016-2017
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INTRODUCTION

Pakistan is fortunate enough to have a coastline extending 1046 kilometers along the warm waters of Arabian Sea. This, of course, implies that Pakistan has the benefit of an Exclusive Economic Zone (EEZ) and continental shelf consisting of 290,000 sq km. Our country is located at the crossroads of South Asia and Gulf region directly connecting the world's busiest maritime sea route. These features provide Pakistan a great edge over several countries especially landlocked ones. These features include, freely exporting and importing goods directly through the homeland, developing ports, engaging in ship building and repairing, acting as a port-of-call for land-locked countries, establishing fisheries, exploring underwater minerals and oil reserves, and exploring the other multifarious economic opportunities that a coastal boundary brings.

Karachi Port is the largest port of the country with 11.5 km long harbour. The Karachi Port is administered by a Board of Trustees of the Karachi Port Trust comprising Chairman and 10 Trustees. The Chairman is appointed by the Federal Government who also acts as the Chief Executive of Karachi Port Trust (KPT). KPT has 30 Berths including 03 dedicated Container Terminals and 03 Bulk Oil Piers for handling Liquid Bulk Cargo. Karachi Port is now handling over 15.320 million tons (2016-2017) of liquid cargo and 37.174 million tons (2016-17) of dry cargo. KPT handles 60% of country's seaborne traffic including Liquid and Dry Cargo. KPT handled 2.11 Million TEUs of containerized cargo (Import / Export) during 2016-2017. Karachi Port witnessed arrival/departure of 1922 ships during 2016-17.

The Port Muhammad Bin Qasim is the second seaport in Karachi, Pakistan, on the coastline of the Arabian Sea, handling about 40% of the nation's cargo. The port encompasses a total area of 12,000 acres (49 KM²) wherein many industrial zones operate. The Port Muhammad Bin Qasim is administered by the Board comprising 07 Members headed by the Chairman, Port Qasim Authority. A 45-Kilometre long Navigation Channel connects the port with sea for vessels up to 75,000 metric tons deadweight (DWT). In 2016-2017, a total of 37.4 Million Tons cargo was handled at the Port and 1,407 ships were handled during the same period.

Gwadar is located on the shores of the Arabian Sea in the western province of Balochistan. It is about 630 km from Karachi and 120 km from the Iranian border. The administrative decisions of Gwadar Port

Authority (GPA) are made through GPA management Board. 11 members of the Board are representatives of Ministries/ Divisions/Government Organizations and Quetta Chamber of Commerce. The Port encompasses 03 Multipurpose berths each 200 meters long with a total quay length of 602m, 01 RO-RO facility, 100m service berth and 4.7 km long approach channel dredged to 14.4m. The port currently has the capacity to handle three ships of 50,000 DWT @ 12.5 meter maximum draft. Gwadar Port became operational with the first ship to dock in 2008. In May 2013, the port's Concessional Rights were transferred from Port of Singapore Authority (PSA) to the new operator viz, China Overseas Ports Holding Company Ltd. (COPHCL). The government-to-government CPEC agreements have created bright prospects for optimum operationalization of Gwadar Port and harnessing the benefits of regional trade connectivity through this natural deep-sea-port by Pakistan, China, Central Asian Republics and Afghanistan. Since 2008, Gwadar Port has handled around 6.453 million cargo from 205 ships. The Chinese Operator is working on increasing the number of ship calls at the port. Two ship-liners (COSCO & Sino-Trans) are calling regularly at the port.

MISSION STATEMENT

Sustainable development of national ports and competitive shipping and maritime business to improve the socio-economic condition of the country ensuring safe navigation and protection of marine environment as well as sustainable utilization of marine fisheries resources for quality protein provision to the nation and for export to earn foreign exchange.

OBJECTIVES

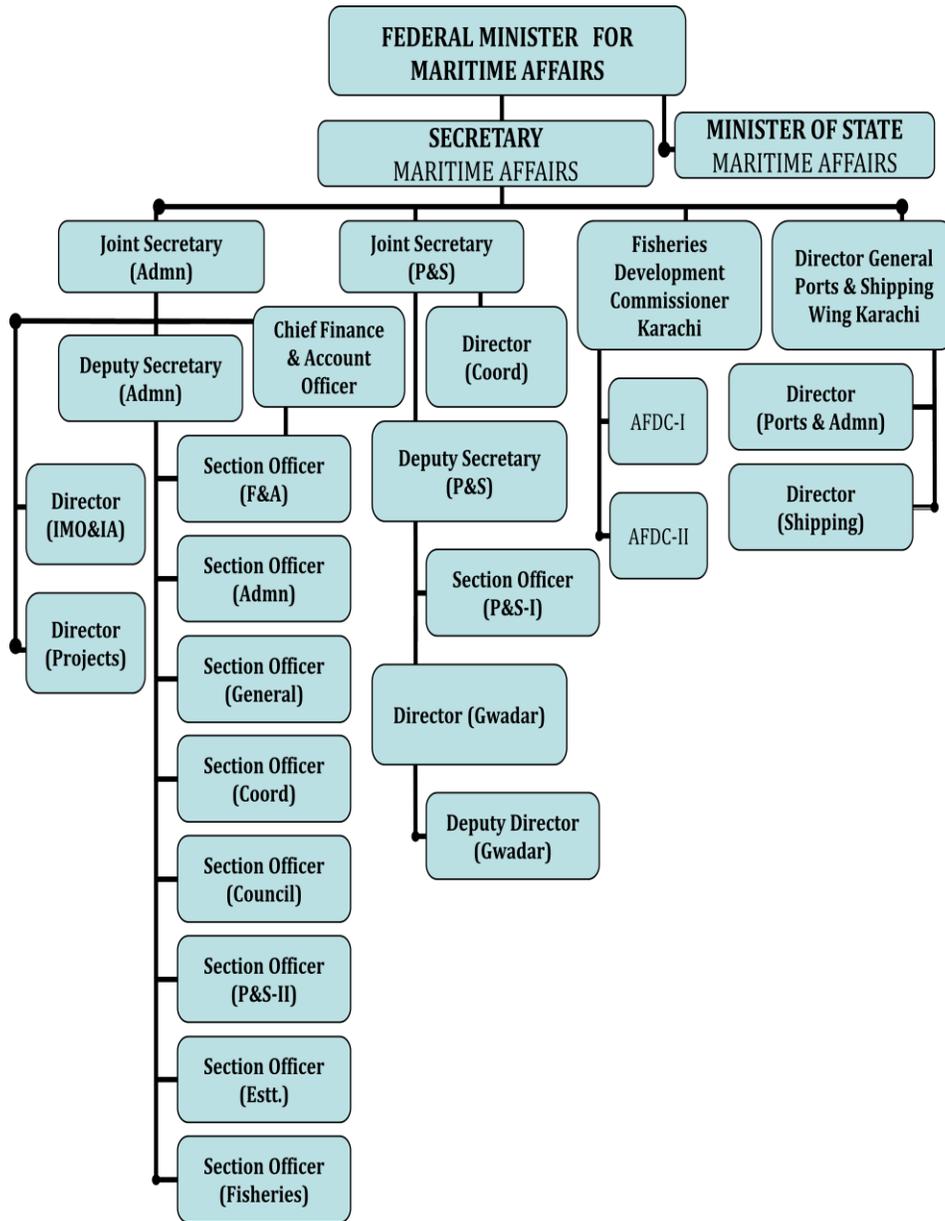
- To formulate and implement plans and policies in conformity with International best practices to transform the ports of Pakistan into modern, competitive, user friendly and a transshipment hub of the region with hinterland connectivity.
- To encourage private ship owning under Pakistani flag by creating favourable conditions.
- To improve governance of the ports while focusing on modern and innovative approaches of landlord ports strategies.
- To maintain safety and security standards as per International Maritime Organization (IMO) Conventions with strenuous efforts aimed at maintaining world class standards of marine pollution control.
- To ensure and maintain quality of Pakistani seafarers in accordance with the Standard for Training Certification and Watch-keeping (STCW) 1978 Convention.
- To promote Deep Sea Fishing of Pakistan.
- To regulate the export of Fish and Fisheries Products and also to bring a pronounced positive change in the Harbour Environment.

FUNCTIONS OF THE MINISTRY AS PER RULES OF BUSINESS

1. National Planning, research and international aspects of —
 - (i) Inland water transport; and
 - (ii) Coastal shipping within the same Province.
2. Diverted cargo belonging to the Federal Government.
3. Navigation and shipping, including coastal shipping but not including shipping confined to one Province; safety of ports and regulation of matters relating to dangerous cargo.
4. Light-houses, including lightships, beacons and other provisions for safety of shipping.
5. Admiralty jurisdiction; offenses committed on the high seas.
6. Declaration and delimitation of major ports and the constitution and power of authorities in such ports.
7. Mercantile marine; planning for development and rehabilitation of Pakistan merchant navy; international shipping and maritime conferences and ratification of their conventions; training of seamen; pool for national shipping.
8. Korangi Fisheries Harbour Authority, Karachi.
9. Office for promotion of Deep Sea Fisheries Resources in Exclusive Economic Zone.
10. Fishing and Fisheries beyond territorial waters.
11. Quality Control Laboratory Karachi.
12. Marine Fisheries Research Laboratory Karachi.
13. Fisheries Training Centre/Deep Sea Fishing Vessel.
14. Oceanography and Hydrological Research.
15. Marine Biological Research Laboratory, Karachi.
16. Welfare of Seamen; seamen Hostel Karachi.

MINISTRY OF MARITIME AFFAIRS

ORGANOGRAM



DIRECTORATE GENERAL OF PORTS & SHIPPING WING

The office of the Directorate General Ports & Shipping at Karachi, is working as a Wing of the Ministry of Maritime Affairs, Islamabad, The objective of placement of the office in Karachi is to facilitate the Ministry based in Islamabad, specifically on administrative matters, related to the Ports and its authorities i.e. KPT, PQA & GPA, as and when referred to; including policy input on matters related to Ports & Shipping, Administration of Merchant Shipping in the country, adherence to International maritime Conventions, Issuance of Certificate of Competency of Master Mariners, framing Rules approval of training syllabus of all accredited merchant shipping schools/institutions, conducting survey of all ships & vessels, issuance of certificates relating to implementation of safety regulations, issuance of sea manning Agents certification whereas the technical wing provides extensive services specifically on the following aspects:

Karachi Port Trust (KPT), Port Qasim Authority (PQA), Pakistan National Shipping Corporation (PNSC), based in Karachi, and Gwadar Port Authority (GPA) are autonomous organizations with their own fully empowered Boards of Directors & stipulated rules and regulations. The office of Director General, Ports & Shipping is consulted / referred for administrative approval of decisions of the Boards as and when required and also for administrative approval regarding level of officers, establishment cases of ports including pay and allowances, promotion, recruitment, retirement, dismissal of KPT, PQA employees which fall outside the power of Boards, Processing of Budget/accounts estimates, issuance of NOC to foreigners for visits of ports, legislation and revision of ports Acts. Issue of Policy directive and guidance of ports, problems connected with conservancy, tugs, boats, dredgers, mooring, birth and all other harbor development in ports, dispute /demand etc., of KPT, PNSC, PQA Unions. Processing of the cases regarding appointment of Board Members/trustees, waiver of port charges, matter concerning to ports land and disputes, declaration of ports limits/ports area, Engagement of shipping lines/Shipping companies with PNSC.

Mercantile Marine Department (MMD), Government Shipping Office (GSO), Directorate of Dock Workers & Safety (DDWS), and Marine Biological Research Laboratory (MBRL) are subordinate offices.

The statistical data for year 2016-17 is given below:—

S. No.	DESCRIPTION (PERIOD 01-07-2016 TO 30-06-2017)	NUMBER OF CASES
1.	Approval for Foreign Exchange Release to PNSC	289
2.	Approval for Dry Docking	03
3.	Approval of Drawings for crafts/fishing boats	16
4.	Survey	29
5.	Allocation of Workshop and NOE for SSB/Examination of CoCs	76
6.	Applications for Examinations of Certificate of Competency Processed	384
7.	Certificate of Competency issued	109
8.	Certificates of STCW/Dangerous Cargo issued	366
9.	Verification of CoCs/E-mails issued	11
10.	Equivalency of CoC to Foreign CoC holders	12
11.	Certificate of Competency to Electro Technical Officers (ETO)	75

FUNCTIONS:

The functions of the Ports & Shipping Wing are summarized as under:

- i. Formulation and implementation of plan and policies in line with the changing technology according to International Conventions and standard for improvement of Ports & Shipping and allied organizations.
- ii. Technical and professional advice to the Government on all matters related to Ports & Shipping, Maritime Training and Maritime Affairs.
- iii. Dealing with various legislations, Act., Rules, Regulations, etc. related to Ports & Shipping.
- iv. Coordination of work with other Ministries, Divisions and Inter-Governmental Agencies and International Conferences and other consultative organizations concerning Ports & Shipping and Maritime Affairs.
- v. Arrangements for holding examination of Masters, Mates and Engineers.

- vi. Conducting Examination for surveys casualties, inspection and standards for ships' safety and operation and investigation into shipping casualties.
- vii. Compilation of records of all examination results, certificates of competency issued to certificated marine officers/engineers.
- viii. Marine environment, pollution control and legislative measures including conservation and management in the field of marine wild life.
- ix. Administration of Pakistan Merchant Shipping Ordinance, 2001.

