MISSION

The mission assigned to Ministry of Defence Production is to meet the requirements of the Armed Forces through procurement (local and abroad) as well as through indigenous production, and also to export our defence products to friendly countries.
It is a matter of great pleasure for me to present the Year Book 2011-2012 of Ministry of Defence Production (MoDP). It includes brief introduction of the Ministry and its Establishments their functions and performance during the year. The Ministry of Defence Production geared itself to meet the challenges in regional and global environment to convert them into opportunities. Successful efforts were made to enhance our role in the field of Defence Production.

MoDP comprises of Pakistan Ordnance Factories (POFs), Heavy Industries Taxila (HIT), Pakistan Aeronautical Complex (PAC), Karachi Shipyard and Engineering Works (KS & EW), R & D Establishments under Directorate General Munitions Production, Directorate General Defence Purchase (DGDP), Defence Export Promotion Organization (DEPO) and National Radio Telecommunication Corporation (NRTC). Out of these Defence Production Establishments, POFs caters for need of small arms and ammunition for our three services while HIT and PAC are dedicated to maintain the cutting edge of our armoured component of the Pak Army and the Pakistan Air Force respectively. KS & EW has been designed and built to undertake construction & repair of small to medium size ships and to undertake heavy engineering activities. NRTC is a high tech industry engaged in manufacturing of telecommunication equipment in Pakistan. DGDP, an important segment of Defence Production Division in the supply chain management, is successfully engaged in centralized cost controlled quality procurement for the three services. DGMP is organized on a tri services basis and has three Directorates dealing with Army, Navy and PAF projects, respectively. DEPO is primarily responsible for conducting biennial Defence Exhibition, i.e., International Defence Exhibition and Seminar (IDEAS) at Pakistan.

I hope the readers will find the book informative and useful. The book will also serve as a reference document for the general public. The Ministry would, however, welcome suggestions/recommendations from the readers, which may be helpful for effecting improvements in future.

Lt Gen (Retd)
Shahid Iqbal, HI(M)
Secretary
Ministry of Defence Production (MoDP), created in 1972 as a Division of Ministry of Defence, is now a separate Ministry. It is responsible for the policy, formulation of plans and coordination between Procurement and Development in the field of Defence Production. The Ministry is implementing a programme to achieve the following objectives:

- To provide base for maximum self-reliance in the production of defence requirements of the three services.
- To accelerate pace of technological development to contemporary levels.
- To identify, integrate and utilize industrial potential available in public and private sector for production and procurement of defence stores and equipment.
- To attain economy of scales through optimum production.
BUSINESS AS ASSIGNED TO MINISTRY OF DEFENCE PRODUCTION IN RULES OF BUSINESS 1973

- Laying down policies or guidelines on all matters relating to defence production.
- Procurement of arms, firearms, weapons, ammunition, equipment, stores and explosives for the defence forces.
- Declaration of industries necessary for the purpose of defence or for the prosecution of war.
- Research and development of defence equipment and stores.
- Co-ordination of defence science research with civil scientific research organizations.
- Indigenous production and manufacture of defence equipment and stores.
- Negotiations of agreements or MOUs for foreign assistance or collaboration and loans for purchase of military stores and technical know-how or transfer of technology.
- Export of defence products.
- Marketing and promotion of activities relating to export of defence products.
- Co-ordinate production activities of all defence production organizations or establishments.
Pakistan Ordnance Factories (POFs)
POF Board was constituted under the authority of POF Board Ordinance No. XVII of 1961, as amended. The functions given therein are:-

“The Principal function of the Board shall be to manage and administer the affairs of the factories and to run them on sound commercial lines so as to adequately meet during war and peace the needs of the defence of the country and to utilize the surplus capacity of the factories to meet the needs of the civilian population”.

POF Board has at present following 14 factories and also possesses 100% shares of Wah Industries Ltd., which is a Subsidiary and commercial window of POF.

- Medium Artillery Ammunition Factory, Wah Cantt.
- Heavy Artillery Ammunition Factory, Sanjwal Cantt.
- Tank/Anti Tank Ammunition Factory, Gadwal in Wah Cantt.
- Bombs & Grenade Factory, Wah Cantt.
- Small Arms Ammunition Factory, Wah Cantt.
• Weapons Factory, Wah Cantt.
• Machine Gun Factory, Wah Cantt.
• Explosives Factory, Wah Cantt.
• Propellant Factory, Havelian Cantt.
• Tungsten Alloy Factory, Wah Cantt.
• Brass Mill, Wah Cantt.
• Clothing Factory, Wah Cantt.
• Filling Factory, Wah Cantt.
• Carbide Factory, Wah Cantt.

Range of Products:

Scope of products developed and produced by POF is around 60. Below is a list of these.

✔ Weapons

• Rifle G3 (7.62 mm x 51 Caliber)
• Light Machine Gun MG3 (7.62 mm x 51 Caliber)
• Sub Machine Gun MP5A3, A4, P7 etc (9 mm x 19 Caliber)
• Anti Aircraft Gun (12.7mm Caliber)- Chinese
- **Small Arms Ammunition:**
  - 7.62 mm x 51 Carton Packed
  - 7.62 mm x 51 Link Belted
  - 7.62 mm Blank
  - 9 mm x 19 Parabellum
  - 5.56 mm x 45 M193 (Ball)
  - 5.56mm x 45 B855 (Penetrator)
  - 7.62 mm x 39

- **Artillery Ammunition:**
  - 25 Pdr HE & Blank
  - 105 mm (HOW), HE Smoke and Blank
  - 122 mm HE HOW and 122 mm D30 Ammo
  - 130 mm HE Gun Ammo RC & FC
  - 155 mm HOW HE M107
  - 203 mm HE

- **Mortar Bombs:**
  - 60 mm HE & Smoke WP, Illu, Signal (Red & Green)
  - 81 mm HE & Smoke WP, Illu
  - 120 mm HE & Smoke WP

- **Aircraft Bombs, Aircraft & Anti Aircraft Munitions:**
  - 250 Kg – Mk 82 Aircraft Bomb
  - 6 Kg & 25 Lbs Practice Bombs
  - 30 mm HEI
  - 30 mm API
  - 30 mm Practice
  - 37 mm Anti Aircraft
  - 20 mm Phalanx (for Navy)
  - 12.7 mm x 108 API & APIT
- **Tank & Anti Tank Ammunition:**
  - 125 mm APFSDS
  - 125 mm HE
  - 105 mm APFSDS
  - 105 mm HE
  - 100 mm APFSDS
  - 100 mm HE
  - 106 mm RR HEAT

