

DIRECTORATE GENERAL, PORTS & SHIPPING WING, KARACHI

The office of the Directorate General Ports & Shipping Wing was established in 1961 at Karachi as a result of Implementation of the recommendations enshrined in the Report of the Working Party constituted by the Cabinet to look into the affairs of Ports & Shipping industry in the country. This Wing, having both Secretariat and Technical Functions, is a part and parcel 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 Maritime Department (MMD), Government Shipping Office (GSO), Directorate of Dock Workers & Safety (DDWS), Marine biological Research laboratory (MBRL) and Pakistan Marine Academy (PMA) are subordinate offices.

The statistical data for year 2018-19 is given below:-

Chief Engineer & Ship Surveyor

S. No	DESCRIPTION (PERIOD 01-07-2018 to 30-06-2019)	NUMBER OF CASES
1.	Approval for Foreign Exchange Release to PNSC	509
2.	Approval for Dry Docking	04
3.	Approval of Drawings for crafts/fishing boats	28
4.	Survey	29
5.	Allocation of Workshop and NOE for SSB/Examinations of CoCs	74
6.	Applications for Examinations of Certificate of Competency Processed	315
7.	Certificate of Competency issued	97
8.	Certificates of STCW/Dangerous Cargo issued	250
9.	Verification of CoCs/E-mails issued	16
10.	Equivalency of CoC to Foreign CoC holders	31
11.	Certificate of Competency to Electro Technical Officers (ETO)	26

Chief Nautical Surveyor

S. No	DESCRIPTION (PERIOD 01-07-2018 to 30-06-2019)	NUMBER OF CASES
1.	Applications for Examinations of Certificate of Competency processed	375
2.	Certificate of Competency issued	80
3.	Certificate of STCW issued	350
4.	Certificates of Dangerous Cargo issued	380
5.	Verification of CoCs on hard copy / online verification and updation of record	380
6.	Certificate of Recognition to CoC to foreign CoC holders	12
7.	Notice of Eligibility for Examination of CoC	250
8.	Surveys	100
9.	Total receipts disposed off	1150
10.	Revalidation of GMDSS Certificate and its online verification and updation.	25

FUNCTIONS:

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

1. 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
2. Technical and professional advice to the Government of all matters related to Ports & Shipping, Maritime Training and Maritime Affairs.
3. Dealing with various legislations, Act., Rules, Regulations, etc. related to Ports & Shipping
4. Coordination of work with other Ministries, Divisions and Inter-Governmental Agencies and International Conferences and other consultative organizations concerning Ports & Shipping & Maritime Affairs.
5. Arrangements for holding examination of Masters, Mates and Engineers.
6. Conducting Examination for surveys casualties, inspection and standards for ships' safety and operation and investigation into shipping casualties.
7. Compilation of records of all examination results, certificates of competency issued to certificated marine officers / engineers.
8. Marine environments, pollution control and legislative measures including conservation and management in the field of marine wild life.
9. Administration of Pakistan Merchant Shipping Ordinance, 2001.

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MERCANTILE MARINE DEPARTMENT

FUNCTION

Mercantile Marine Department, established in 1930, is a sub-ordinate office of Ports and Shipping Wing, Ministry of Maritime Affairs which is headed by Principal Officer (MP-II). 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 and International 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 on the Coast of Pakistan is an International obligation on the Government of Pakistan.