* * * * *

MERCANTILE MARINE DEPARTMENT

Mercantile Marine Department, established in 1930, is a sub-ordinate office of Ministry of Maritime Affairs which is headed by Principal Officer (MP-II) presently. The major function of this Department, as a part of Maritime Administration of Pakistan, is to ensure safety of life at sea, safety of navigation and protection of marine environment in accordance with National Law/Rules and International Conventions. The department also acts as the registration authority for ships and craft under Pakistani flag and also conducts surveys and inspections of these ships & crafts. Examinations for various categories of seamen are also conducted by this department as a part of maritime administration.

This department also looks after the operation and maintenance of Lighthouses which provide navigational aids along the coast line of Pakistan to facilitate ships for safe navigation. Provision of navigational aids along the coast of Pakistan is an International obligation on the Government of Pakistan.

Sub-Office of Mercantile Marine Department at Gwadar was established in February 2007 and has obligatory role towards operation of the port and the allied shipping activities thereof.

Performance / Achievement 2016-2017

Indicators	Target	Achieved
Survey and Inspection	2,600	3,031
Supervision of new construction & Repair / Evaluation Etc.	40	06
Issuance of Statutory Certificates of Ships	30	30
NOC for Outward Port Clearance	3,500	3,523
Registration / Change of Ownerships of Ships / Craft	700	1,130
Examination (Technical Personnel / Inland)	1,300	2,094
Examination of Marine Engineers / Deck Officers (F.G)	1,000	742
Endorsement	2,350	2,509
Miscellaneous (Notice of Eligibility / Eye Sight Test / Verification / Attestation Etc.	1,800	2,107

Lighthouses and Lightships

Indicators	Target	Achieved
Ships arriving and departing	3,000	3,403
Foreign Country Craft	200	120

MMD (Sub-Office at Gwadar)

Indicators	Target	Achieved
Survey and Inspection	20	00
NOC for Outward Port Clearance	20	19
Registration / Change of Ownerships of Ships / Craft	50	196

Revenue Receipts

Indicators	Target	Achieved
Survey, Registration, Examination & Misc.	45,000,000	60,459,758
Light Dues	400,000,000	366,797,448
Survey and Registration	300,000	905,000

GOVERNMENT SHIPPING OFFICE

Government Shipping Office (GSO) was established at Karachi Port on 21st May 1948. It now functions under the Ministry of Maritime Affairs and is being maintained in accordance with Chapter 3 of the Merchant Shipping Ordinance 2001.

FUNCTIONS

1. **Registration of seamen and issue the seaman service book (SSB)**
2. **Issue of Machine Readable Seafarers Identification Document (MRSID)**
3. **Supply of crew to all Pakistani & desiring Foreign Ships**
4. **Engagement & Discharge formalities for Seamen on Ships**
5. **Settlement of disputes between Seamen and their employers**

MISSION

1. **Simplify seamen employment and discharge procedures**
2. **Computerized working for swift service to seamen in all matters**
3. **On line data arrangements for verification**

ACHIEVEMENTS

YEAR	Computerized Seaman Service Book (SSB) issued	Machine Readable Seafarers Identity Card (MRSID) Issued	Seafarers Engaged on Ships	Seafarers Discharged from Ships
2016-2017	1103	774	6434	6161

PAKISTAN MARINE ACADEMY



Mercantile Marine Academy was established in the year 1962 at Juldia, Chittagong (in former East Pakistan) for training of officers for merchant navy. In 1971, the Academy was shifted to Karachi and renamed as Pakistan Marine Academy (**PMA**). In 1978, it was shifted to its permanent campus located at Hawks Bay Road Mauripur, Karachi. It is spread over an area of 136 acres. The Seamen Training Centre, established for training of sailors was merged with PMA in 1997.

PMA is the only institution in the country for the training of seafarers. It is also the regional branch of World Maritime University Malmo, Sweden; PMA has meritorious standing amongst the galaxy of the world's elite institutions for training of Merchant Navy Officers.

PMA is affiliated with NED University of Engineering & Technology, Karachi and Cadets are awarded Associate Degree in Marine Engineering and Ship Management on completion of two (02) years training.

Aims and Objectives

The targets set by the Government for Pakistan Marine Academy are:

- a. To train and educate 170 Pakistani and 10 foreign resident cadets per annum through a two year resident programme.

b. To train 200 General Purpose Crew/Ratings annually.

c. To conduct IMO Mandatory Courses for seafarers.

The eventual aim was to develop and establish a Pakistan Maritime Training Complex which would impart the highest and most advanced training in Maritime Sciences and Technology through a Maritime College/ University.

The main objectives of Pakistan Marine Academy are:

a. To provide sound academic background and teach the fundamentals in the field of Nautical and Marine Engineering for a successful career at sea.

b. To develop leadership, high sense of responsibility, honour uprightnes, pride of profession, loyalty and devotion to duty in the service of the country.

c. To provide higher professional training in selected Maritime disciplines and conduct mid career courses for seafarers though the Maritime College / University.

Training Facilities

The Academy has a magnificent civil infrastructure consisting of ingeniously designed and purpose built buildings for the administrative staff, instruction and the training activities, accommodation facilities, simulators, engineering workshop, and medical center.

In addition there are sports fields, swimming pool, auditorium, parade ground and a pier for waterborne training facilities. Well-equipped science laboratories, a well stocked library and a computer lab also exist to support the training activities. Residential quarters for 30 officers and about 95 staff members are also available on the campus. A fully equipped medical center provides basic medical cover to the trainees and the residents of the campus.

This impressive infrastructure houses a hub of modern maritime training resource intended to impart quality instructions to the seafarers. Comprehensive and modern training facilities are provided including navigation and engineering simulators, computer laboratory, ARPA, etc.

Experienced and dedicated teaching faculty members cater for the educational needs of the students. The basic training is offered on full residential basis, while pre sea and post sea short courses are offered for day scholars. For leisure wide range of recreational and sport facilities is also available in campus.



Passing out Cadets

Environment:

The Academy is situated on seaside and is at a distance of 10 Kilometers from the main city therefore, the environment is pollution free. Plantation of Mangroves has enhanced the greenery in the campus.

The Academy has a faculty comprising of twenty permanently employed members supplemented by visiting instructors and guest scholars as necessary. The team of instructors at PMA includes experienced naval and merchant marine officers and scholars, who mostly hold post graduate qualifications in their respective fields from various universities besides vast practical experience at sea. These include a number of graduates from World Maritime University (Malmo) as well. In addition the Academy also employs about 300 admin staff to support the training activities. This expertise enables PMA to offer a wide range of specialized courses to complement and meet the needs of the dynamic maritime industry.

The Academy has strong links with universities and training institutions within Pakistan and abroad. It is affiliated with the NED University of Engineering & Technology, Karachi for award of Associate Degree in Ship Management and Marine Engineering to its graduates.

Training Equipments

PMA is well equipped with the finest training facilities in the region. Which include Full Mission Bridge and Engine Simulators, full range of Electronic Navigational Aids, Gyro Compass Working models, Cargo Handling Working Models, Mini Planetarium, Tankers Course Laboratory, Mini Oil Recovery Skimmer, Seamanship Practical Training Room, Global Maritime Distress & Safety System (GMDSS) Simulators, Electrical and Mechanical Workshop and Computer Laboratory.

Courses & Training Programmes:

The Academy conducts the following Pre-Sea & Post-Sea courses as per training requirements of IMO in accordance with STCW convention.

A. Pre-Sea Courses

a) 02 Years Course in Nautical/Marine Engineering Discipline

(Leading to award of Associate Degree in Ship Management & Marine Engineering by the NED University of Engineering & Technology, Karachi)

Admission Criteria

- i) Qualification: Higher Secondary School Certificate (Intermediate in Science with Mathematics, Physics, Chemistry) i.e. 12 years school education.
 - ii) Age: 17-20 Years
 - iii) Medical Fitness: As per standards for Seafarers
 - iv) Entry Test
- b) 05 month GP-III Training (For Ratings)**

Admission Criteria

- i) Qualification: Secondary School Certificate Holder that is 10 years school education

- ii) Age: 18-25 Years
- iii) Medical Fitness: As per standards for Seafarers

B. Post Sea/Short/Mandatory Courses:

- Oil Tanker Familiarization
- Engine Plant Simulator
- Global Maritime Distress Safety System (GMDSS)
- Basic Fire Fighting Course
- Personal Survival Techniques Course
- Elementary First Aid Course
- Proficiency in Survival Craft & Rescue Board
- Personal Safety & Social Responsibility

Performance/Achievements

- i) The Academy conducted following programme/courses during the above mentioned period. Number of participants/qualified trainees is mentioned against each.

S#	Name of Course	Duration	No. of Trainees (2016-17)
01	Associate Degree in Ship Management	02 Years	73
02	Associate Degree in Marine Engineering	02 Years	76
03	GP-III (Rating course)		
	i) Regular Scheme	05 months	50(Regular)
	ii) Prime Minister Scheme (NAVVTC)		49 (NAVVTC)
04	Short/Mandatory Courses:	3 to 18 days	1263

- ii) **Purchase of Simulators:** New State of the Art, Full Mission Bridge and Engine Plant Simulators purchased/ installed, replacing the obsolete ones(of 1988), for training of Seafarers.

iii) **Co-Curricular Activities:** Following Co-curricular activities were held during the year 2016-17:

- a. 53rd PMA Raising Day celebrated on 3rd September 2016.
- b. 2nd Inter-City Sports Gala was organized by PMA.
- c. Maritime Awareness Seminar conducted at Lahore & Quetta.

iv) **Projects completed (2016-17):**

S#	Name of Project	Actual Expenditure	Remarks (if any)
		Total	
01	Purchase of Full Mission Bridge & Engine Simulators	59.88 M	---

Focal Person:

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KARACHI PORT TRUST

Introduction

Karachi Port is the nation's most important economic asset bearing a proud and distinguished history. A constant and on-going development programme based on scientific maritime principles has equipped the port to ably meet both the present and future requirements of cargo-handling. This impressive pinnacle of achievement has been reached after more than a century of development work and far-sighted planning.

The Formation of Karachi Port Trust

In 1886 an Act paving the way for the establishment of Karachi Port Trust was passed by the Bombay Legislature Council. It defined the land and seaward limits of the port and harbour and vested land, buildings and port facilities under a public trust comprising of a Board of Trustees which represented users in both the public and private sectors. The Trust's mandate gave it the power to utilize and mobilize resources in an expeditious manner bypassing the delays caused by the bureaucratic chain of decision making.

Location

In the northern coast of the Arabian Sea, from the straits of Hormuz in the west and past the Indus River in the east, lies about 600 kilometres of Pakistan's serene coastline. Ideally located with well developed connections with Afghanistan, Central Asia and Western China; Karachi Port serves as gateway to the region.



Vision

“To Transform Karachi Port into a Modern, Competitive, User Friendly Port and a Transshipment Hub of the Region with Hinterland Connectivity”

Governance Structure

Karachi Port is governed by the Ministry of Maritime Affairs. Chairman is the Chief Executive and also Chairman of KPT Board of Trustees. He is

assisted by six General Managers, responsible for the Operations, Finance, Planning and Development, Engineering, Administration and Civil Works & Estate. All policy decisions are vested in KPT Board of Trustees.

Board of Trustees

The Board comprises eleven Trustees including Chairman. Chairman and five Trustees including one associated with Labour Unions are appointed by the Federal Government. Five Trustees are notified by Federal Government after they are elected / nominated by the respective bodies i.e.

1. Chamber of Commerce Karachi
2. Overseas Chamber of Commerce & Industry
3. Karachi Cotton Association
4. Pakistan Ship Owners Association
5. Karachi Municipal Corporation (City District Govt. Karachi)

Minimum of two ordinary meetings of the Board are to be held each month.

FACILITIES AT KARACHI PORT

Port Operations

The containerized cargo started coming to Karachi Port from 1973. the American President Line has for the first time given service within a fortnight to bring 100 containers from US whose arrival was inaugurated by the then Prime Minister Ghulam Mustafa Jatoi. Since then cargo freight has mostly shifted to containerized form and is growing every year.

KPT is poised to become the regional shipment hub, and its 30 world-class terminals serve major shipping lines connecting to ports all over the world. Spread out over 32 square miles, KPT is a state of the art port, with easy access for ships that come to call on it.

The Port itself consists of two wharves. The East Wharf has 17 multipurpose berths (Berth No. 1 to 17) and the West Wharf (Berth No. 18 to 30) has 13 berths. Each of the wharves has 2 dedicated container

terminals with a design depth of 14 meters. The Karachi Port Trust has also three oil piers to handle liquid cargo.

Container Facilities

Karachi International Container Terminal and Pakistan International Container Terminals are the two dedicated Container Terminals located on the port developed in collaboration with private partnership and equipped with the latest cargo handling equipments.

Warehousing Facilities

KPT provides at each berth facilities for transit, storage, warehousing and clearance of cargo and containers. Additional services provided are dangerous cargo handling, packing stations for immediate uploading and packaging of dry goods, custom storage yards, oil tankages, bulk cargo stacking areas and container freight stations.

Liquid Cargo Terminal

KPT has three dedicated liquid cargo piers used for the handling of petroleum and non petroleum products. These terminals are equipped with the most modern loading and unloading facilities and safety measures.