- **Rockets:**
  - Arty Rocket 122 mm MBRL Yarmuk
  - Rocket Propelled Grenade 40 mm HEAT (RPG-7P)
  - Rocket Propelled Grenade 40 mm AP (RPG-7P)
  - 73 mm Recoilless AT Grenade (SPG-9P)

- **Grenades, Pyrotechniques & Mines:**
  - Hand Grenade Arges 84
  - Grenade Target Indication, White, Red, Yellow, Green etc.
  - Smoke Grenade WP P1 Mk1
  - Mine AP P4
  - Mine AT P3 Mk-2
  - Flare Trip Wire
➢ **Military Explosives & Propellants:**

- Black Powder
- TNT, RDX, Compo B, Tetryl, Nitroguanidine, PETN
- Single, Double and Triple Base Propellants
- Ignition Charges

➢ **Commercial Explosives:**

- Emulsion Explosives, Dynamites
- Semi-Gelatinous & Powder Explosives
- Blasting Accessories, Safety Fuze Cords
- Detonating Cords
- Detonators (Plain & Electrical)

➢ **Commercial Products:**

- Brass Rods, Pipes, Plates, Sheets & Extrusions
- Gilding Metal Clad Steel Strips
- Tungsten Carbide Tool Tips, Nibs & dies
- 12 Bore Sporting Ammo

**MANPOWER:**

<table>
<thead>
<tr>
<th>EVENT</th>
<th>OFFICERS</th>
<th>STAFF/RTEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotions</td>
<td>19</td>
<td>391</td>
</tr>
<tr>
<td>Recruitment</td>
<td>03</td>
<td>125</td>
</tr>
<tr>
<td>Training</td>
<td>146</td>
<td>389</td>
</tr>
<tr>
<td>Disciplinary Cases</td>
<td>09</td>
<td></td>
</tr>
<tr>
<td>Pension</td>
<td>958</td>
<td></td>
</tr>
<tr>
<td>Benevolent</td>
<td>264</td>
<td></td>
</tr>
<tr>
<td>7% Living Allowances</td>
<td>3885</td>
<td></td>
</tr>
<tr>
<td>Farewell Grant</td>
<td>285</td>
<td></td>
</tr>
<tr>
<td>Marriage Grant</td>
<td>451</td>
<td></td>
</tr>
</tbody>
</table>
SWOT:

➢ **Strength:**

- Skilled manpower
- Strong internal control system
- International certificates of Quality (ISO 91), Environmental protection (ISO 14000), Laboratory accreditation (ISO 17025), and Occupational health and safety (ISO 18000)
- Strong diversified products.

➢ **Weaknesses:**

- Old technology
- Weak inventory management because of huge inventory of 227,000 items and manual accounting
- Lack of professional accounting and financial management staff
- High cost of production.

➢ **Opportunities:**

- Improved production through automation, restructuring and standardization
- Better marketing can result in improved access to international markets.
- Utilization of spare capacity for production of civil products.

➢ **Threats:**

- International sanctions on purchase of Raw Materials/Production & Export to other countries
- Reluctance of International OEMs to share high technology
- Non commercial marketing resulting in high dependence on Pak Army (Sole customer).
Financial Highlights:

- **Normal Budget (From GoP):**

  For the fiscal year 2011-12, against a Budget Estimate (B.E) of Rs. 24,962.500 Million, an annual Budget of Rs.17,681.440 Million was allocated. POF spent Rs. 2803.793 Million from its own sources to augment the budgetary deficiencies for procurement of raw materials, stores, plant & machinery required for exports and civil production.

- **Deposits with State Bank of Pakistan:**

  POF is allowed to retain its export earnings and receipts from commercial sales to meet expenditures in connection with production and promotion of items meant for exports and commercial sales. POF has at present a balance of Rs.3820.802 Million (FE), Rs. 753.826 Million (LC) in Special Deposit Fund (SDF) of Exports earnings and Rs.262.077 Million in local currency account of commercial sales (RD&R). The receipts and expenditure trends of said funds were as follows:-

### SDF:

<table>
<thead>
<tr>
<th>Year</th>
<th>Opening Balance</th>
<th>Receipts</th>
<th>Expenditure</th>
<th>Closing Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006-07</td>
<td>5,074.389</td>
<td>972.046</td>
<td>947.350</td>
<td>5,099.085</td>
</tr>
<tr>
<td>2007-08</td>
<td>5,099.085</td>
<td>642.130</td>
<td>531.176</td>
<td>5,210.039</td>
</tr>
<tr>
<td>2008-09</td>
<td>5,210.039</td>
<td>4,221.571</td>
<td>2,065.875</td>
<td>7,365.735</td>
</tr>
<tr>
<td>2009-2010</td>
<td>7,365.735</td>
<td>1,825.719</td>
<td>1,564.877</td>
<td>7,626.575</td>
</tr>
<tr>
<td>2010-2011</td>
<td>7,626.798</td>
<td>1,325.629</td>
<td>794.209</td>
<td>8,178.554</td>
</tr>
<tr>
<td>2011-2012</td>
<td>8,157.995</td>
<td>1,406.485</td>
<td>1,682.075</td>
<td>7,882.405</td>
</tr>
</tbody>
</table>
RD&R:

<table>
<thead>
<tr>
<th>Year</th>
<th>Opening Balance</th>
<th>Receipts</th>
<th>Expenditure</th>
<th>Closing Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006-07</td>
<td>940.486</td>
<td>581.590</td>
<td>450.828</td>
<td>1,071.248</td>
</tr>
<tr>
<td>2007-08</td>
<td>1,071.248</td>
<td>619.476</td>
<td>586.411</td>
<td>1,104.308</td>
</tr>
<tr>
<td>2008-09</td>
<td>1,104.308</td>
<td>585.947</td>
<td>1,258.915</td>
<td>431.340</td>
</tr>
<tr>
<td>2009-2010</td>
<td>431.340</td>
<td>420.729</td>
<td>469.317</td>
<td>382.752</td>
</tr>
<tr>
<td>2010-2011</td>
<td>382.752</td>
<td>687.704</td>
<td>155.608</td>
<td>914.817</td>
</tr>
<tr>
<td>2011-2012</td>
<td>914.817</td>
<td>1,230.190</td>
<td>1,363.915</td>
<td>781.092</td>
</tr>
</tbody>
</table>

Production:

- **Production (Target VS Despatch) – FY 2011-2012:**

Against production targets of Rs. 21,351.608 Million (including backlog + Recoupment) from AFs, combined dispatches to the tune of Rs 12,228.492 Million (Estimated) were made to Armed Forces. This was the ever highest production, as depicted graphically in the bar chart below. POF is thus at present the major contributor of supply of arms and ammo required by our armed forces during the ongoing operations.
BMRE PLAN:

BMRE Plan to be implemented in two phases.