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

Performance / achievement during the fiscal year 2018-2019

1. Mercantile Marine Department (Main Office at Karachi)

Indicators	Target	Achieved
Survey and Inspection	2,800	4,277
Supervision of new construction & Repair / Evaluation Etc.	50	21
Issuance of Statutory Certificate of Ship	30	69
NOC for Outward Port Clearance	3,700	3,385
Registration / Transfer of Ownership of Ship / Craft	800	1,024
Examination (STCW Conventions / Technical Personnel / Inland)	1,400	1,450
Examination of Foreign Going CoC of Deck Officer / Marine Engineers	1,100	679
Certificate of Competency / Revalidation / Endorsement	300	271
Other and Misc. (Notice of Eligibility / Eye Sight Test / Verification / Attestation Etc.)	1,900	2,310

2. Lighthouses and Lightships

Indicators	Target	Achieved
Ships arriving and departing	4,000	3,227
Foreign Country Craft	200	158

3. Mercantile Marine Department (Sub-Office at Gwadar)

Indicators	Target	Achieved
Survey and Inspection	20	00
NOC for Outward Port Clearance	20	41
Registration / Change of Ownerships of Ships / Crafts	50	1,214

4. NON TAX REVENUE RECEIPTS

Indicators	Target	Achieved
Survey, Registration, Examination & Misc.	47,000,000	66,298,774
Light Dues	406,000,000	389,907,508
Survey and Registration	360,000	4,905,500

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.

MAJOR FUNCTIONS

1. Registration of seamen and issue the seamen 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
6. Maintain Seamen Service records and verification of records
7. Maintain discipline amongst Seamen

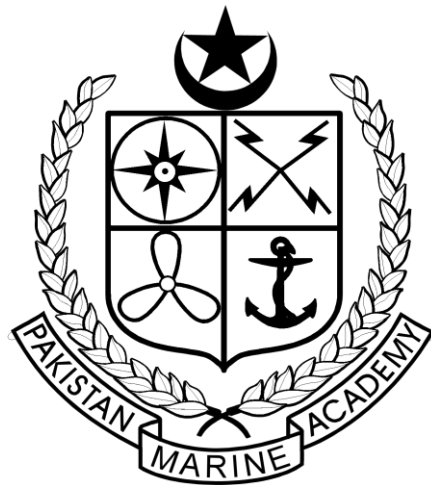
MISSION

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

PERFORMANCE / ACHIEVEMENTS

YEAR	Computerized Seaman Service Book (SSB) issued	Machine Readable Seafarers Identity Card (MRSID) Issued	Seafarers Engaged on Ships	Seafarers Discharged from Ships
2018-2019	1241	620	5986	5701

PAKISTAN MARINE ACADEMY



MATERIAL FOR THE YEAR BOOK

2018 – 2019



PAKISTAN MARINE ACADEMY

Introduction:

The maritime sector indeed, massively contributes to the national economy, hence merits recognition at all levels. Since ages, the only factor, which facilitated economic activities at a larger scale, is trade through sea. Not only efficient means of sea transportation is essential, but also Seafarers, who operates & maintains the cargo laden ships, for timely arrival & departure, while ensuring uninterrupted trade related economic activities, are the most important and most expensive component. Hence, need of producing professionally trained competent Seafarers, is the compulsion for maritime nations. Pakistan, since independence, wisely invested in this very important sector, thereby, producing much- acclaimed Seafarers.

Pakistan Mercantile Marine Academy was established in 1962 at Juldia, Chittagong (former East Pakistan), for training of Merchant Marine Cadets. In 1971, the Academy was shifted to Karachi at a temporary location and renamed as Pakistan Marine Academy (PMA). Subsequently, in 1978, it was finally shifted to current location at Hawks Bay Road, Mauripur, Karachi. In 1997, Seamen Training Centre, a training institute of Sailors was also merged with PMA.

PMA is the only Public institute of Pakistan for training of Seafarers, for pre and post sea courses. It is affiliated with NED University of Engineering & Technology, Karachi, which awards Associate Degree in Nautical Science and Marine Engineering to Cadets on completion of 02 years pre-sea training.