Ship Maintenance & Repair

KPT has its own dry dock facility at Manora that enables quick boat repair and maintenance. For more extensive work or for larger ships, a shipyard run by Karachi Shipyard and Engineering works is located near the Port.

Port Safety & Security

KPT is committed to the utmost safety and security of goods and personnel. A sophisticated system of radars, buoys, and technology systems are employed to monitor incoming vessels and guide them to their berthing space. Additionally, the dedicated Port Security Force, Port Technology Units, Marine Pollution Control Department and Fire Fighting Unit at Karachi Port Trust works round the clock to protect the Karachi Port, its cargo and its users.

Dredging & Reclamation Work

The dredging is a constant activity of a port and is conducted to maintain required level of depth at all times within the port channel to facilitate

shipping lines and vessels calling Karachi Port. Due to high and low tides, the flow of tidal current bring siltation inside the channel which gradually reduces the depth inside the port channel. KPT has a large flotilla of dredgers and is the sole port of Pakistan to have this facility. The Port has over the years remained in constant pursuit to acquire latest dredgers to meet its requirements.

DEVELOPMENT PROJECTS

A. PAKISTAN DEEP WATER CONTAINER PORT



- To brace larger container ships KPT has taken initiative to develop Deep Water Container Port.
- The Project is being developed in phases, presently 4 berths are being constructed with 1500m Quay Wall in the first Phase.
- Design depth 18m but in the first phase 16m draft would be dredged.

The project has 4 Major Components:

1. Dredging And Reclamation



Contract was awarded to M/s China International Water and Electric Company (CWE) for basin and inner approach channel. Estimated quantity for dredging was about 24 million cubic meters including 08 million cubic meters of Reclamation. For outer channel the work was awarded to M/s Van Oord Dredging B.V, the work completed in March 2017.

2. Marine Protection Works

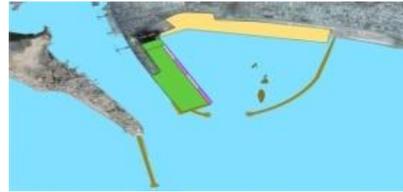
The second component is Marine Protection Works (MPW) in which three breakwaters and a revetment were to be built.

The contract was awarded to M/s China Harbour Engineering Company (CHEC). All the three breakwaters and revetment have been built and the work was completed in May 2013.



3. Quay Wall

The contract for the quay wall construction was awarded to M/s China Harbour Engineering Company (CHEC). About 97% work has been



completed so far. Out of all four berths three have been completed the fourth berth is scheduled for completion by December 2017.

4. Aids To Navigation

New aids to navigation including buoys, lights, VTS, radar, communications and other aspects have been installed to the new channel and basin of Pakistan Deep Water Container Port.

Concession Agreement for the development, Operation and Maintenance of the Terminal has already been signed with M/s Hutchison Port Holding (HPH). On two berths commercial operations have started in December 2016.

Container Handling Capacity; 3.1 MTEUs

B. RE-CONSTRUCTION OF BERTHS 15 TO 17 A

KPT had started second phase of re-construction of old berths from 15 to 17A in year 2012 and completed in May 2017. The project work was awarded to M/s Ssangyoung & Dangyoung

J.V of Korea. However, M/s Atkins of UK was engaged to supervise the entire work. All berths under operational. Closing account of project is under progress.

C. PREPARATION OF TEN YEARS BUSINESS PLAN AND STRATEGIC DEVELOPMENT PLAN

- A loan agreement for World Bank Financing was signed. One of the components of this loan is Preparation of Ten years Business Plan and Strategic Development Plan of the Port.
- Ten years Business Plan for KPT completed in Nov-2015 by the Netherland firm M/s MTBS.

Major future development/implementation projects are recommended in the Ten Years Business Plan are as under:—

i. Environmental Friendly Multi Purpose Bulk Handling Terminal At East Wharf

To encourage the policy of Public Private Partnership an Environmental Friendly Multi Purpose Bulk Handling Terminal at East Wharf is proposed.

Facilities that may be provided by the concessionaire should include bulk handling cranes with bagging units, conveyors, silos and other auxiliary facilities.

Consultant M/s NESPAK have been engaged to carry out feasibility study and probably completed by Sep 2018 & thereafter.

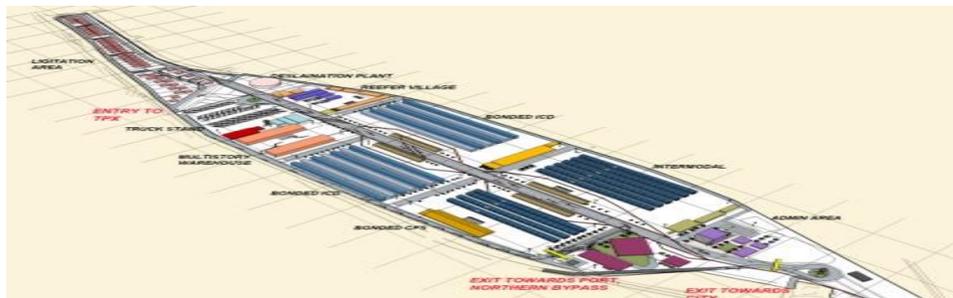
ii. Construction Of Periphery Road Along Chinna Creek

- Karachi Port Trust intends to develop a protective bund (sea wall) and road along the periphery of Chinna Creek.
- Hiring of Consultant for feasibility study is under way.

- Purpose of this project is
 - To safeguard KPT's Land from encroachment
 - To provide alternate road network from Mai Kolachi Road and additional access to Deep Water Container Port, and reduce traffic congestion around port area.

iii. Development of TPX area along M.T. Khan Road

- KPT is facing acute shortage of storage & warehousing within the bonded area of the port. Rehabilitation and development of existing areas is economical & immediate workable option to avoid restricted capacity of the Port to handle the cargo.
- The area under consideration is a few Km away from the Port, will be utilized to serve East & West Wharves as a off-dock facility.
- Hiring of Consultant for feasibility study is under way.
- Following facilities will be developed at TXP as Dry Port:
 - Warehousing
 - Processing of Cargo
 - Container Scanning
 - Access to rail network
 - Administrative Block
- Project shall be executed through Public Private Partnership (PPP) module.



iv. Construction Of Elevated Port Expressway

- To address the Traffic forecasts and congestion at the Port, it is necessary to explore all possible ways out for disposal and for the maintenance of Port Capacity.
- In this regard a 4 & 6 lane Elevated Port Expressway shall be constructed up to cater for port traffic generated from Pakistan Deep Water Container Port.
- The Elevated Expressway would also facilitate traffic generated from Coal Yard, East and West Wharves.
- Hiring of consultant for feasibility study and designing is under process.
- Project shall be executed through Public Private Partnership (PPP) module.

D. RECONSTRUCTION OF OP-I FACILITY

- OP-1 is a dedicated facility for handling of petroleum products ranging from 25000 DWT-75000 DWT Tankers. The facility was constructed in 1975-78 and is being used by various companies setup in the Keamari Oil installation area.
- On the basis of current conditions observed at OP-1 and keeping in view the medium to long term operating conditions anticipated economic factors, risks, safety factors, it was not recommended to rehabilitate the facility. The consultant strongly recommended to re-construct the Oil Pier-I.
- M/s Inros Lackner – Germany + M/s Techno Consult Int'l – Pakistan (TCI) is being hired for plan, detail design the reconstruction of Oil Pier-I. The contract agreement is under preparation & process shortly.

E. CABLE STAY BRIDGE / KARACHI HARBOUR CROSSING AT THE PORT OF KARACHI.

- Karachi Harbour Crossing bridge is to cater to present and future congestion in and around the port area.



- The project envisages a cable stay bridge across the channel, opposite OP-III with 350 meter span and 47 meter height to cater for shipping traffic under it.
- Two causeways will lead from the bridge, the shorter one connect the Manora–Sandspit road and the other one will go over the Western Backwaters and connect the Cargo Village. Through cargo village it will be further connected to the Lyari Expressway and Northern By-pass.



The project is proposed to be executed on PPP module, and is expected to be completed in 4 to 5 years from date of commencement.

F. CARGO VILLAGE / INDUSTRIAL PARK

- Setting up a satellite facility in the vicinity of the port, enveloping all the port requirements is a recent concept all over the world. 1300 acres of land is proposed for the project with individual areas catering for containers, general and bulk cargo, processing plants, customs and other related facilities. It will also have connectivity to M-10 and Lyari Express Way. The said project is currently not in the execution stage. Feasibility study was completed by M/S Louis Berger, USA year 1994-95. The project is proposed to be executed on PPP module.





The cargo handling operations, including export and import at Karachi Port Trust has remained brisk in financial year 2016-17 and the KPT broke its own record. The total cargo handling in this financial year closed at 52.49 million tons whereas the same remained 50.05 million tons during last year resulting in an increase of cargo handling with +4.89% growth. Similarly the container handling closed at 2.11 million TEUs (Twenty Equivalent Units – i.e equivalent to 20 feet container box size) whereas the same remained at 1.96 million TEUs during the same period of last year.

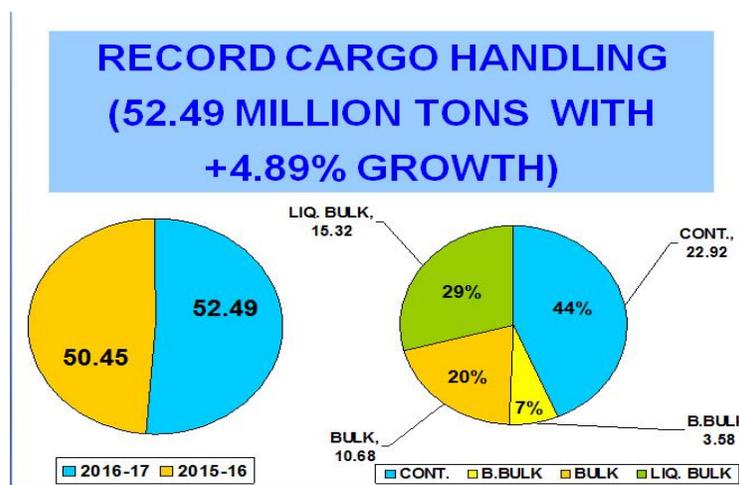
The cargo handling at KPT breakup shows that the port has handled 37.17 million tons of import and export dry cargo whereas during last year 34.59 million tons cargo was handled which is quite adequate increased handling with +7.46% additional cargo in the year 2016-17. The liquid bulk cargo of import and export has been closed at 15.32 million tons. Further the breakup of dry and liquid bulk cargo shows that the export cargo handling during financial year 2016-17 remained at 8.54 million tons and 1.32 million tons respectively as dry and liquid bulk cargo. The tonnage of export remained 8.40 million tons and 1.38 million tons during the year 2015-16. Similarly, the handling of import dry and liquid bulk cargo also closed at 28.63 million tons and 14.00 million tons whereas these remained 26.19 million tons of dry cargo import and 14.07 million tons of liquid bulk cargo import.

KPT has handled +9.32% additional dry import cargo during the financial year 2016-17 and the major contribution in this growth is dry bulk import

cargo which is +23.85% during financial year 2016-17. The port recorded handling of export of Urea this year apart from handling other import commodities like fertilizer and seeds.

The ships traffic has also improved during the financial year 2016-17 by witnessing arrival/departure of 758 container ships, 244 bulk cargo ships, 379 general cargo ships and 541 oil tankers. During last financial year 738 container ships, 222 bulk cargo ships, 374 general cargo ships and 559 oil tankers was handled in the year 2015-16. It is important to highlight that the KPT made available the Deep Draft Berths and as a result larger vessels has been accommodated with more volume of cargo.

CARGO / CONTAINER Handling 2016-17	
CATEGORY	(2016-17)
CARGO HANDLING (MILLION TONS)	
Dry Gen. Cargo	26.498
Dry Bulk Cargo	10.675
Total Dry Cargo	37.173
Liquid Bulk Cargo	15.320
TOTAL	52.493
CONTAINER HANDLING (MILLION TEUs)	
Import Teus	1.077
Export Teus	1.032
TOTAL	2.109



PAKISTAN NATIONAL SHIPPING CORPORATION (PNSC)



INTRODUCTION

Pakistan National Shipping Corporation (PNSC) the National Flag carrier enjoys a global presence in the shipping world. It undertakes business operations in an internationally competitive environment, competes even for transportation of Pakistani imports/exports and earns most needed foreign exchange for the country by managing a fleet of nine (09) ships. PNSC's fleet is a mix of double hull Aframax tankers, Panamax bulk carriers, Supramax, Handymax and Handysize bulk carriers, all of modern vintage, having a total deadweight carrying capacity of 681,806 metric tons. PNSC transports all type of cargoes on several geographical routes covering almost entire world.

VISION

To be a prominent player in global shipping by maintaining diversified marine assets, providing reliable & efficient shipping services to overseas and Pakistan's sea borne trade, maintaining relationship of integrity and trust with our customers, partners, employees, safeguarding interests of our stakeholders and contributing towards betterment of national economy, society and the environment.

ACTIVITIES

- a. During FY2016-17, PNSC and its vessel-owning subsidiary companies lifted 14.303 million freight tones of cargo.