- Phase-I is in implementation in which MoDP allocated US $ 23 M for the year 2010-2011 (fully committed).
- Another trench of US $ 25 M is still awaited by GoP for the year 2011-2012.
- POF has already allocated US $ 50 M out of SDF (US $ 32.25 M committed so far).
- For Phase-II US $ 140.93 M have been estimated which remains critical for the completion of approved plan and is dependent upon allocation of adequate funds by MoDP.

IMPACT OF BMRE:

The impact of the BMRE plan is aimed at reducing the financial burden of government of Pakistan, exploiting its commercial potential for self-reliance, increasing capacity and product range to meet the Army’s needs and thus develop POF into a sustainable corporate entity.

Major Savings Due to Efficient Procurement:

As per internationally accepted criteria, the product cost usually contains 60% of material cost. Planning & procurement of material therefore, play a vital role to keep the product cost lower & economical. The management remain committed to continue the objective of optimum saving in procurement and its planning during the financial year (2011-12). A few of the savings have been displayed below without compromising quality of the product and schedule of deliveries;

- 2.980 Tons of virgin metals have been procured, which is bread and butter for POF for production of ammos thus ensuring meeting the production target in time.
- Provision of 1,314,470 liters of POL items during 2011-12 ensuring uninterrupted running of entire transport fleet to meet POF commitments.

- 528,289 liters of 32x lubricant oils required to run machines were procured and made available for smooth operations and production activities of entire POF.

- Ensured despatch of ammos to designated army depots as per assigned schedule.

- A considerable amount has been earned through disposal of scrap.

With efficient and timely actions and decisions, a substantial saving of Rs.121.270 million was made during the year 2011-12 that includes Rs.38.880 million against indigenous procurement and Rs.82.390 million against foreign procurement as tabulated hereunder:

<table>
<thead>
<tr>
<th>Budget Head</th>
<th>Department</th>
<th>Total Saving (Rs in million)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P &amp; S</td>
<td>Filling</td>
</tr>
<tr>
<td>Indigenous</td>
<td>7.062</td>
<td>23.469</td>
</tr>
<tr>
<td>F .E.</td>
<td>80.89</td>
<td>1.500</td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PERFORMANCE OF SERVICES GROUP:**

Services Group energizes all POFs Factories/Groups and keeps every nook & corner illuminated by supplying Electricity, Steam, Water, Fire Fighting services, Transports facilities, Communication facilities and putting faulty machinery into operation. During the year 2011-12, following areas were given due consideration:
Optimizing self power generation
Up-gradation of electric distribution network
Energy conservation
Provision of electrical maintenance facilities
Provision of electronics/communication facilities
Provision of transport facilities
Provision of water supply
Provision of fabrication, machining, reconditioning & air conditioning.
Ice in summer season
Slow moving machinery i.e. road cranes, tractors, dumpers & shovels etc.

POWER HOUSE:

Augmentation in Electric Power Generation:

Pakistan is facing electric power crisis, and national grid in under immense pressure to meet the ever increasing industrial & domestic requirements of electric power. POF being a vital defense organization has a number of essential & sensitive plants for which continuous & stable electric power supply is required. In order to meet the specific power requirement & minimize dependence on Wapda, POF planned to install 7 – 8 MW Power Plant comprising of Gas Gensets. Tenders have been opened on 20-07-2012, and technical scrutiny of offers is being carried out. Hopefully the Power Plant will be installed next year upto Dec 31,2013.

Harnessing Renewable Energies:

As fossil fuels are depleting day by day, hence world wide efforts are focused on utilizing renewable energies for electric power generation. Pakistan is blessed with enormous amounts of renewable energies particularly Solar & Wind energies. POF has planned the following for the financial year 2012-13.

- Installation of 05 – 08 MW Solar Power Plant.
• Preparation of feasibility study for installation of Wind Power Plant at APR Sonmiani.

➢ **Indigenous Manufacturing / Development:**

• Feed pump compensating by pass valve of boiler No. 1 & 2 of 1950s model was repaired/overhauled and its damaged parts were manufactured/ developed departmentally. Had this valve been procured, it would cost at least Rs. 0.60 Million.

• Pinion gear bushes, of 04 pneumatic motors of Gensets manufactured departmentally. If these pneumatic motors had been procured, it would cost Rs 7.20 Million, as value of one pneumatic motor is Rs 1.80 Million.

• Preparation of feasibility study for installation of 7-8 MW Gas Gensets at POF Wah & POF Sanjwal.

**ENERGY CONSERVATION MEASURES:**

• Use of high Elect consuming machines/plants during POFs peak load hours (from 0800-1300 hrs) and WAPDA peak hours (04 hrs after Maghrib Prayer) will be minimized to bare minimum level.

• All furnances will be operated at 80% charge & continuously running plants will be operated at minimum 80% efficiency.

• Idle running of machines/plants will be avoided and machines will be switched off after use.

• Shop/Office lights during daytime will not be un-necessarily switched ON. Reflectors and glasses of north lights will be kept clean for optimum utilization of daylight.

• Leakage of Steam, Compressed Air and Water will be identified and got rectified from concerned.
- Steam/Chilled water lines will be properly insulated. All steam traps will be maintained in proper working condition.
- Space heating will be controlled.
- Tuning and energy audit of boilers will be carried out periodically to run at optimum efficiency.
- Petrol vehicles will be run on CNG.
- Govt. policy will be strictly followed regarding utilization of Air Conditioners.
- 02 Hours Load Shedding in Estate Area will be continued.
- ENERGY CONSERVATION PLAN 2012-13
- Target: 10 % reduction in utilities consumption, Electricity, Gas & Steam.

**INSTRUMENT & ELECTRONIC (I & E) SECTION:**

- **Innovative Works assigned to I&E Section:**


  Saving: Rs 1.2 Million

**ACHIEVEMENT:**

- **Repair / Maintenance of Doppler Radar BS-850:**

  A Doppler Radar BS-850 was kept useless by EPD&I Unit (PAF) under breakdown since long. Technical Team of I&E Section worked with their best efforts on its maintenance/test & trial on continue live firing of ammos. At last, team succeeded to rectify the fault. Now the Radar is working with its full capacity since 06 months. By doing this I&E Section brought the faulty Radar in operation and saved a huge amount of POF.

  Saving: Rs 25 Million
TRANSPORT SECTION:

- **Overhauling/Major Repair Works:**
  - No. of vehicles attend for Engine overhauling - 34
  - No. of vehicles attended for major repair work - 82
  - No. of vehicles attended for denting/painting work - 72

- **Fuel Economy:**
  - Combination of Moves
  - Conversion & use of vehicles on CNG.
  - Curtailment in payment duties
  - Control over misuse of Transport.