A View of Admin Block

Mandate by Ministry of Maritime Affairs, GoP

The shape of maritime sector has changed dramatically over the last few decades; new technological changes coupled with diversified opportunities are emerging at a pace, never seen before. Thus considering an obligation and as per directions of Federal Ministry of Maritime Affairs(Pakistan); PMA, ensures implementation of contemporary learning skills, based on maritime sector requirements and experiences shared by the active Seafarers, to meet the maritime sector demand for knowledgeable & skilled personnel. Training activities are also focused upon learners' experiences, both in theory & practical, thus assisting them to recognize the importance of specific skills being imparted for their future career. In addition, to positively promote maritime awareness, PMA organizes and actively participates in relevant activities along with maintaining close coordination with local/international maritime industry.

Ministry of Maritime Affairs has mandated PMA for "Provision of Maritime Education & Training to Cadets and Sailors for onwards deployment in Maritime Sector / Shipping Industry.

In view of above, targets set by the Government for PMA are:

- a. To train and educate at least 170 Cadets (Nautical & Marine Engineering) in a year, through 2years resident program.
- b. To train 200 General Purpose Crew/Ratings, annually.
- c. To conduct pre-sea and post-sea,IMO Mandatory Courses.

Vision, Mission, Aim& Objectives

Vision: A preminent International Maritime Institute with futuristic facilities to yield global professionals in accordance with contemporary requirements of maritime industry; and international Research & Development (R&D) Center of excellence for further development of Maritime Sectors.

Mission: To produce professionally skilled and capable Human Resource in order to meet requirements of maritime sector/shipping industry

Aim. The ultimate aim is to make academic career more flexible by articulating curricula in unison with desired professional requirements, emphasizing on core competencies and leadership qualities.

Objectives. The main objectives of Pakistan Marine Academy are:

- a. To provide comprehensive knowledge in the fields of Nautical and Marine Engineering, for a successful career at sea and ashore, for both Cadets and sailors.
- b. To develop leadership qualities, high sense of responsibility, honour, uprightness, pride of profession, loyalty and devotion to the profession, thereby serving the country.
- c. To provide higher professional training in selected Maritime disciplines and conduct mid-career courses for seafarers through the Maritime College / University.

Efforts are also at advanced stages for transforming PMA into Institute of Maritime Affairs(IMA) for enhancing the scope of education-cum-training, thereby, producing professionals in the field of; Maritime Law; Finance; Broking; Insurance; Administrative/Ocean Management; Energy Engineering & Automation; Marine Transport/Logistic Economics; Physical

Oceanography; Geological & Geophysics; Chemical Oceanography & Marine Environment; Biological Oceanography etc., which indeed would be beneficial for achieving desired progress in maritime fields.

Training Facilities

PMA provides an environment geared up for professional learning and training in a congenial academic atmosphere, supported by quality teaching and requisite practical training, through state-of-the-art infrastructure. 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.



Instructional Block



Parade Ground/ Cadets' Block



Class Room



Library

To support training activities, PMA has state-of-the-art Bridge, Engine, ECDIS, GMDSS, Radar ARPA & High Voltage simulators; well-equipped science laboratories, engineering workshops, Fire-fighting mock-up; a well-stocked library and a modern computer and language laboratories. In addition, there are indoor/outdoor sports facilities/fields, swimming pool, auditorium, parade ground and a pier (jetty) for water-borne training facilities. A fully equipped medical center provides basic medical cover to the trainees and the residents of the campus. Residential quarters for 30 officers and about 95 staff members are also available on the campus.



Ship Model Room



Computer Lab

Experienced and dedicated teaching faculty members cater for the educational and training 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.



Full Mission Bridge Simulator



Swimming Pool



Boat Handling



Passing-out Parade

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.



A Beautiful View of Jetty

The Academy has a faculty comprising of 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 holds post graduate qualifications in their respective fields with having rich practical experience at sea. These include a number of graduates from World Maritime University (Malmo), as well. In addition, Academy also employs about 170 admin staff to support the training activities. This expertise enables PMA to offer a wide range of specialized courses to complement and meet contemporary needs of dynamic maritime industry.