- b. A comparative of sector-wise cargo lifting of FY 2016-17 is as under:

Sector	Freight Tones 2016-17 (Millions)
Liquid	12.639
Dry Bulk	1.351
Slot Charter	0.312
Total	14.303

- c. PNSC Group has reported decrease in revenue by 0.53%. However, Group has improved revenue in liquid cargo through chartering by 29% and dry cargo from slot charter business by 39%. While the business from the dry cargo bulk-carriers was weak as compared to last year reason being significant fluctuations in dry bulk freight market rates. Revenue from real estate increased by 8.7% in the current year.
- d. Group expenditure reduced by 0.29%. Aligning the group fleet direct expenses with the level of shipping activity, fleet direct expenses reduced by 0.41% in the current year. Benefiting from the fallen diesel and fuel prices in the global market and careful consideration and selection of cheap ports for bunker and lubricant lifting on voyages conducted by PNSC's owned vessels, diesel and fuel expenses reduced by 4.6%.
- e. Gross Profit of Rs. 3,513 million was achieved as against Rs. 3,554 million last year thereby showing a decrease of 1.1%.
- f. Group has achieved Net Profit after tax was Rs.2,476 million as compared to Rs. 2,323 million last year, an increase of 6.6%.
- g. Earnings per share of the Pakistan National Shipping Corporation Group of Companies was Rs. 18.75 as against Rs. 17.59 last year.

h. ACHIEVEMENTS AND PROGRESS:

Following table depicts the comparison of fiscal position of PNSC for the year 2015-16 & 2016-17.

FISCAL POSITION

	<u>2016-2017</u> <u>(Rs. In '000)</u>	<u>2015-2016</u> <u>(Rs. In '000)</u>
Operating Revenue	12,477,685	12,543,985
Operating Expenditure	8,963,790	8,989,808
Operating Profit	3,513,895	3,073,933
Other Operating Income	2,279,086	1,627,014
Other Expenses	1,353,745	1,181,349
Profit before Taxation	3,101,763	2,515,352
Profit after Taxation	2,476,815	2,323,054

i. WEALTH GENERATED:

Following table depicts comparison of wealth generated by PNSC.

	<u>2016-2017</u> <u>(Rs. In '000)</u>	<u>2015-2016</u> <u>(Rs. In '000)</u>
Income from		
Shipping Business	12,286,236	12,367,841
Rental Income	191,449	176,144
Other operating		
<u>Income</u>	<u>2,279,086</u>	<u>1,627,014</u>
<u>Total</u>	<u>14,756,771</u>	<u>14,170,999</u>

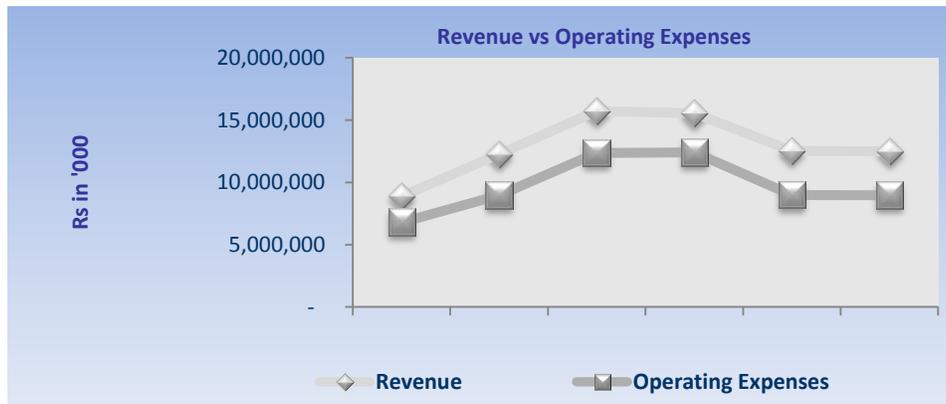
ii. WEALTH DISTRIBUTED:

Following table depicts comparison of wealth distributed by PNSC:

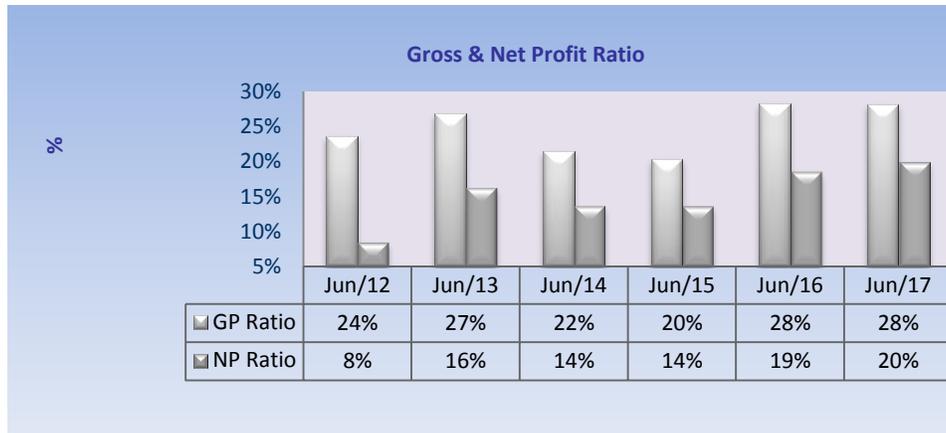
<u>2016-2017</u>	<u>2015-2016</u> <u>(Rs. In '000)</u>	<u>(Rs. In '000)</u>
Fleet Expenses	8,147,035	8,221,569
Administrative & General Expenses	1,802,302	1,596,172
Salaries	1,375,260	1,279,325
Finance Cost	330,411	558,581
Taxes	624,948	192,298
Dividend	264,127	264,127
Retained for <u>Business</u>	<u>2,212,688</u>	<u>2,058,927</u>
<u>Total</u>	<u>14,756,771</u>	<u>14,170,999</u>

1. **GRAPHICAL ANALYSIS:**

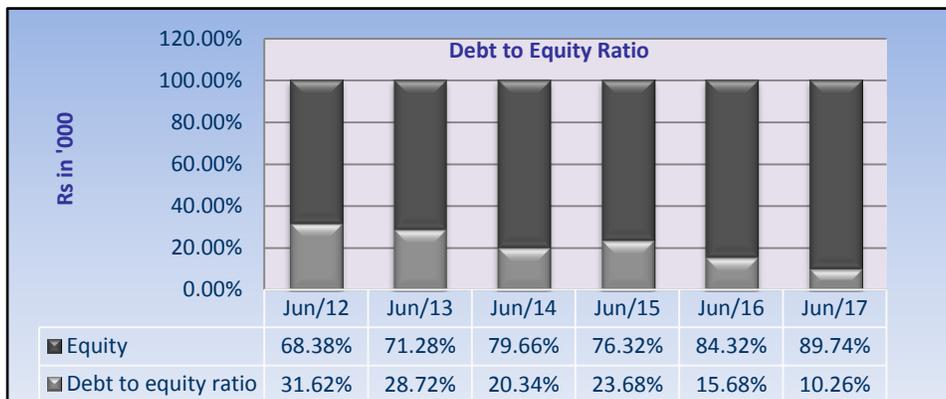
a. Revenue vs Operating Expenses



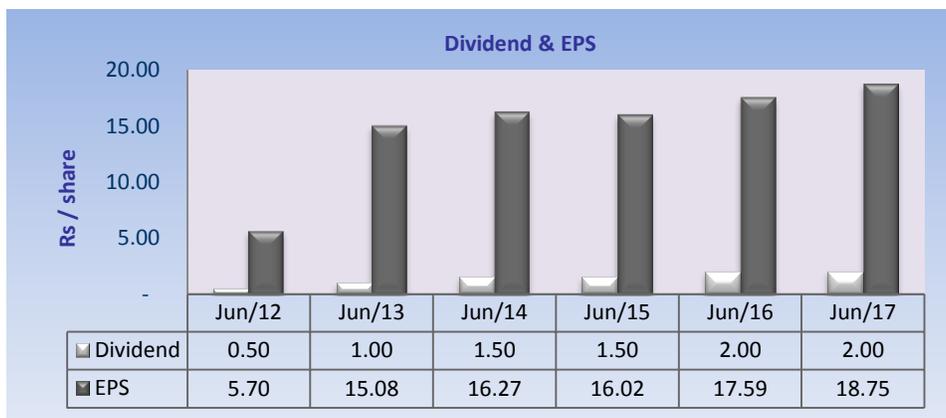
b. Gross & Net Profit Ratio



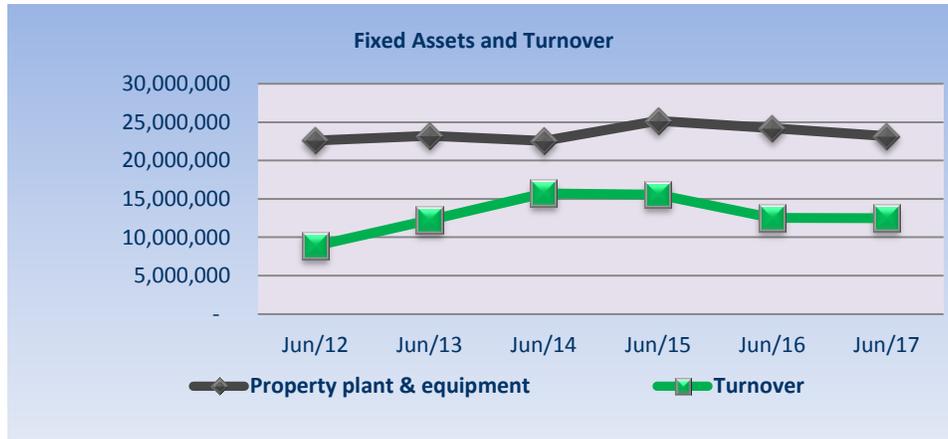
c. Debt to Equity Ratio



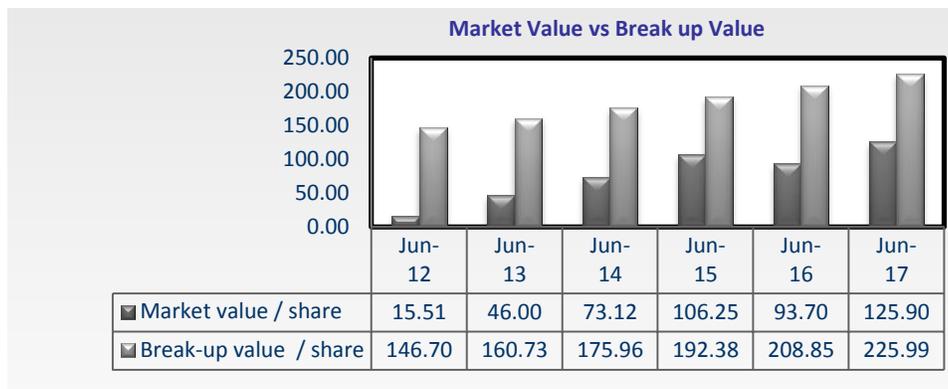
d. Dividend Payout (Rs. Per Share)



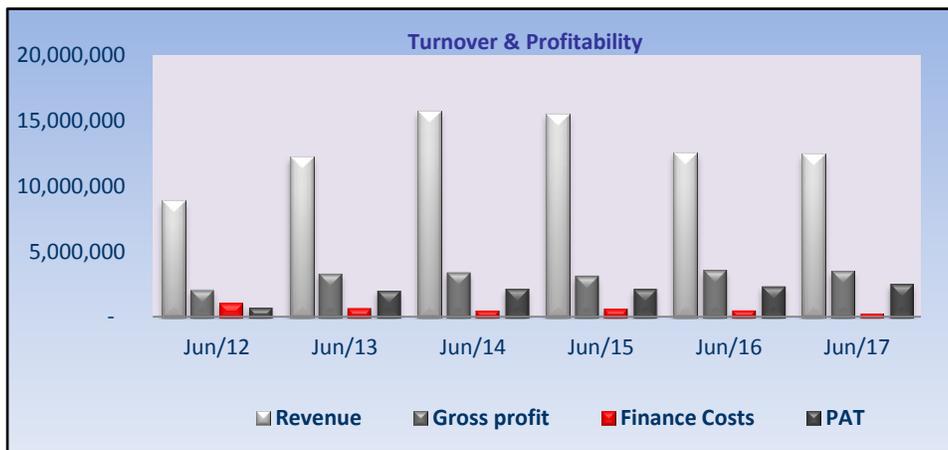
e. Fixed Assets and Turnover



f. Market /Break-up Value per Share



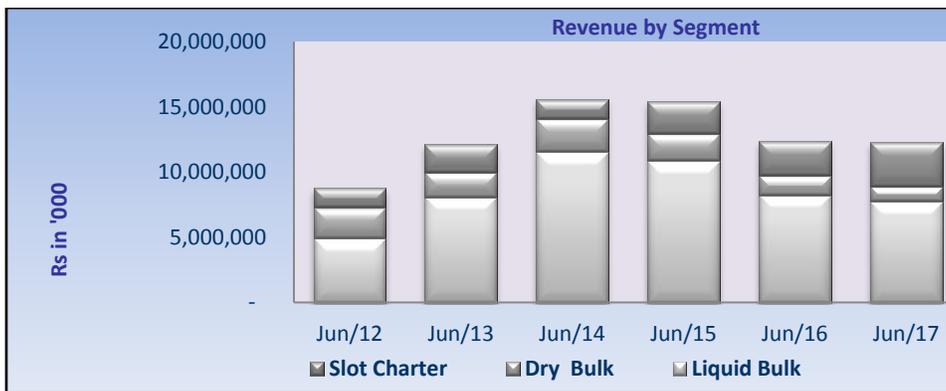
g. Turnover and Profitability



h. Price Earning (P/E) Ratio



i. Sector Wise Revenue



2. PNSC FLEET STRENGTH

Name of the Vessel	Description	Name of the Vessel	Description
MT. Quetta	Built Japan 2003	MV. Malakand	Built Japan 2004
MT. Lahore	Built Japan 2003	MV. Hyderabad	Built Japan 2004
MT. Karachi	Built Japan 2003	MV. Sibbi	Built Japan 2009
MT. Shalamar	Built Japan 2006	MV. Multan	Built Japan 2002
MT. Chitral	Built Japan 2003		

3. STRATEGIES, OBJECTIVES AND FUTURE PROSPECTS

A. STRATEGIC OBJECTIVES

The strategic objectives of PNSC are as under;

- (i). Persistent growth by strategically investing and diversifying in marine sectors according to past performance and outlook.