SAFETY & FIRE FIGHTING ACTIVITIES:

- Safety lectures on different topics were held in every month at FF Lecture Hall.
- Quarterly Accident Data of Services Group was collected.
- Mock exercise was held in every section of Services Group.
- Fire Services provided during the year 2011-12
  - Minor – 115
  - Major - 20

- Rescue Services during the year 2011-12
  - Minor – 03
  - Major - 01

- To provide training on Fire Fighting, Fire Prevention, Passive Air Defence and Disaster Management to POF Employees.
- Training to POF Employees provided during the year 2011-12:
  - First Aid Fire Equipment’s Training - 5927
  - Passive Air Defence Training - 83
Exports:

Due to the changing global scenario the atmosphere for Export of defence products, is not so encouraging. However, all possible efforts were exerted to maintain the momentum of exports. By the grace of Almighty Allah, during the FY 2011-2012, the volume of exports remained at reasonable level in spite of all odds. Following is the breakdown of exports achievement:-

- Total Value of Contracts = US $ 23.827 Million
- Despatches Made = US $ 10.067 Million
- Orders under Production = US $ 13.760 Million


Attendance of POF in these exhibitions remained fruitful in terms of establishing new contracts as well as revival of existing ones which ultimately yielded into number of new inquiries/confirmed orders.

During these exhibitions POF displayed their complete range of products which were appreciated by the visiting delegates especially our new products like Personal Load Carrying Equipment (PLCE) and G3-s (short version) Rifle.

Commercial Production:

- POF’s Subsidiaries:

  M/s Wah Industries Ltd., (WIL). Inspite of recession in the country and slump in the market due to Energy Crises during the year 2011-12, all out efforts have been made for achieving optimum sales results. By the grace of Almighty Allah, WIL has succeeded to register sales of Rs. 3259.824 Million & orders in process Rs. 855.195 Million, total Rs. 4115.019 Million which has been possible due to especial/able guidance extended by the Chairman & Board Members.
M/S Wah Nobel (Pvt) Ltd. is a subsidiary of POF in which M/S WIL holds majority share with 51.75% while M/s SAAB of Sweden and Al-Misehal of Saudi Arabia are other shares holders with 27.23 % & 21.02 % shares respectively. Their sales during 2011-12 were Rs. 3167 Million. Their sales are 30.814 % higher than the 2010-11 (i.e. 2421 Million).

M/S HI-Tech Plastics (Pvt) Ltd. Manufactures various packaging, Containers, Carriers for Ammo and plastic parts of ammos. It has injection/blow molding and extrusion facility. During financial year 2011-12, its sales amounted to Rs. 196.009 Million which is the highest ever figure and 45.64 % higher as compared to the previous year.
**R & D Projects:**

Although POF is not approved as an ‘R&D’ organization and no funds are provided by MoDP, yet POF in consultation with user & Tech Dte has undertaken following projects:-

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**PROJECTS WITH R&D SECTION:**

<table>
<thead>
<tr>
<th>S#</th>
<th>Project Name</th>
<th>Project Description</th>
<th>Progress</th>
<th>Achievements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HARP</td>
<td>The system is a portable man pack which is comprised of a rocket along with steel</td>
<td>Successful user trial conducted.</td>
<td>Development completed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>grapnel, can carry a rope across the water obstacle up to a maximum range of 300m.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Cost Reduction G3A3 Rifle</td>
<td>Time &amp; Motion study on the components of G3A3 Rifle was carried out by POF, R&amp;D</td>
<td>-</td>
<td>POF has been able to achieve a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>team.</td>
<td></td>
<td>cost reduction of upto 30% on each</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Rifle G3A3 by reducing overheads.</td>
</tr>
<tr>
<td>3</td>
<td>Cost Control of SAA</td>
<td>To conduct study of different stages of small arms ammo production and to reduce</td>
<td>-</td>
<td>Cost of complete round with new</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the price of product. Advantage is being given to Pak Army.</td>
<td></td>
<td>price along with revised overheads</td>
</tr>
</tbody>
</table>
**Quality Assurance:**

POF has already obtained the certification/accreditation of ISO in following standards, which were audited by External Auditors during the year and certification/accreditation extended:-

<table>
<thead>
<tr>
<th>ISO Standard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO 9001-2008</td>
<td>Pertains to International Quality Standards for Design, Development &amp; Manufacture of Small Arms and Ammunitions etc.</td>
</tr>
<tr>
<td>ISO-17025-2005</td>
<td>Pertain to the accreditation to Metallurgical Lab, Explosive (Chemical) Lab and Dimensional Metrology Lab.</td>
</tr>
</tbody>
</table>

**POF Institute of Technology (POFIT):**

POFIT is imparting both Technical & Management Training to workers, Staff and Officers for Human Resource Development. Following training programs were completed during the year 2011-12 and 3791 trainees participated in under mentioned courses. Hence Rs 28,223 Million have been saved and transferred to Govt. treasury.
<table>
<thead>
<tr>
<th>Sr.#</th>
<th>Training Programme</th>
<th>No. of beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Orientation Training for newly inducted officer and staff</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>In house In-service Management course for officers with collaboration with PIM Karachi from POFIT earning.</td>
<td>455</td>
</tr>
<tr>
<td>3</td>
<td>In service short courses (POF Candidate)</td>
<td>91</td>
</tr>
<tr>
<td>4</td>
<td>Short Courses for Private candidate</td>
<td>83</td>
</tr>
<tr>
<td>5</td>
<td>Special course for special children (Nashaman)</td>
<td>Nil</td>
</tr>
<tr>
<td>6</td>
<td>Artisans Training</td>
<td>241</td>
</tr>
<tr>
<td>7</td>
<td>Internship of University Students</td>
<td>592</td>
</tr>
<tr>
<td>8</td>
<td>DAE Students</td>
<td>1212</td>
</tr>
<tr>
<td>9</td>
<td>Services to WEC Students</td>
<td>867</td>
</tr>
<tr>
<td>10</td>
<td>Coaching for &amp; Evaluation of Officers, staff, and Workers for Departmental Promotion Examination.</td>
<td>HSM - 105 T.O. - 42 Admin - 83</td>
</tr>
<tr>
<td></td>
<td>i) Technical</td>
<td>=</td>
</tr>
<tr>
<td></td>
<td>ii) Auxiliary</td>
<td>=</td>
</tr>
<tr>
<td></td>
<td>Total:</td>
<td>3791</td>
</tr>
</tbody>
</table>

| 11   | Amount transfer to RD & R Head                                                     |                      |
|      | i.) DAE earning                                                                    | 10.00 Million        |
|      | ii.) Short Courses Charges                                                         | 0.843 Million        |
|      | iii.) WEC Rent & Service                                                           | 17.38 Million        |
|      | Total:                                                                             | 28.223 Million       |

**Welfare Activities:**

POF undertakes lot of welfare measure for its employees and spent huge amounts like Rs. 120.600 Million on Ward Marriage, Rs.3.191 Million on
Scholarship, to deserving students, including those of Deeni Madaris, Rs. 2.300 Million on Haj & Umra contingents, Rs.45.419 Million special medical treatment & grant given on the occasion of death of POF employees or their family member Rs. 2.639 Million to the family of every employee up to BS-16, who dies in service, is also given Rs. 50,000/- as special Death Grant. This is addition to their normal entitlement of pension, Group Insurance, Benevolent Fund & Assistance Package.