The Academy has professional associations with universities and training institutes within Pakistan and abroad.

Training Equipment

PMA is well equipped with the latest training facilities in the region, which include, Full Mission Bridge and Engine Simulators, Global Maritime Distress & Safety System (GMDSS), ECDIS, RADAR/ARPA and High Voltage 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, Electrical and Mechanical Workshops, Fire-fighting training mock-up, Computer and language Laboratories.

Courses & Training Programmes:

The Academy conducts Pre-Sea & Post-Sea courses as per training requirements of IMO, in accordance with STCW convention; following data is relevant in this regard:

Yearly Recruits (Pre-Sea):	170 Cadets and 100 GPs
Total No. of Trained Pre-Sea Cadets:	3,382
Total No. of Trained Post-Sea Training:	30,283 (Nautical & Engg)
Total No. of Trained GPs:	2,400
Total No. of Cadets undergoing Training:	279 (129 Nautical & 150 Engg)
Total No. of Trained Short/Mandatory Courses:	3,670

Pre-Sea Courses

a. 02 Years Course in Nautical/Marine Engineering Discipline

(Leading to award of Associate Degree in Nautical Science & 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 months 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

Post Sea/Short/Mandatory Courses:

- a. Oil Tanker Familiarization.
- b. Engine Room Simulator Course.
- c. Global Maritime Distress Safety System (GMDSS).
- d. Basic Fire Fighting Course.
- e. Personal Survival Techniques Course.
- f. Elementary First Aid Course.
- g. Proficiency in Survival Craft & Rescue Boat.
- h. Personal Safety & Social Responsibility
- i. Tanker safety Course.

Performance /Achievements during the year 2018- 19:

Revised Associate Degree Programme(in Nautical Science and Marine Engineering) dulyapproved by Syndicate & Academic Council of NED University of Engineering & Technology Karachi, has been implemented from 56th Batch(January 2018 - December 2019).

The Academy conducted following programmes/courses during the above mentioned period. Number of participants/qualified trainees is mentioned against each:

S#	Name of Course	Duration	No. of Trainees (2018-19)
1.	Associate Degree in Nautical Science	02 Years	72
2.	Associate Degree in Marine Engineering	02 Years	88
3.	GP-III (Rating course) i) Regular Scheme ii) Prime Minister Scheme (NAVTTTC)	05 months	100 (NAVTTTC)
4.	Short/Mandatory Courses:	3 to 18 days	1075

Procurement/Installation of Latest Simulators: New state-of-the-art, Global Maritime Distress and Safety System (GMDSS), ECDIS, RADAR/ARPA and High

Voltage Simulators have been recently installed, replacing obsolete ones, for training of Seafarers.

Co-Curricular Activities: Following Co-curricular activities were held during the year 2018-19:

- a. 1st Campus Placement Drive for PMA graduates was conducted on 15 December 2018.
- b. Workshop on “Stress Management & Adjustment” by Prof. Dr. Uzma Ali and Dr. Hina Imran, Clinical Psychological Deptt University of Karachi, was conducted (for 57th Batch of Cadets) on 21 February 2019.
- c. 3rd PMA Bilingual Declamation Contest was held on 22nd March 2019.
- d. Workshop on “Traffic & Road Safety Issues” by Mobile Education Unit from Sind Motorway Police was held on 10 April 2019.
- e. Workshop on “Cardiac Arrest and subsequent measures to treat patients by providing hands on training to deal with such emergency Cases” by MsSaimaJamil, Head of Advance Skills Department, College of Physicians & Surgeons DHA Karachi, was conducted on 12 April 2019.
- f. Lectures to Cadets by renowned guest speakers.