- (ii). To be optimally profitable, viable, commercial organization and contribute to the national economy by securing a reasonable return on capital and minimize outflow of national foreign reserves.
- (iii). Ensure steady supplies to Pakistan defense forces in time of peace & war.
- (iv). To do highly ethical, environment friendly and socially responsible business practices.
- (v). Ensuring that every employee feels proud of being part of PNSC team.
- (vi). To provide its clientele safe, secure, reliable and efficient services.
- (vii). To practice & believe in Equal Opportunity for every one in every aspect of business.

B. FLEET EXPANSION PLAN:

PNSC has taken steps to secure new business for maximum utilization of its cargo carrying capacity. Efforts are being made to reduce the laycan time of the ships being called at the ports and enhance/ infrastructure to of port operations implications.

***Pakistan's
largest
industrial
and deep sea
port of
Country.***

Keeping in view petroleum products low oil prices, the program of PNSC procurement of one one (1) LR-1 upgrade the port increase efficiency as well as financial the rising demand of in the backdrop of fleet development is revised with (1) Aframax tanker, product tanker in FY 2016-17, to meet additional oil transportation requirements of Pakistan.

In addition to above, PNSC is also in the process of procuring two (2) ferries for the establishment of domestic and international ferry service operations first time in Pakistan.

PORT QASIM AUTHORITY



Overview

Port Qasim exists in Indus Delta region at distance of 50 km in south-east of Karachi. Being geographically located on the trade route of Arabian Gulf, Port Qasim is the 1st industrial and commercial Port of Pakistan operating under landlord concept, location of the Port Qasim makes it very well connected to the transportation infrastructure of the country.

It is at distance of only 15 km from the national highway, providing direct access to the hinterland through road.

The port comprises of 17 berths with a total quay length of about 4,768 meters. It services more than 117 ships on a monthly basis.

The Port was started in 1980 with a dedicated Iron Ore & Coal Berth for bulk handling of imports of raw materials for steel production. The Port today has been carving into a business hub and busiest port and the main maritime gateway to Pakistan, Port is one of the largest contributors to national economy of Pakistan, providing wide range of port facilities, and Pakistan's largest industrial and deep sea port of country, playing a vital role in the development of national economy and today it handles one third of total seaborne trade of Pakistan economy, The port presently comprises 17 berths with annual handling capacity of 75 million tonnes per annum. A role of port is to facilitate trade by providing a competitive advantage of importers, exporters and port- related supply chain, and a key economic asset supporting the prosperity of thousand of business and daily

lives of families across the country. The port has completed 38 years of glorious service to the nation's maritime trade.

Port Qasim the deep Sea Port of the country, where 13 meters draught vessels are regularly handled where 335 meters long vessels are allowed, even though the Navigational channel of Port Qasim is 45 kilometers are available for vessels of 310 meters length and provide safe navigation for vessels up to 75,000 metric tonnes deadweight (DWT).

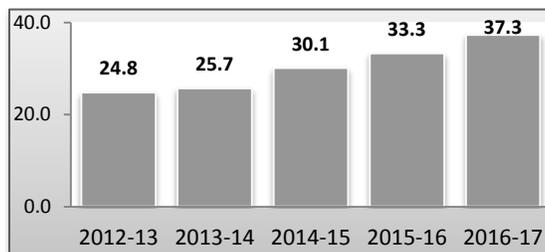
Milestone:

PQA handled largest ship of **Chestine Maersk** with LOA 347 meters was berthed at QICT Berth No. 7 on February 2017 which to is the largest vessels ever to berth at container terminal/port in Pakistan maritime history.

Trade Highlights for 2016-17

PQA registered a growth of **12.1 percent** in the fiscal year 2016-17, the record trade volume of 37.358 million tonnes led to the port handling 1,406 ship movements, the core activity of containerized trade moved up by 0.1% and non-containerized trade reflecting an increase of almost 20.6 percent.

Total Trade: Trade through the Port reached its highest level on record, where a cargo volume of 37.358 million tonnes was handled during financial year 2016-17 as compared to 33.321 million tonnes during corresponding period of the previous year 2015-16, registering a substantial increase of 12.1%.



The growth 12.1% in total traffic during the financial year 2016-17 is attributed in Furnace oil, Diesel oil, chemicals, Coal, LPG & LNG and Grain.

Out of 37.358 million tonnes of total traffic, liquid cargo was 17.543 million tonnes (46.9%), the containerized cargo was 14.335 million tonnes (38.4%) & remaining 5.479 million tonnes (14.7%) was miscellaneous types of dry bulk cargo/break bulk cargo.

The target planned by the Port Authority for the year 2016-17 was 33.4 million tonnes, against this Port achieved 37.358 million tonnes which is an increase of **11.8%** than the target.

Containerized Trade:

*Country's first Intergraded Cargo Container Control (IC3) facility is available at Port Qaim, Container terminals have a total handling capacity of over two million TEUs per annum, Large deeply laden container vessels handled safely up to 94,402 GRT having capacity of 11,500TUEs handling largest container vessels calling in Pakistan up to 347 meters length and permissible 45.2 meters beam Containers caters for lion share in container traffic of the country had a record box trade of more than 1.175 TEUs registered a growth of 4.6% over the corresponding figures and represented **38%** of total trade in 2016/17.*

In terms of Imports and exports, imports TEUs increased by 2 percent and exports TUEs rose by 7%.



Total containerized trade in tonnes increased by 0.1% over the previous financial year.

Total empty of exports & imports containers represented 17% of total container throughput which is an increase of 10.2% from 2016/17, average annual growth rate in the containers (TEUs) remained 10% over last four years per annum.

Non Containerized Trade:

The non-containerized trade represents an increase of 21.1% as compared to last year, and accounted for **61.6%** of total trade, non-containerized cargo were over 22.936 million tonnes, which comprised 22.373 million tonnes imports, showing an exceptional growth of 26.4%, as against the previous year, while 0.649 million tonnes recorded exports, registered a decrease of **50.7%**, this decrease was due to Containerize cargo, Cement, Rice, Steel coil and Crude oil shortfall.

The non-containerized cargo classified into two types, liquid cargo and dry cargo.

Liquid cargo:

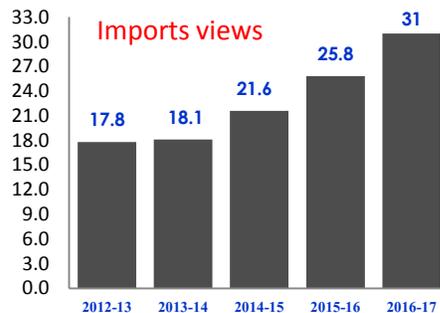
Total liquid trade was 17.543 million tonnes during the fiscal year, which was the biggest cargo types by volume with share of **47 percent** of total traffic, cargo consisting mostly petroleum product, LNG, LPG, edible oil and Chemicals, POL is biggest liquid cargo at the Port which is represented 54.7% of liquid volume & has consistently contributed at above 25.6% at the Port's tonneg trade, under the POL the most important product is furnace oil, diesel oil and crude oil which is being imported from Gulf countries, and second largest liquid cargo is Liquefied Natural Gas (LNG) which is imported from Qatar.

Dry Cargo:

Dry cargo including bulk and break bulk (exclusion containerized cargo) handled at the port at 5.479 million tonnes in 2016-17, reflecting **9.5%** growth, dry cargoes totaled 14.7 percent of the total volume handled in the Port, during the year unprecedented growth of 58% and 33.4% recorded in dry bulk commodities of Coal & Grain respectively.

Imports:

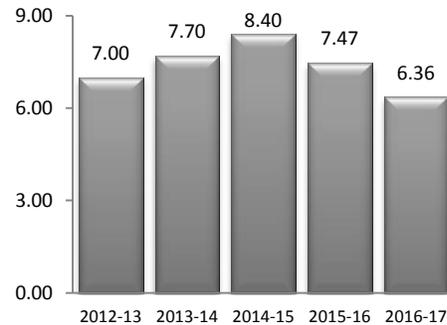
*The combine trade for containerized and non-containerized imports stood at **30.995** million tonnes, which is an increase of **19.9%** from July-June 2015-16. Imports accounted for a majority of Port Qasim's trade in 2016-17 comprising 83% of total trade.*



*The **POL** imports was the largest imported cargo which represented over **31%** of total import cargo, the second largest imported cargo was the containerized cargo which represented **28%** of total imports, and third largest imported cargo was the LNG which represented 11.6% of total imports and fourth largest imported cargo was the edible oil which represented 8.3% of total imports, Grains was fifth largest imported commodity group which represented 7% of total imports.*

Exports:

The export accounted for 17% of total trade through the port, total export handled at the Port at 6.363 million tonnes, reflecting a decrease of 14.9% as against the previous year, this decrease was due to Containerize cargo, Cement, Rice, Steel coil and Crude oil shortfall.



The exports of containerized cargo was the largest group of exports, which is a decrease of 7.3% from 2015-16.

The second largest non-containerized group of exports was cement, which decreased 56.7% from 2015-16.

Pakistan Seaborne Trade and PQA Share:

The totaled cargo handled among Pakistan Sea ports amounted to **89.851** million tonnes, out of which PQA handled 37.358 million tonnes cargo, which is represented over **41.5%** of PQA share.

The number of containers handled among Pakistan Sea ports amounted to 3.264 million TEUs, out of which PQA handled 1.175 million TEUs, PQA share in containers represented 34%,

Shipping:

Ship callings during the financial year 2016-17 stood at 1,406 ships, registered an increase of 2.5% as compared to corresponding period. Average annual growth rate in shipping has been over 7.8% over last four years per annum.

Preview of ship handling at Port Qasim



Contribution to Economic Development:

PQA is a largest contributor to the national exchequer, the Collectorate of Customs collected 414.437 billions rupees in the form of duties & taxes on imports passing through the port during the financial year 2016-17, as against the Corresponding period, showing a substantial increase of 31.2 percent.

Financial:

During the financial year 2016-17, PQA earned a total revenue of Rs. 13,088.65 million Rupees, as compared to corresponding period 2015-16, showing a growth of 22.54%.

The expenditure during the report period stood at Rs. 9,192.19 million Rupees, after making provisional for income tax at Rs.1,540.31 million Rupees.

PQA earned a net surplus of Rs. 3,428.43 million during the fiscal year 2016-17, as against the last year figures Rs. 2,596.914 million, which is shows a substantial increase of 32 percent.

Industrial:

PQA is facilitating development of port based Industrial and commercial complex to gear up Industrialization.

Currently **341** various industrial and commercial projects are already operative at the port while **276** are in construction phase.

Project under Construction:

SELF USE JETTY WITH MW COAL FIRED POWER PLANT:

Government of Pakistan had approved the project and accordingly PQA M/S Port Qasim Energy Power Company Limited (PQEPCPL) signed an Agreement on 23rd April, 2015 for establishment of 1320 MW Coal fired Power Project on 200 acres of land in Eastern Industrial Estate of PQA, with a dedicate Jetty. The Project is of national significant under China-Pak Economic Corridor to meet energy requirement of the country. The project cost is envisaged at a cost of US\$ 2 Billion and expected to

complete by end of 2017. The project is under construction by two Chinese EPC Contractors i.e Sinohydro and SEPCP-III.

LNG Terminal by PGPL:

ECC approved the project in April 2007 and accordingly PQA and PGPL had entered into IA dated 28th April 2007, amended by SIA dated 5th January 2017 for establishment an LNG Terminal in Port Qasim Authority. M/S PGPL requested for novation of SIA in favour of PGPL and bifurcations of land as PGPL and PGPL intended to assign its rights and obligations under the IA to PGPL. The Novation Agreement has been signed. The Terminal is located at The Mouth of Chara Chan Waddo Creek at Mazhar Point, which is 1.3 kilometers across the navigation channel from the existing FOTCO Jetty QP-1. The project is expected to be completed by the end of 2017.

LNG Terminal by GEIP:

PQA and JV GEL Pakistan (pvt) Ltd and Global Energy Infrastructure Ltd (GEI) had signed and implementation Agreement on 16th December 2011 for construction and operation of LNG Floating Storage and Re-gasification terminal on BOT basis, in the remote area in LNG Zone in Char –Chhan Waddo Creek. The Agreement was made effective on the Date of Signing i.e 16th December 2011. GEIP conducted QRA and obtained SEPA approval for Site specific. PQA allotted 25 acres of land in LNG Zone.