**Medical Facilities:**

POFs Hospital was established in 1962 with an initial capacity of 103 beds. Hospital capacity increased 200, 400 and 500 beds in 1963, 1969 and 1987 respectively. Existing bed strength is 676 due to introduction of new departments over successive years. It is now a modern tertiary care hospital providing teaching facilities to Wah Medical College. The hospital is recognized for house job and postgraduate training in various disciplines. The hospital is responsible to provide healthcare facilities to serving/retired POF’s employees & families/parents of the employees, army personnel posted to POFs (including their families/parents) and employees of Allied Departments (CMA, IDA etc). The hospital also extends diagnostic and treatment facilities to general public residing in the area on payment.

➢ Workload

Workload statistics for the year 2011-12 is as follows:-

- Outpatients - 123,852
- Hospital Admissions - 35,255
- Dental Treatments - 17,255
• Pathology Laboratory - 381,655
• Radiology - 41,075
• Ultrasonography - 13,174
• E.T.T. - 696
• Echocardiography - 2,589
• Endoscopy/ERCP - 1,267
• Haemodialysis - 1,584
• Surgical Operations - 26,225

➢ **Budget Allocation/Expenditure – 2011/12:**

<table>
<thead>
<tr>
<th>Sr.</th>
<th>Budget Head</th>
<th>Allocation (Million Rs)</th>
<th>Expenditure (Million Rs)</th>
<th>Carry Over Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Pay &amp; Allowances</td>
<td>232.746</td>
<td>232.746</td>
<td>-</td>
</tr>
<tr>
<td>b.</td>
<td>Overtime</td>
<td>7.088</td>
<td>7.088</td>
<td>-</td>
</tr>
<tr>
<td>c.</td>
<td>Transportation &amp; Misc</td>
<td>43.332</td>
<td>43.332</td>
<td>3.853</td>
</tr>
<tr>
<td>d.</td>
<td>Indigenous Purchase</td>
<td>17.296</td>
<td>17.296</td>
<td>12.562</td>
</tr>
<tr>
<td>e.</td>
<td>Utilities (Sui Gas)</td>
<td>19.773</td>
<td>19.773</td>
<td>-</td>
</tr>
<tr>
<td>f.</td>
<td>Building Maintenance</td>
<td>02.155</td>
<td>02.155</td>
<td>-</td>
</tr>
<tr>
<td>g.</td>
<td>Medical Stores</td>
<td>185.000</td>
<td>185.000</td>
<td>25.00</td>
</tr>
<tr>
<td>h.</td>
<td>Hospital Diet</td>
<td>25.000</td>
<td>25.000</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>532.387</strong></td>
<td><strong>532.387</strong></td>
<td><strong>41.415</strong></td>
</tr>
</tbody>
</table>

➢ **Achievements during the Year (Self Help Basis):**

• Renovation/expansion of Hospital Masjid
• Renovation of Main Operation Theatre
• Renovation/up-gradation of Dental Centre
• Replacement of Chillers in Hospital Morgue
• Establishment of new Eye, ENT, Gynae and Children OPD
• Improvement of comforts for waiting patients
• Improvement of Hospital Waste Disposal System
• Introduction of Biometric System of Attendance
• Introduction of colour code dresses for support Staff
- Opening of Hospital Cafeteria
- Renovation of Hospital Auditorium and Officers Tea Bar
- Organization of Environment Week.

➤ **Major Value Additions in Hospital Capacity on the Anvil:**

- Establishment of Central Sterile Supplies Department (CSSD).
- Installation of 16 Slice CT Scan.

➤ **Training Activities:**

- A Continuing Medical Education (CME) Department has been established for training/professional development of doctors and nurses.
- Clinico-Pathological Conferences (CPCs) attended by all doctors are held on weekly basis.
- Bimonthly clinical meetings are held for nurses.
- Workshops, Seminars are held in which eminent guest speakers are invited.
- Admissions in Nursing School have been re-started with the induction of 10 x students.
- 2 x POF Hospital Medical Officers have qualified FCPS during the year.
- 2 x PG Trainees have qualified FSPS during the year and inducted as Senior Registrars.
- 4 x PG Trainees have qualified MCPS during the year.
- 22 x Nursing Students have qualified the Nursing Diploma.
Sports:

POF Sports Control Board is engaged in promoting healthy culture & environment in this huge industrial zone through various activities. Although it was already taking necessary measures to enhance its sphere from grass root level to national level remaining within the available resources but during the last six month under the kind patronage & guidance of worthy Chairman POF Board, POF Sports Control Board is striving its best to move forward on fast track basis. We are lucky enough that we possess an infrastructure with modern sports facilities in line with this policy different local, regional level events of various games were arranged.

SCB has renovated the Badminton & Table Tennis Halls. Now renovation work of POF Gymnasium Hall is in pipeline.

In addition to general sports activities SCB also arranged Jashn-e-Azadi Walk / Cycle Rally Flood Lit cricket Match on Independence Day 14\textsuperscript{th} Aug and 04 Categories Cycle races on Defence day 6\textsuperscript{th} September were organized by POF SCB, in which more than 500 participants from different age groups participated and also attended by masses from all walks of life. POF SCB also organized POF Officers Badminton Championship in which worthy Chairman POF Board & Senior Officers of POF also participated. Recently from 9\textsuperscript{th} to 12\textsuperscript{th} Sept'2012, POF SCB organized POF National Squash Championship 2012, in which top 16 National ranked players participated and won Rs. Five Lac as Cash Award/Prize Money.
The facilities available with SCB are being utilized to engage maximum youth in Volleyball, Football, Basketball & Cricket offering free coaching & Sports Gear. Same facilities have also been provided to schools, colleges & universities etc in addition to SCB’s venues.