Projects Completed (2018-19):

S#	Name of Project	Cost	Remarks (if any)
1.	The Global Maritime Distress and Safety System (GMDSS), ECDIS, RADAR/ARPA and High Voltage Simulators	Rs.55.59 M	---
2.	Renovation/re-Construction of Swimming Pool	Rs.6.5 M	----
3.	Renovation of PMA Mosque	-	By donation from different source

Focal Person:

For any query/information please contact the following:

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MARINE BIOLOGICAL RESEARCH LABORATORY

Material for year book 2018-19

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 marine fauna collection for reference.
- To impart training in marine wildlife identification.
- Create public awareness about marine 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,2018 to May,2019	12 (Twelve) surveys were under taken of Sindh and Baluchistan coast.	<u>Coastal Birds:</u>		<ul style="list-style-type: none"> ➤ One Paper on threats to vertebrate diversity of West Coast of Pakistan (Makran) is under Publication in Records of Zoological Survey of Pakistan. ➤ Winter Survey of Birds at KetiBunder, (District Thatta) J. Zool., Punjab University. Vol. 31(2): 203-208. ➤ Bionomic study of Common Mormon (<i>Papiliopolytes</i>) (Lepidoptera: <i>Papilionidae</i>) from Lower Sindh Pakistan. Accepted for Publication. USA
		Coastal Birds species 75 (recorded from KetiBundar)	Birds Count -2200	
		Coastal Birds Species 29 (recorded from Banbhor)	Birds Count-1050	
		Coastal Bird Species 25 (recorded from Sonmani)	Bird Count-400	
		<u>Coastal Reptiles:</u>		<ul style="list-style-type: none"> ➤ Paper on Natural Enemies of citrus Butterfly <i>Papiliodemoleus</i> and common Mormon Butterfly <i>Papiliopolytes</i>(Lepidoptera, <i>Papilionidae</i>) from Lower Sindh Pakistan (Under Publication) in J. of Entomology University of Karachi. ➤ Avifauna of Sindh coast. Paper under compilation. ➤ Collaboration with different in line Organizations like SEPA, IUCN, Marine
		Coastal (Land) Reptiles Species -12 (recorded from KetiBundar)	Coastal (Land) Reptiles count -48	
		Coastal (Land) Reptiles Species-13(Recorded from Karachi Coast)	Coastal (Land) Reptiles count -35	
		<u>Marine Reptiles:</u>	Marine Turtles count -210	

		Marine Turtles Species -2 (West coast of Karachi)		Fisheries Department, ZSP, and WWF.
		<p><u>Marine Invertebrates:</u></p> <p><u>Mollusca:</u></p> <p>a) Gastropods Species-10(West coast of Karachi) b) Bivalve Species -07 (West coast of Karachi)</p>	<p><u>Mollusca:</u></p> <p>a) Gastropods count 2000 b) Bivalve count 400</p>	<p>➤ Survey of of marine fishes at Ibrahim Hyderi(Jetty), Karachi-Pakistan. Journal of Wildlife & Ecology (2017).1(2):42-47.</p> <p>➤ Avifauna diversity along the coastline of Banbhore (Gharo Creek), district thatta, Sindh J.W.E.(2017). 1(1):8-16.</p> <p>➤ Assment of growth of lemon Butterfly (<i>Papiliodemoleus</i>) in Tando Muhammad Khan, lower Sindh Pakistan journal wildlife & Ecology (2017)1(2)25-34.</p>
		c) Echinoderms Species -05 (West coast of Karachi)	Echinoderms count -100	
		<p><u>Marine Fishes:</u></p> <p>a) Fishes Species- 41 (recorded from Banhbor)</p> <p>b) Fish Species-20 (recorded from Sonmani)</p> <p>c) Fish Species-45 (recorded from Korangi Fish Harbour, Ibrahim Hyderietc)</p>	<p>Fishes count -700</p> <p>Fishes count-250</p> <p>Fishes Count- 850</p>	

THE 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 inspect 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 2018 – 2019, conducted 1,353 inspection of ships Cargo gears certification and port premises. Due to strict vigilance 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 accident in 1990, the figure 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.