Dedicate Coal Terminal at MW 3&4

PQA and M/S Huaneng Fuyun Port & Shipping (pvt) Limited has signed the implementation Agreement on 10th October 2016 for establishment and dedicated coal terminal at Marginal Wharf 3&4. The Project as per on scope will be completed in 09 months to facilitate coal handling for Sahiwal Project, Due to a few reasons, the company is seeking permission for extension in time for completion of the project.

Integrated 2nd Oil Jetty

Keeping in view the market demand, PQA is expanding the petroleum products facilities at Port Qasim Authority through private sector participation on BOT basis. The Project will be by way of a new jetty and

not on PQA's Berths No. 1&2, Marginal Wharf. In this connection, advertisement has been floated in the leading newspapers and REP uploaded on PQA website and PPRA website for procurement of consultancy services.

Multipurpose Berth

PQA at present is handling bulk cargo at Marginal Wharf 1&2, the berths are not sufficient enough to cater the requirement. It is being envisaged that the demand would furthermore increase in the near future. Keeping in view, PQA is planning to construct multipurpose berth through private sector participation on BOT basis.

GWADAR PORT AUTHORITY



Introduction

Gwadar Port Authority (GPA) was established as an organization, after promulgation of the GPA Ordinance No. LXXVII of 2002 dated 17 October 2002, for construction, operations, management and maintenance of Gwadar Deep Water Port. Gwadar Port is the second great monument of Pak-China friendship after Karakoram Highway linking Pakistan and China.

Location

Gwadar is located on the shores of the Arabian Sea in the western province of Balochistan. It is about 630 km away from Karachi and 120 km from the Iranian border. Gwadar Port is located at the mouth of the Persian Gulf, just outside the Strait of Hormuz, near the key shipping routes in and out of the Persian Gulf.

GPA Management Board

The policy decisions of GPA are made through GPA Board. Members are representatives of Ministries/Divisions/ Government Organizations and Quetta Chamber of Commerce.

Mission

Gwadar Port will soon become gateway port for Pakistan and the region and a world-class maritime hub. Gwadar Port “the first deep sea port in the country” is a complement to Karachi Port and Port Qasim in order to stimulate economic growth of Pakistan in general and Balochistan in particular by utilizing the available resources of the country and also

providing an outlet for land-locked Central Asian States, Western China and Afghanistan through transit trade and offering transshipment facilities and to operate in a manner that is, Efficient, Effective, Competitive, Transparent & Fair to all.

Objective

- To cater for all types of ships and handle all types of cargo
- To facilitate trade industrial and economic development, nationally, locally and regionally
- To operate in a manner that is efficient, effective, competitive, transparent and fair to all
- To remain aligned with expectations of local and international customers and stakeholders

In doing so, the development of both Gwadar City and Gwadar Port will make important contributions to the socio-economic development of the district and the province of Balochistan while contributing a lot to the national economy.

Port Operation and Renovation

The earlier port operator, M/s PSA Gwadar International Pte Ltd, was unsuccessful in bringing business to the port and further expansion of its infrastructure..Since May 2013, the port’s Concessional Rights were transferred to the new operator, viz. China Overseas Ports Holding Company Limited (COPHCL).Since the concession were handed-overt to COPHC and they (the Port Operator) have been working on improving port facilities, surrounding environment and port business. The Port operator had invested more than \$30 million for port facilities upgradation. The Port is now fully operational with following facilities:

Current Port Equipment

Container stacking area (with terminal)	134,400 sq-m
Container freight station	21,750 sq-m

General cargo yard (adjacent to the terminal)	3,790 sq-m
Reefer Cargo space (Container Sockets)	(400 points) 367sq-m
Empty container stacking area	6,875 sq-m
Storage yard	28,669 sq-m
Transit shed (75 x 50 m)	3,750 sq-m
Hazardous cargo storage yard	1,830 sq-m
Lorry car park	1,125 sq-m

Crafts and Vessels

Tug Boats, ASD Type, Bollard Pull Tonnage: 30 Tons,
Horsepower: 2400 hp

1 - Survey boat

1 - Working boat

1 - Mooring boat

2 - Pilot boats

Cranes & Yard Equipment

5 x STS gantry cranes, 40 tons lifting capacity (2 cranes are operational and 3 cranes are in commissioning process and will be ready by end of Oct 2017)

2 x Rail-mounted Cranes (Portal Cranes) (575m Long rail track), 16 tons lifting capacity, Outreach: 33 meter

2 x Rubber-tired gantry (RTG), 40 tons lifting capacity

In addition, a large fleet of trucks, vehicles and other equipment are available to efficiently handle all types of cargo efficiently.

Gwadar Port Free Zone



During the initial phase of the execution, the COPHC started work on internal development of the Pilot Zone (initial area) of the Free Zone and initiate marketing. The construction of initial area is being done round the clock. All infrastructures,

including power, water, road, telecom, waste treatment, drainage system will be completed by end of 2017. More than 20 enterprises, involving in the fields of banks, insurance, financial leasing, hotels, overseas warehouses, fishery products processing, edible oil processing, pipe, furniture manufacturing, electric vehicle assembly, trade and logistics, have already been registered in FZ. Construction of Pilot Zone will be completed by Dec 2017 at an estimated cost of US\$ 270 million by COPHC/Gwadar Free Zone Company. Additional investment is also being made from 5 main investors, investing in industrial units, logistic business centers, and some commercial services.



Port Operations

Since 2008, Gwadar Port has handled around 6.453 million cargo from 205 ships. The Chinese Operator is working on increasing the number of ship calls at the port. Two ship-liners (COSCO & Sino-Trans) are calling regularly at the port. From May 2015 Container Business has also been started from Gwadar Port.

GPA Port Performance				
Year	No of Ships Handled	Cargo Imports (MT)	Cargo Exports (MT)	Total Cargo Handled (MT)
2008	6	183,434		183,434
2009	70	2,249,593		2,249,593
2010	21	731,534		731,534
2011	30	1,087,895		1,087,895
2012	18	782,262		782,262
2013	17	601,486		601,486
2014	11	443,380		443,380
2015	13	290,278	750	291,028
2016	11	25,311	2,163	27,474
2017	8	55,225	32	55,257
Total :	205	6,450,398	2,945	6,453,343

Gwadar Port Master Plan

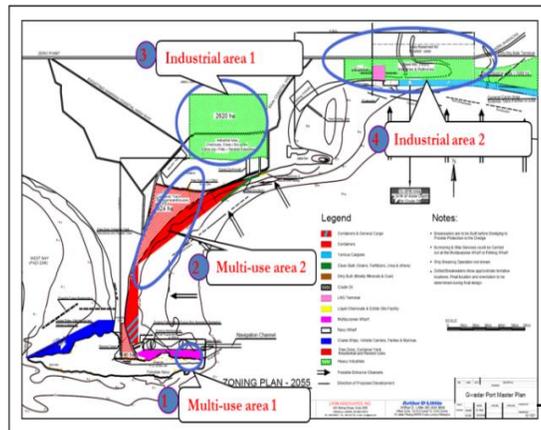
Gwadar Port Master Plan was prepared by consultants M/S Arthur D Little in May 2006. It provides the foundation for current & future planning system of Gwadar Port Authority. The main objective is to provide for a rapid, smart and economic development roadmap of Gwadar port.

Multi-use area 1 (146 ha)

Designated to support phase 1 & 2 operations of multipurpose terminal Storage,

Multi-use area 2 (924 ha)

Reserved for free zone container storage and related developments including commercial areas.



Industrial area 1 (2620 ha)

Port related industrial land for clean dry bulk, liquid bulk, chemical factories, food processing, oils and fats and related industries Potential location for EPZ

Industrial area 2 (5000 ha)

Port related industrial land for heavy industries, including

oil refineries, petrochemicals, LNG, power, steel, cement, ship breaking, minerals etc.

China Pakistan Economic Corridor (CPEC) & Gwadar Port and City

The governments of Islamic Republic of Pakistan & People's Republic of China have agreed on a long-term bilateral trade and economic corridor programme, i.e. China Pakistan Economic Corridor (CPEC). Since 2013-14, GPA has been part of all planning and appraisal processes of CPEC programme. For the early harvest / prioritized phase of CPEC, following projects related to Gwadar Port & Port City of Gwadar have been agreed, which are in different stages of project implementation and approval:

- **Construction of East-Bay Expressway,**
- **Pak-China Technical & Vocational Institute**
- **Construction of Breakwaters,**
- **Capital Dredging of Berthing Areas & Channels,**

Construction of East Bay Expressway

To resolve the port connectivity with the highway network, the project, “Construction of Gwadar Port Eastbay Expressway” has now been agreed for funding under CPEC at an approved cost of the Rs.14.062 Million. A project management consultant firm by GPA has been selected. The project is in implementation process and its ground-breaking ceremony was performed by the Prime Minister on 22 November 2017



Pak-China Technical & Vocational Institute

Pak China Technical & Vocational Institute is planned adjacent to the Port Free Zone, to cater for the future requirements of skilled manpower in



Free Zone and Port related fields. The project comprises main building for class rooms, admin block, workshops; labs, hostels, examination block, teachers lodges parking area at a cost of Rs 912.330 million with 80% Chinese grant. Phase-I

(on PPP mode) has been planned and one Pakistani institute M/s CIBA has been selected to immediately start classes by the end of this year 2017. Phase-II of the institute is under process with Chinese MoFCOM after signing of project feasibility minutes.

Beside the above works, the following projects are in full swing, which are being executed with local funding:

Development & Construction of Port Allied Structures in Mullah Band Area (GPA Business Complex)

A number of port related businesses have been started in port and surrounding areas and these operating companies need accommodations and offices. Besides, GPA may also develop commercial structures like Bank Branches, Stevedores, Agency Offices, Cargo Storage Sheds, Marine Repair Workshop etc. to facilitate the investors as well as for



revenue generation on a 69 acres of land. GPA initiated construction of following infrastructures with an estimated cost of Rs. 2381.884 million:

Commercial Complex-I: Construction of Commercial Complex (G+2) to provide spaces for port related businesses, bank branches etc.

Commercial Complex-II: Construction Commercial Complex and Seaman Centre to provide recreational and residential facilities to ship crews, businesspersons and investors.

Construction of Sheds: Construction of Cargo Shed, Container Repair Shed, Marine Repair Shed and Container Freight Station.

External Development Works: Construction of underground water tank with pump room, overhead water tank with watch & light tower, MV substation, roads, water supply & sewerage system, fire-fighting, drainage and electrical works.

Up-gradation of GPA Housing Complex

The current structures and other facilities of GPA Housing Complex for the officers / employees of GPA were established in 1990 and 2004. In



order to provide better living facilities to officials of GPA the project of “Up-gradation of GPA Housing Complex” started in January 2017 with a cost of Rs.519.921 million. Construction of additional residential blocks, GPA House

(Chairman’s residence), walking track, community center, commercial center, playground, and water supply system etc. are included in the project along with renovation of present infrastructure for fulfillment of the present and future requirements of GPA.

KARACHI DOCK LABOUR BOARD



Introduction

Karachi Dock Labour Board is a regulatory body established under Karachi Dock Workers (Regulation of Employment) Scheme, 1973 issued by Federal Government vide SRO 1693(I)/1973 dated 03.12.1973 in pursuance of Dock Workers (Regulation of Employment) Ordinance, 1973 which was later replaced by Dock Workers (Regulation of Employment) Act, 1974. The Board as such is established and functioning under an Act of Parliament to regulate the employment of dock workers at the Karachi Port and by virtue of its functions and duties is performing the role of Federal Government and is empowered to impose cess on cargo handled at the Karachi Port to generate funds for the welfare of dock workers registered with the Board.

Organization:

The Board consists of the following Members

Representing Federal Government

- | | |
|------------------------------------|-----------|
| ➤ Chairman | 01 |
| ➤ Senior Executives – KPT | 02 |
| ➤ Director Labour, Govt. of Sindh | <u>01</u> |
| | 04 |
| ➤ Representing CBA of Dock workers | 05 |

- Representing Pak. Stevedores
Conference (G) Ltd. 02
- Representing PNSC 01
- Representing Pak. Ship Agents Association 01
- Representing Overseas Chamber
of Commerce & Ind. 01

14 Members

Objectives:

1. To regulate the employment of Dock Workers.
2. To ensure that adequate number of Dock Workers are available for:
3. Efficient Performance of Dock Work.
4. Expeditious and Economic Turn-round of ships.
5. Speedy transit of goods through the Port of Karachi.

Functions:

The Board has taken measures for furthering the objectives of this Scheme, including measures for:

- Ensuring adequate supply and the full and proper utilization of registered Dock Workers.
- Regulating the Recruitment and discharge of Dock Workers.
- Keeping and maintaining Employers' Register.
- Maintaining Record of Dock Workers.
- Providing training to Dock Workers.
- Providing welfare benefits including medical services.

- Making provision for health and safety measures.
- Fixing and Recovering levy from the Beneficiaries for operating the Scheme.
- Maintaining and administering the Welfare Fund.
- Maintaining and administering a Provident Fund, Gratuity Fund and other welfare scheme for the registered Dock Workers.
- Maintaining proper accounts of all receipts and expenses relating to the Scheme.