**POF Welfare Trust:**

POF Welfare Trust is extending transport facilities, running Izzat Ali Shah Female Hospital, Welfare Day Care Centre & Montessori School, Welfare Computer Centre, Welfare Club-II (Marriage Hall), Welfare Medical Store, Poly Technique College, Welfare Filling Station, Welfare Packages Factory, Joint Venture with GASCO 2000 and Nasheman School on concessional rates for the employees/residents of Wah Cantt. Besides, Wah Industrial Home for the wives/widows is running and providing financial assistance to the needy persons alongwith catering services to the Senior Citizens of Pakistan, Wah Chapter.
**Education:**

In addition to the above, under the umbrella of POF Welfare Trust autonomous projects like Wah Medical College, Wah Engineering College, University of Wah & Mashal Degree College are running and extending educational services to the residents and suburbs of Wah Cantt at reasonable rates. Due to these educational institutions, the Wah Cantt has become an “Education City” in Pakistan and the literacy rate has gone up enormously. All the above institutions have shown their extra-ordinary performance/results during the year 2011-12.
Heavy Industries Taxila (HIT)
HEAVY INDUSTRIES BOARD TAXILA

Introduction:

HIT was conceived in the seventies with the objective to rebuild T-59 tanks of Chinese origin. Today Heavy Industries Taxila (HIT) is a large defence and security equipment production industry, working under Ministry of Defence Production. It comprises six production factories and engineering support facilities. The industry is under taking following activities:-

- Rebuilding, up-gradation and modernization of tracked vehicles.
- Research and development of modern Armour Systems in order to incorporate latest trends in Tank Technology.

Mission:

- Manufacturing of Tanks - 50 / year
- Rebuild of Tanks - 50 / year
- Manufacture Tank Guns - 50 / year
- Manufacturing of APC - 150 / year
- Rebuild of APC - 100 / year
- SP Gun Rebuild - 15 / year

Rebuild & Manufacturing Facilities:

Rebuild Facilities:

Rebuild of Heavy Rebuild Factory (T-Series): Established in 1979 with a capacity to rebuild and upgrade 50 tanks per year. Factory has under taken rebuild and upgradation of tanks T-59 M, T-59MII, T-85 and ARV W-653 including modernization of old Tanks T-55 and T-59 to Tank Al Zarrar. The factory products are as under:-
Upgradation of T Series Tanks into Al Zarrar: A total of 394 Tanks Al Zarrar have been handed over to Pakistan Army. Production of next batch of 92 Tanks is in progress.

- Rebuild and upgradation of Tank T-85IIAP.
- Rebuild of Tank T-80UD engines and assemblies.
- Upgradation of ARV W653 to W653A.
- Rebuild / conversion of 105 mm T 59 Tanks to 100 mm for FC Khyber Pakhtunkhaw and Baluchistan.

Heavy Rebuild Factory (M-Series):
Established in 1987, Capable of rebuilding 100 APCS M113 and 15 self propelled guns per year. Products are as under:-

- APC M113A1/A2.
- SP M109A1 / A2 Guns.

Advance System Rebuild Factory (ASRF):
This factory was established in 2007. It has capability to rebuild following stand alone systems of Tanks including its standardization and integration:-

- FCS / GCS.
- Hydraulic Systems.
- Electronics and Electrical sub systems.
- Mechatronics Systems.
- Optronics.
- NVDS / Thermal Imaging Sights assembly and testing.
- Auxiliary Systems (NBC, FESS, APU, Communication).
Manufacturing Facilities:

**Tank Manufacturing Factory:** Factory was established in 1992 with a capacity to manufacture 50 Tanks per year. Tank factory is a modern outfit with latest Tank manufacturing facilities, which includes state of art CNC machines for heavy duty flexible machining operations and a complete infrastructure of Tank. Factory production started with manufacture of Tanks T-69, T-85 and ARV W-653. Manufacturing of 300 Tanks Al Khalid has been successfully completed. Next batch of 21 x Al Khalid will be manufactured in year 2012 / 13. Main features of Tank Al Khalid are as under:-

**Main Armament:** 125mm smooth bore Gun with an Autoloader and Image Stabilized Fire Control. The gun control system is also integrated with Auto Tracking and Hunter Killer Device. For night operation Tank is equipped with thermal night sight.

**Power Pack:** Tank is equipped with 1200 HP multi fuel engine coupled with Multi Reverse Speed (MRS) having Power to weight ration of 26:1.

**Armour Protection:**

- Composite Armour.
- Explosive reactive armour.
- NBC protection system.
- Additional feature includes Integrated Battle Field Management System (IBMS).
Armoured Personnel Carrier Factory:

Established in 1992. Manufactures APC M113P, APC Talha and different variants of APCs with a capacity of 150 APCs per year. APC Factory has absorbed the technology to manufacture APCs and has also been able to develop APC Talha and Saad. APC Saad has been designed and developed as a defence product and is equipped with state of the art systems. APC Saad has enhanced power to meet the dictates of modern battle field. The main features are as under:-

- 408 HP Diesel Engine
- Automatic Transmission
- Enhanced Mobility
- Enhanced Armour Protection
- NBC Protection System
- Air Conditioned

Gun Manufacturing Factory:

Established in 1992 with a capacity to manufacture 50 tank guns per year. Gun Factory has the capability of producing smooth and rifled gun barrels ranging from 105mm to 203mm caliber. Each barrel is processed through precision machining operations and subject to stringent quality control parameters. Presently manufacturing 125 mm smooth bore Tank Gun for tank Al Khalid and Al Zarrar.
**Surplus Capacity Utilization:** Manufacturing factories are utilizing surplus capacity to manufacture Security Vehicles, Discreetly Armoured Vehicles and Security Equipment.

**Allied Facilities:**

**DESCOM:** The Development Engineering Support and Component Manufacture (DESCOM) is the factory implementing deletion plan through indigenization. This includes manufacture of in-house items and development of parts and components through downstream industry.

- 39,800 variety of items are being manufactured through In House Manufacture facilities.
- Factory also engages Pakistan’s downstream industry for manufacture of 58,900 variety items.