REGISTERED DOCK WORKERS

At present 2770 Dock Workers are registered on KDLB Roster under the following categories in Day/Night Shifts:—

<u>CATEGORIES</u>	<u>STRENGTH</u>	
	<u>Day</u>	<u>Night Total</u>
1. HATCH WORKERS	0597	06001197
2. TINDAL	0049	00430092
3. WHARF WORKERS	0598	05621279
4. WINCH CRANE DRIVERS	0163	01580321
TOTAL:—	<u>1407</u>	<u>13632770</u>

KARACHI DOCK LABOUR BOARD PROJECTS

COMPLETED

- a) KDLB SECRETARIAT BUILDING. (Ground + Five Story)
- b) BOOKING CALL STATION WEST WHARF ADJACENT KDLB BUILDING FOR HATCH WORKERS.

- c) BOOKING CALL STATION KEAMARI NEAR TO JUNGLE SHAH, KEAMARI FOR WHARF WORKERS.
- d) MOSQUE KHATA-MUR-RUSUL, ADJACENT KDLB BUILDING.
- e) TRAINING CENTRE FOR DOCK WORKERS.
- f) CANTEEN ADJACENT BOOKING CALL STATION, WEST WHARF.
- g) KDLB HOSPITAL (110 BEDS HOSPITAL), KEAMARI.

DIRECTORATE OF DOCK WORKERS SAFETY

The Directorate of Dock Workers Safety is responsible for the enforcement of Dock Labourers Act, 1934 and Regulations, 1948. The directorate of dock workers safety is an obligatory department to implement International Labour Organization Convention No. 32 (Protection against Accident of workers employed in loading and unloading ships).

Inspection of Ships and Dock under Dock Labourers Act.

Dock workers safety inspector inspects the ships, cargo handling equipment testing and certification by the international Classification Societies to ensure the compliance with international requirements. The inspectors and their staff carry out investigation of accident and recommend measure to prevent recurrence. During the financial 2016 – 2017, conducted 1,544 inspections of ships Cargo gears certification and port premises. Due to strict vigilance all ships were found using duly tested machinery.

Safety Awareness Schemes.

The Directorate of Dock Workers Safety carried out following activities during the above reference period.

Publications.

- Safety Handbook.
- First Aid.
- Standard Hand Signals.
- Safety Education.
- Primer on Hand Signaling.

Decreasing rate of accidents.

A downward trend was observed in the accidents during operations on account of the efforts of the directorate in the areas of effective

enforcement, guidance, advice and systematic training. From the highest number of 102 accidents in 1990, the figures come down to 32 in 1998. The figure further declined to 24 in the year 2001. It came down to 10 accidents in the year 2005. Due to effective vigilance and all the port areas of Pakistan have now Zero Accident Areas. Due to Zero Accident, productivity of dock workers have been increased multifold.

KORANGI FISHERIES HARBOUR AUTHORITY

PURPOSE FOR CREATION OF AUTHORITY

The Korangi Fisheries Harbour Authority (KoFHA) was established under Ordinance No. XVI of 1982 for making all arrangements for the planning, construction, operation, management and maintenance of Korangi Fisheries Harbour for exploiting fisheries resources beyond territorial waters.

The functions and administrative control of the Authority after devolution of Ministry of Livestock & Dairy Development was transferred to the Ministry of Maritime Affairs, GOP in May, 2011.

OBJECTIVES

Following are the objectives for development of deep-sea fish harbour at Korangi creek:

- (i) To increase fish production by providing basic infrastructure facilities,
- (ii) To promote deep sea fishing by accommodating larger sized vessels to exploit the un-tapped off-shore fisheries resources,
- (iii) To increase the foreign exchange earnings of the country through increase exports of marine fish products,
- (iv) To assist in removing the prevailing congestion at Karachi Fish Harbour by shifting of boats,
- (v) To improve socio-economic life of fishermen by providing significant employment opportunities.

LEGAL FRAMEWORK

With the declaration of Exclusive Economic Zone (EEZ), Pakistan extended its jurisdiction up to 200 nautical miles from the coastline and added about 250,000 SM of sea area to territory. Therefore the Exclusive Fishery Zone (Regulation of Fishing) Act, 1975 was promulgated for sustainable exploitation of the fishery resources beyond territorial waters.

Federal Government under entry 36 of Federal Legislative List is responsible for fishing & fisheries beyond territorial waters.

Pursuant to Deep-sea Fishing Policy of 2009, it is mandatory for all deep-sea vessels operating in EEZ (20 to 200 nautical miles) to land/export the fish catch from Korangi Fisheries Harbour. The Korangi Fisheries Harbour Authority has been established with the very purpose of exploiting fisheries resources beyond territorial waters (12 NM).

FUNCTIONS & SERVICES

The main function of the Authority is to provide berthing and onshore facilities to deep-sea fishing fleet. The harbour has been designed to facilitate the operation of fleet of 413 fishing vessels varying from 45 GRT to 350 GRT with a maximum draught of 4.2 meters. The services to handle an annual fish landing of 92,000 MT can broadly be divided into:

- (i) Fish landing , encompassing a wide range of infrastructure and activities:
 - Jetties for the landing of fish, supply of utilities and waiting,
 - Navigation aids and ship control
 - Fish handling equipment for unloading the fish.
- (ii) Auctioning , including:
 - The availability of the auctioning hall and fish handling equipment, Supervision and administration of the auctioning process.
- (iii) Land, subleased to supporting industries, such as
 - Ice plant, fish processing industries, boat building and mechanical workshops for repair of marine engines etc. Commercial building, rented out to business and bank services.

- (iv) Utilities (water and electricity, fuel), to be supplied to boats/ fishing vessels, Industrial and commercial users.
- (v) General services, which include access and internal roads, drainage, janitorial, weigh bridge, petrol pumps and security etc.

ORGANIZATION

The general directions and administration of the Authority and its affairs are vested in the Board, which may exercise all power and do all acts and things which may be exercised or done by the Authority. The case for appointment of a new Chairman & reconstitution of the Board is under consideration by Prime Minister Secretariat. The strength of the Authority comprises 79 sanctioned personnel out of which 61 are in position at present.

HARBOUR FACILITIES

The harbour facilities consist of a total of 709 meter long jetty (unloading, supply & waiting) to facilitate operation of a fleet of 408 vessels of various sizes to land a catch of 92,000 MT annually. Besides Jetty structures, other facilities such as Navigational Aids, Fish Auction Hall, Offices for the Mole Holders, Restaurant, Net Mending Shed, Public Toilets, Car Park, Access Roads, 100 Telephone lines on DRS link, Water (135,000 GPD) and Power Supplies (3.6 MW & 600 KW from KESC) etc. have also been provided at the harbour.

PERFORMANCE

7(i). Port Operation & Fish Landings

The main objectives of Korangi Fish Harbour are to promote deep sea fishing by accommodating medium-sized vessels for exploiting fisheries resources beyond territorial waters and removing the prevailing congestion at Karachi Fish Harbour by diverting boats beyond the capacity of Karachi Fish Harbour to Korangi Fish Harbour.

Despite credible efforts made which include amendment in Deep-sea Fishing Policy and repeated invitation for the grant of fishing licenses through press, the operation of deep sea vessels is discontinued since year 2006. Although the Deep-sea Fishing

Policy was revisited in 2009 but due to IUU fishing, abnormal growth of fishing fleet coupled with mechanization of fishing vessels the marine fisheries stock has sharply declined to an alarming stage. The stock assessment survey report of FAO also confirms that stock of large pelagic & demersal fish has depleted significantly. In response to advertisement released in September 2015, Six Fishing Trawlers of Chinese origin were arrived at Korangi Harbour in December 2015. However on the basis of FAO stock assessment report no surplus deep-sea fisheries resources to allow licensing to foreign flagged fishing trawlers. Therefore all applications for the grant of fishing licenses were denied. Resultantly the foreign trawler sailed out in October 2017 after payment of port charges.

Accordingly, the licenses to foreign operators for trawl fishing are not being granted. However, foreign flagged Tuna Long Liners & Squid Jiggers being friendly fishing gear may be allowed to operate beyond 20 NM under present policy.

The Deep-sea Policy as amended in 2009 is once again being revisited to make it more investment friendly with prime emphasis to regulate local fishing fleet with fishing license/permit for sustainable production from EEZ.

During past three years the fleet size of local fishing boats has substantially increased. Presently about 210 small and large boats are operating on regular basis using Korangi as home port. The shifting from close vicinity and Karachi Harbour is increasing due to congestion problems at Karachi Fish Harbour better. During the year 2016-17 about 12,350 MT of fish catch was unloaded by the local boats as per following details. It may be noted although the size of fleet and numbers of fishing trips have increased considerably but due to depletion of fish stock the quantity of fish catch per boat has significantly declined as can be noticed from following details:

YEAR	NOS. OF BOATS	NOS. OF TRIPS	QUANTITY OF FISH (MT)
2014-15	72	1,112	8,079
2015-16	90	941	8,494
2016-17	150	1,229	12,350
TOTAL			28,923

7 (ii). FINANCIAL PERFORMANCE

The Authority has earned revenue of Rs 595.90 million as on 30-06-2017, since commencement of the operation in November, 1996. In absence of deep-sea fishing traffic the operating income of the Authority is far behind the targets as anticipated at the time of inception of Korangi Fisheries Harbour. The Authority has succeeded in improving the income from other sources during past as mentioned below:

(In Million Rupees)

S.No	Particulars	2014-15	2015-16	2016-17
(a)	Operating	11.094	20.139	25.435
(b)	Non Operating	26.548	31.099	31.015
	Total Income	37.621	51.238	56.450

ESTABLISHMENT OF FISHERIES INDUSTRIES & INFRASTRUCTURE

In the absence of operation of deep sea fishing traffic, the Authority has concentrated to promote Korangi Fish Harbour as Business Park by establishing modern Fish Processing Units for value added products. The Authority has made significant headway in this area during past two years. The progress is mentioned as under:

- Seven Fish Processing Plants are functional. Four more seafood processing factories are under construction. Remaining land for industrial undertakings have been allotted to potential parties. Two ice plants are also functional.
- 4 FRP boat building yards, 3 HSD bunkering/dispensing for fishing boats one Petrol Pump and one mechanical workshop for vehicular traffic are functional. Infrastructure facilities- The feeder for supply of 3 MW electric powers has been energized, adequate water supply from KW&SB trunk main is being supplied to all users, 100 telephone lines have been provided by PTCL through DRS Link free of cost. Mosque has been built with public donations.

The establishment of these processing plants provides hope for the first time that soon a wholesale fish market would be established at the harbour. The processing units at present are providing employment to over 2000 workers and exporting fish products valuing US \$30 million annually. Upon full scale development of industrial area within two years, it will create the employment opportunities for 5,000 people and enhance the export in several orders.

PLANS FOR NEXT YEAR & WAY FORWARD

Goals and targets fixed for the financial years 2017-18 are as under:

- i. Immediate issuance deep-sea fishing licenses.
- ii. Immediate notification of new Deep Sea Fishing Policy with mandatory requirement to operate from Korangi Fish Harbour.
- iii. Further promote Korangi Fish Harbour as Business Park for the establishment of value added fish processing plants and expedite construction of fish processing units.
- iv. Improve port infrastructure facilities & services.
- v. Attract local boats from the vicinity to use Korangi as home port.

Moreover, the Authority in consultation with Infrastructure Project Development Facility (IPDF), Ministry of Finance has developed financial models for three projects (establishment, operation and management of modern auction hall, floating jetty for small boats and boat lifting/lowing facility along with marine workshop) to outsource on the basis of Public Private Partnership. Which is under process Built Operative Transfer (BOT). Thereafter Expression of Interest most likely on BOT basis will be invited. The accomplishment of these projects might make the Authority a profitable commercial entity, create more employment opportunity and ensure export of quality fisheries products to international markets.

MARINE BIOLOGICAL RESEARCH LABORATORY

Functions:

- To obtain information on distribution, population dynamics, migratory pattern and status of animal life of Pakistan (for MBRL only fauna of coastal areas of Pakistan).
- To setup and maintain standard zoological collection for reference.
- To advise the Government on all zoological matters including conservation and management. Export and import of wildlife.
- To impart training in wildlife identification.
- Create public awareness about wildlife conservation.

Year	Number of Surveys	Number of Species observed/ collected	Number of specimens of each species observed/ recorded	Create Public awareness about wildlife conservation/wildlife training/liaison with other in line organizations
July 2016 to May 2017	15 (Fifteen) surveys were under taken of Sindh and Balochistan coast.	<u>Coastal Birds:</u> Coastal Birds species 50 (recorded from KetiBundar) Coastal Birds Species 43 (recorded from Banbhor) Coastal Bird Species 28 (recorded from Sonmani) Coastal Bird Species 15 (recorded from KundMalir)	Birds Count -3330 Birds Count-1396 Bird Count-530 Bird Count-502	➤ One Paper on vertebrate diversity of West Coast of Pakistan has been published in Records of Zoological Survey of Pakistan. 2017. Vol.22 : 30-38. ➤ Winter Survey of Birds at Keti Bunder, (District Thatta) J. Zool., Punjab University. 2016. Vol. 31(2): 203-208. ➤ Bionomic study of Common Mormon (<i>papiliopolytes</i>) (Lepidoptera: <i>Papilionidae</i>) from Lower Sindh Pakistan.
		<u>Cetaceans:</u> Marine Mammals Species -2 (West coast of Karachi)	Marine Mammals count -10	➤ Accepted for Publication. USA Paper on Natural Enemies of citrus Butterfly <i>papiliodemoleus</i> and <i>common Mormon</i> Butterfly <i>papiliopolytes</i> (Lepidoptera, <i>Papilionidae</i>)

		<p><u>Coastal Reptiles:</u> Coastal (Land) Reptiles Species -12 (recorded from KetiBundar)</p> <p>Coastal (Land) Reptiles Species-10</p> <p><u>Marine Reptiles:</u> Marine Turtles Species -1 (West coast of Karachi)</p>	<p>Coastal (Land) Reptiles count -52</p> <p>Coastal (Land) Reptiles count -40</p> <p>Marine Turtles count -200</p>	<p>from Lower Sindh Pakistan (Under Publication) in J. of Entomology University of Karachi.</p> <p>➤ Avifauna of Sindh coast. Paper under compilation.</p> <p>➤ Collaboration with different in line Organizations like SEPA, IUCN,</p> <p>➤ Marine Fisheries Department, ZSP, and WWF</p>
		<p><u>Marine Invertebrates:</u> a) Gastropods Species – 14 (West coast of Karachi) b) Bivalve Species – 11 (West coast of Karachi)</p>	<p><u>Mollusca:</u> a) Gastropods count 3500 b) Bivalve count 900</p>	
		<p>c) Echinoderms Species – 11 (West coast of Karachi)</p>	<p>Echinoderms count - 140</p>	
		<p><u>Marine Fishes:</u> a) Fishes Species-9 (recorded from Banhbor) b) Fish Species-16 (recorded from Sonmani) c) Fish Species-13 (recorded from Korangi Fish Harbour, Ibrahim Hyderi etc)</p>	<p>Fishes count -405</p> <p>Fishes count-350</p> <p>Fishes Count- 410</p>	

MARINE FISHERIES DEPARTMENT'S

A) THE DETAILS OF ITS ACTIVITIES, ACHIEVEMENTS AND PROGRESS

Marine Fisheries Department is an attached department of Ministry of Maritime Affairs, Government of Pakistan. It is the executive fishery agency of the Federal Government, with primary responsibilities for ensuring management and development of fishery resources in the interest of the nation. According to the constitution, the management of Fishing and Fisheries beyond territorial waters (i.e. beyond 12 nautical miles) is Federal responsibility.

Fisheries as a sub-sector of agriculture plays a significant role in the national economy and towards the food security of the country, as it reduce the existing pressure on demand for mutton, beef and poultry.

Contribution of fisheries:

a) GDP	1%
b) Contribution to Agricultural GDP	4%
c) Contribution to labour force	1%
d) Source of livelihood	
e) Direct fishermen	400,000
f) Ancillary Industries	600,000
g) Per capita consumption / P/Y	2.0 kg

B) ACTIVITIES OF THE DEPARTMENT

Marine Fisheries Department since its inception is involved in the development of fisheries in Pakistan. Main areas of the activity are:

- Exploitation and management of fisheries and other living resources in the EEZ of Pakistan.

- To regulate quality and promote export of fish and fishery products and to prevent export of substandard quality of fish and fishery products.
- To conduct exploratory fishing survey and biological research on various aspects of fisheries.
- Study of occurrence, life history and distribution of commercially important fish species.
- Management and improvement of fishing fleet.
- Introduction of new fishing techniques and improvement of traditional methods.
- Training of fishermen in various disciplines including modern fishing techniques, engine maintenance, fish processing and quality control.
- Liaison with various national and international agencies.
- Collection, analysis, interpretation and publication of fisheries statistical data.
- Advice to federal and provincial governments in matters relating to fisheries.
- Provide quality control service for export and domestic consumption of fish
- Provide technical assistance and promotion of fish processing industry.

C) ACHIEVEMENT/ PROGRESS DURING THE LAST YEAR, 2016-17 AND PROCEEDING 2017 - 18:

Government has taken number of steps to improve fisheries sector, which *enter-alia* include strengthening of extension services, introduction of new fishing methodologies, and development of value-added products, enhancement of per capita consumption and up-lifting of socio-economic condition of the fishermen communities. Following achievements were made during the last year, 2016-17 and proceeding 2017-18:

- i) Fishery plays an important role in Pakistan's economy and is considered to be a source of livelihood for the coastal inhabitants. A part from marine fisheries, inland fisheries (based in rivers, lakes, ponds, dams etc.) is also very important activity throughout the country. Fisheries share in GDP although very little but it adds substantially to the national income through export earnings. During the year 2016-17, a total of 152,858 m. tons of fish and fishery products were exported, earning value of 394 million US\$.
- ii) During the period 2016-2017 total marine and inland fish production was estimated 797,000 m. tons out of which 498,000 m. tons was marine production and the remaining catch come from inland waters. Whereas the production for the period 2015 - 2016 was estimated to be 788,000 m. tons in which 493,000 m. tons was for marine and the remaining was produced by inland fishery sector.
- iii) A total of 152,858 m. tons of fish and fish preparation was exported during the financial year 2016-17. Pakistan's major buyers are China, Thailand, Malaysia, Middle East, Sri Lanka, Japan, etc. Pakistan earned US\$ 394 million. Whereas the export for 2015- 2016 was 127,910 m. tons of fish and fishery products were exported earning US\$ 325 Million. The export of fish & fishery products has been increased by 19.5 % in quantity and in value have been increased by 21.35 % during the financial year 2016-17.
- iv) Government of Pakistan is taking a number of steps to improve fisheries sector. Further number of initiatives are being taken by federal and provincial fisheries departments which includes *inter alia* strengthening of extension services, introduction of new fishing methodologies, development of value added products, enhancement of per capita consumption of fish, up gradation of socio-economic conditions of the fishermen's community.
- v) **BIOLOGICAL AND HYDROLOGICAL RESEARCH**

During the period 2016-2017 samples of seawater collected from coastal areas were analyzed to determine parameters

which affect fish distribution. Fish samples of different species were examined for study of length-weight relationship, sex ratio, maturity, food and feeding habit and fecundity etc. Monitoring for fish landing to determine stock position was also carried out at Karachi Fish Harbour.

vi) **QUALITY CONTROL SERVICES**

Marine Fisheries Department is responsible to regulate quality and promote export of fish and fishery products and to prevent export of substandard quality of seafood products and for matters connected therewith and ancillary thereto. In this connection, Quality Control Section of the department has issued certificates of Quality & Origin and health for seafood commodities exported from Pakistan. The income generated from issuance of these certificates are as under:-

Period from 01st July, 2016 to 30th June, 2017.

S. No	Location	No. of Certificates of Quality & Origin	No. of Health Certificates	Total No. of Certificates	Total income (Rs. million)
1	MFD, Karachi	15,423	5,602	21,025	21.025
2	Regional Office, MFD, Peshawar	181	-	181	0.181

vii) **EXPORT OF FISH AND FISHERY PRODUCTS TO THE EUROPEAN UNION (EU) COUNTRIES**

Since resumption of export to the EU countries in March 2013, total 167 consignments of cuttlefish, Shrimps and fish were sent to the EU countries which have successfully been cleared after 100% laboratory analysis at EU border.

In order to meet the requirement of EU and other importing countries, two (02) laboratories of MFD (i.e. microbiology & Chemical) were got accredited from Pakistan National Accreditation Council upto 2016.

viii) TED, AND TRIALS OF TED BY LOCAL FISHERMEN

A training course on construction, installation and use of Turtle Exclusion Device (TED) was also conducted for the fishermen of shrimp trawlers. 300 fishermen including representatives of the other organizations participated in this training. The primary purpose of TED is to reduce the incidental mortality of sea turtles in fishing nets and to fulfill the obligatory requirement of United State regulation for the export of shrimp to USA.

The TED is mandatory in the World Trade Organization's environmental clauses. Pakistan is also a signatory to the FAO's Code of Conduct for responsible fishing. The federal and provincial governments have assigned the task to the Maritime Security Agency for ensuring compliance with the TED on all the fishing boats in the sea.

United States turtle Excluder Device (TED) team to Pakistan for 4-6 April 2017 to inspect the implementation of TED in shrimp trawl.

ix) MODERNIZED THE FISHING FLEETS

The traditional fishing fleet will be modernized by providing high-power engines, navigational and communication equipment and improvement of deck facilities, in order to enhance their capability to fish in relatively deeper waters as per requirements of EU continue.

As a result of introduction of modular boats by MFD, the boat owners have started modification of their boats on their own expenses. This is a success story which shows that the fishermen community has accepted the technology of lining of fish holds with fibreglass coating.

To meet the requirement of EU and other importing countries, Technical assistance in respect of modification of fishing boats was rendered to Provincial Governments and relevant stakeholders, as a result a total number of 1345 fishing boats had been modified, which is a success story for Pakistan.

During this work of local fishing boat modification/ Inspection is restarted by MFD and new/fresh wooden/ fibreglass fishing boats for fish holds and other areas were modified with fibreglass work/coating, as per EU standard and were issued Marine Fisheries Department Boat Approval Certificate for one year expiry.

x) DEEP SEA FISHING

During the period under report no deep sea fishing vessel was not in operation. However the applications for grant of fishing licenses in EEZ of Pakistan have been invited through news papers which are under process.

xi) BUILDING CAPACITY AND TRAINING TO FISHERMEN

- Fisheries Sector Participatory Working Group meetings were arranged for discuss the findings and recommendation of the Fisheries Resources Appraisal in Pakistan conducted with the technical assistance of Food and Agriculture Organizations (FAO) of United Nation
- A total of 635 fishermen were trained in the field of “Handling and preservation of catch on board the fishing vessel” and trained 330 Nakhudas/crews.
- Training of “improving Fish catch Handling practices” and trained 155 Nakhudas/Crews.
- Training programme on Development of “HACCP & Quality control in seafood industry” and trained 92 persons from processing plants.
- Arrange visit of United States turtle Excluder Device (TED) team to Pakistan for 4-6 April 2017 to inspect the implementation of TED in shrimp trawl.
- Arrange visit of 75 student/staff of faculty of fresh water & Fisheries University of Sindh on 20.04.2017 to visit MFD/processing plant and fish harbour.

xii) THE VISION IS TO PROMOTE FISHERIES TO ENSURE FOOD SECURITY THROUGH AVAILABILITY OF QUALITY PRODUCTS AT COMPETITIVE PRICES. THE PRIORITIES FOR FUTURE DEVELOPMENT OF FISHERIES SECTOR INCLUDES:

- Improvement of marketing infrastructure for fishermen along coast line i.e. providing technical assistance / guidelines to stakeholders / provinces for improvement of landing sites/auction halls at different fish harbours.
- Continuation of providing guidelines for up gradation of fishing boats according to international standards and marketing facilities.
- Increase capability for fisheries planning and management based on the sound knowledge of the state of the fishery resources and exploitation of these resources.
- Provided guideline/technical assistance for value addition and to promote aquaculture to boost fish production volume wise as well as value wise.
- Upgrade, accreditate and strengthen the quality control laboratories of Marine Fisheries Department by adding the new testing parameters for monitoring environmental contaminants in fish & fishery products to satisfy the requirements of importing countries.
- Continuation of training and development of fishermen and fisheries related personal.

D) MARINE FISHERIES DEPARTMENT IS EXECUTING FOLLOWING DEVELOPMENT PROJECTS:-

a) **Up gradation and Accreditation of Quality Control Laboratories of MFD for Environmental Contamination:
Approx. cost: Rs. 60.0 millions**

- To up-grade and strengthen the quality control services being provided by MFD by adding the Environmental

Contaminants for testing and monitoring of Seafood export industry of Pakistan.

- These parameters will be accredited to fulfill the requirements under WTIO regime and other importing countries.

b) Establishment of Regional Offices & Testing laboratories of Marine Fisheries Department at Gawadar (Baluchistan): Approx. cost Rs. 46.0 million

- To establish a regional office and laboratories at Gawadar.
- To ensure compliances to the provision of National and International legislative requirements under WTO regime and importing countries.
- To comply with the provisions of IOTC and FAO and EU concerning illegal, un-reported, un-regulated fishing and trade.

c) Establishment of regional office & testing laboratory of Marine Fisheries Department at Peshawar (Khyber Pakhtoon Khawa): Approx. cost Rs. 45.000 Million

- To establish a regional office and laboratories at Peshawar.
- To ensure compliances to the provision of National and International legislative requirements under WTO regime and importing countries.
- To comply with the provisions of IOTC and FAO and EU concerning illegal, un-reported, un-regulated fishing and trade.

FISH PRODUCTION

EXPORT OF SEAFOOD FISHERY PRODUCTS

ITEMS	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18 Target
Quantity (In m.Tons)	138,680	150,498	137,381	127,910	152,858	155,000
Export Earnings (Value in million US\$)	317	369	349	325	394	400

ITEMS	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18 Target
Marine Fish Production (in m. tons)	467,000	470,000	480,000	493,000	498,000	502,000
Inland Fish Production (in m. tons)	262,000	265,000	285,000	295,000	299,000	305,000
TOTAL (in m.tons)	729,000	735,000	765,000	788,000	797,000	807,000