**AARDIC:** Advance Armour Systems Research and Development, Information & Integration Centre (AARDIC) is engaged in development of following systems of tanks:

- Integration of IBMS in Tank Al Khalid.
- Universal Fire Control System for 125 mm tank guns.
- Dynamic Muzzle Reference System.
- Auto Tracker Tank Al Khalid.
- NBC Systems for tanks, APC/M102A2.
- Remote Controlled Weapon Station.
- Bomb Blanket for Toyota Land Cruiser, Defender D-90 and Defender SW-110.
- Development of body armour.
ACHIEVEMENTS

HIT, by the grace of Almighty Allah achieved not only the assigned tasks but also executed various new development concepts in the field of Tanks, Armoured Personnel Carriers (APCs) and Armoured Recovery Vehicles (ARVs), Security vehicles and equipment. All these projects have been accomplished within the targeted time frame. The production progress during financial year 2011-2012 is as under:-

➢ **Rebuild / Upgradation Projects**

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upgradation of Al Zarrar Tanks</td>
<td>23</td>
</tr>
<tr>
<td>Upgradation of ARV W653 to W653A</td>
<td>16</td>
</tr>
<tr>
<td>Rebuild of T-Series (T-59/T-69) Tanks</td>
<td>9</td>
</tr>
<tr>
<td>Tank Engines</td>
<td>105</td>
</tr>
<tr>
<td>Rebuild of APCs (M113 A1/A2/P)</td>
<td>57</td>
</tr>
<tr>
<td>FCS/GCS</td>
<td>303</td>
</tr>
<tr>
<td>MUAs, assemblies and components</td>
<td>2049</td>
</tr>
<tr>
<td>125 mm Tank Gun Rebuild (T-85 IIAP)</td>
<td>2</td>
</tr>
</tbody>
</table>

➢ **Manufacturing Projects:**

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>TI Sights</td>
<td>78</td>
</tr>
<tr>
<td>BS Wpn Carr (Maaz)</td>
<td>4</td>
</tr>
<tr>
<td>Security Vehicles Mohafiz (TM (F)-9 and APC (F)-12</td>
<td>21</td>
</tr>
<tr>
<td>125 mm Tank Gun Barrels</td>
<td>14</td>
</tr>
<tr>
<td>125 mm Tank Guns</td>
<td>31</td>
</tr>
<tr>
<td>Road Blockers</td>
<td>2</td>
</tr>
<tr>
<td>Snow Melting Blower</td>
<td>1</td>
</tr>
<tr>
<td>Bullet Proof Jackets</td>
<td>2000</td>
</tr>
<tr>
<td>Bullet Proof Vests</td>
<td>350</td>
</tr>
</tbody>
</table>
INDIGENIZATION

All HIT projects are subjected to time based deletion plan through indigenization. This includes manufacture of in-house items and development of parts and components through downstream industry. The achievements for year 2011-12 are as under:-

<table>
<thead>
<tr>
<th>Sr</th>
<th>Products</th>
<th>No of Varieties of Parts Manufactured</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>In house Manufacturing</td>
</tr>
<tr>
<td>a.</td>
<td>Tank Al-Khalid</td>
<td>58</td>
</tr>
<tr>
<td>b.</td>
<td>Tank Al Zarrar</td>
<td>129</td>
</tr>
<tr>
<td>c.</td>
<td>Tank T-85IIAP</td>
<td>33</td>
</tr>
<tr>
<td>d.</td>
<td>Tank T-80UD</td>
<td>03</td>
</tr>
<tr>
<td>e.</td>
<td>T 59/T69 IIMP</td>
<td>10</td>
</tr>
<tr>
<td>f.</td>
<td>APC Saad/APC M113/Talha</td>
<td>32</td>
</tr>
<tr>
<td>g.</td>
<td>ARV W653/653A</td>
<td>45</td>
</tr>
<tr>
<td>h.</td>
<td>125 MM Gun</td>
<td>36</td>
</tr>
<tr>
<td>j.</td>
<td>Security Vehicle Mohafiz</td>
<td>42</td>
</tr>
<tr>
<td>k.</td>
<td>580 / 730 HP tank engines</td>
<td>53</td>
</tr>
<tr>
<td>l.</td>
<td>Comd Display Unit</td>
<td>01</td>
</tr>
<tr>
<td>m.</td>
<td>Baktar Shikan</td>
<td>01</td>
</tr>
</tbody>
</table>

Indigenous Effort Benefits: Through value addition, HIT is contributing approximately Rs. 3.8 billion annually towards the overall saving beside generation of economic activity through the down stream private/vendor industry.
COMMERCIAL ACTIVITIES

HIT is pursuing commercial activities utilizing its surplus capacity for manufacturing of marketable products for export and domestic sales under HIT board Act. Some of the commercial products manufactured in year 2011-12 are as under:-

<table>
<thead>
<tr>
<th>Sr</th>
<th>Products</th>
<th>Factory</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Security Vehicle Mohafiz</td>
<td>APC Factory</td>
<td>- 42</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tank Factory</td>
<td>- 12</td>
</tr>
<tr>
<td>b</td>
<td>Discreet Armouring of Vehicle</td>
<td>DESCOM</td>
<td>- 06</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tank Factory</td>
<td>- 02</td>
</tr>
<tr>
<td>c</td>
<td>Bullet Proof Jackets (BPJ)</td>
<td>AARDIC</td>
<td>1426</td>
</tr>
<tr>
<td>d</td>
<td>Bullet Proof Vests</td>
<td>“</td>
<td>02</td>
</tr>
</tbody>
</table>

**Commercial Products:**

**Security Vehicles:**

**Mohafiz–I, II:** The main features are as under: -

- Platform - Land Rover Defender (122 HP).
- Torque – 360 NM
- Manufactured with Ballistic steel or Aluminium – steel combination with rotating turret.
- Protection level - B6
- Seating capacity - 8
- Firing ports - 6
- Run flat tyres.
- Additional features include Jammer for GSM.
Mohafiz – III: Mohafiz-III is being developed with following addl features:-
- Platform - Toyota LC 79 (200 HP Engine)
- Torque – 430 NM
- Protection level - B7
- Improved suspension and brake system

Troop Carrier (MRAP Buraaq): Mine resistant Ambush Protected (MRAP) developed with following main features: -
- Monocoque Shell structure with IED protection.
- Protection level - B7 and above
- Blast Protection - 14 kg of TNT
- Counter Mine Tyres
- Carrying capacity - 12 Persons
- Rear view camera - Available with LCD screen
- Smoke Grenade/Launcher - 4 (2 at front and 2 at rear)

Security Equipment:

Armoured Guard Post (AAHAN): The main features are as under:-
- Customized design
- Protection level B6 or B7
- Protection against blast and fragmentation
- Bullet proof glasses
- Rotating Turret
- Firing ports
**Bullet Proof Jacket (Hifazat):** Main features are:

- **Weight:** 6 kg
- **Size:** Available in all sizes
- **Colour:** As per user requirement
- **Protection:** NIJ level III & IV
- **Protected area:** Front and back, collars shoulder
- **Material:** Fire retardant, floatable, chemically inert

**Discreetly Armoured Vehicles:** Main features are as under:

- Protection B5 / B6 / B6 + level
- Blast protection upto DM51 standard and above
- Bullet proof front, rear and door glasses
- Improved brake system
- Improved suspension system
- Run flat tyres

**Benefits of Commercial Activities:** HIT has significantly contributed in government treasury through exports and domestic sale of APCs, Security equipment/vehicles and discrete armouring of vehicle. Salient are as under:

- **Total sales in FY 2011/12:** Rs. 1835 Million
- **Profit earned for Government:** Rs. 200 Million
- **Proportionate cost remitted to Government as per rules:** Rs. 204 Million
- **Remittance under process:** Rs. 340 Million
Pakistan Aeronautical Complex
(PAC)
Pakistan Aeronautical Complex Kamra is an Organization which comprises four co-located factories which virtually take care of maintenance of all operational assets of Pakistan Air Force for the purpose of effective control and efficient working. Production Statistics of the four Factories for the last Fiscal Year are tabulated below:

**Aircraft Rebuild Factory (ARF):**

(a) GOH aircraft production : 27  
(b) GOH component production : 41,223  
(c) Drop tanks / propellers overhaul : 45  
(d) Calibration / testing of PMEs / PMIs : 8,092  
(e) AME Refurbished : 102

**Mirage Rebuild Factory (MRF):**

(a) ATAR 09C Engine : 100  
(b) ATAR Engine Accessories : 9072  
(c) F-100 Accessories Modules & Parts : 253  
(d) Mini GV of Mirage Aircraft : 10  
(e) Overhaul of T-56 Engine : 16  
(f) Repair of T-56 Engine Accessories : 1022  
(g) Repair of J-69 Engine Parts : 712
**Aircraft Manufacturing Factory (AMF):**

(a) Spares Support to Armed Forces : 1206

**Avionics Production Factory (APF):**

(a) Rebuild of Radars : 06  
(c) Refurbishment of Radio Relay Vehicles : 04  
(d) Refurbishment of Air Conditioners : 28  
(e) Life Cycle Maintenance of Avionics LRUs & SRUs of Avionics : 2173

**Significant Achievements:**

The achievements of respective factories of PAC, Kamra during the period of report are highlighted in the subsequent paragraphs.

**Aircraft Rebuild Factory (ARF):**

The following projects were accomplished by ARF during the period under review:-

(a) **Indigenization Task Development.** A significant number of indigenization tasks were accomplished at ARF. Salient one are listed below:-

- Ind Development of BDU Shell.  
- Ind Development of tools cross bit.  
- Ind Development of tools and parts for aircraft.

(b) **Task Oriented Training (ToT):** ToTs were conducted on following areas as part of Predictive Maintenance Programme to enhance the know-how and increase the standard of workmanship of technical workforce.

- Drag chute system  
- Hyd system hygiene  
- Aft Section / Stabilizer
- Canopy system
- Fuel system
- Brake System
- Flt Cont system
- Engine leveling
- Pneumatic system

(c) **On-Going Specialist Projects:**

- Manufacturing of Ejection Seat Parts
- Life Enhancement of FT-7P Aircraft

**Mirage Rebuild Factory (MRF):**

The following projects were accomplished by MRF during the period under review:-

**Central Logistics Uniform Exchange Store:**

MRF has established a PAC “Central Logistics Uniform Exchange Store” and the opening ceremony for the same was conducted on 20 March, 2012.
Aircraft Manufacturing Factory (AMF):

The following achievements were made by AMF during the period under review:-

(a) **JF-17 Airframe Co-Production Project:** Activities related to JF-17 airframe co-production project at AMF, PAC Kamra progressed at a rapid pace during the year 2011-12. Different elements of subassembly and parts production work continued. Preparations for 3-section fuselage joining work and Front Fuselage subassembly work have also been completed as per targets. Similar pace of activities is continued in the parts production side and AMF is presently in the completion stages of infrastructure required for future work elements.
(b) **Manufacturing of K-8 Small Assemblies & Front Fuselage:** A total of 40 SMK aircraft of PAF, 02 MSK aircraft of Pak Army and 04 Cessna aircraft of Peshawar Flying Club were repaired on site during the year 2011-12.

**Avionics Production Factory (APF):**

**Quality Management System:** Quality Assurance is always striving to adhere to all applicable requirements in order to ensure continual improvement in our products and processes. Implementation of Quality Management System (QMS) is being done in
true letter and spirit. To achieve customer satisfaction, the organization is periodically audited; annually for Surveillance Audit and, after every three years for re-certification audit. The recent re-certification audit of AS 9100-C standard was conducted in May, 2012.

Salient achievements during 2011-2012 are listed below:

- Indigenous Development of Digital Module Test Station
- Successful Trial Repair Electronic Flight Display (EFD) of K-8 Aircraft
- Successful Trial Repair of Stand by Flight Instrument Display Unit (SFIDU)
- Trial repair of Field Support Equipment (FSE), Trial repair of Data Transfer Module (DTM) and High Voltage Power Supply (HVPS).

PME Calibration and Repair: A total of 1955 items were calibrated while 24 items were repaired at PMEL APF during the year 2011-12.

Addition of New Capability: Following new capabilities were added at APF:

(a) **Manufacturing of Commercial Products:** Pakistan Aeronautical Complex and Messrs INNAVTEK International (H.K) joined hands with a vision to strengthen National Economy through commercialization. With this collaboration, APF would be manufacturing e-book readers (PAC-e Book 1), notebooks (PAC-n Book 1) and tablet computers (PAC-PAD 1) along with industrial computers. In this regard, a ceremony was held at APF on 29 December, 2011 to inaugurate manufacturing of commercial products. Secretary Defence Production Division Lt Gen (R) Shahid Iqbal HI(M) was the Chief Guest at the ceremony.

(b) **Certified Avionics Integrator Status:** APF was awarded Certified Avionics Integrator status on 12 September, 2011.
Directorate General Defence Purchase (DGDP)
Financial year 2011-12 like previous fiscal year was eventful and rewarding from procurement point of view. In depth analysis of entire procurement activities has been undertaken and a substantial improvement has been observed in all facets. The improvement in output is attributed to wholehearted and well-coordinated efforts put in by all agencies and organizations, which certainly deserve appreciation. The salients of the achievements are reflected in succeeding paras. During the preceding financial year procurement to the tune of Rs. 118,881.213 Mn has been made for the Armed Forces.

Procurement Activities:

The summary of procurement activities for financial year 2011-12 in respect of DGDP, DPs and AsDP is as under:

**PROC ACTIVITIES FY 2011-2012**

**DGDP:**

**AGAINST SERVICE BUDGET:**

<table>
<thead>
<tr>
<th>Indents Received</th>
<th>Crossmandated</th>
<th>Cancelled/Not Concluded</th>
<th>Contracts Concluded</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>-</td>
<td>-</td>
<td>01</td>
</tr>
</tbody>
</table>

**AGAINST DEVELOPMENT PACKAGES:**

<table>
<thead>
<tr>
<th>Indents Received</th>
<th>Crossmandated</th>
<th>Cancelled/Not Concluded</th>
<th>Contracts Concluded</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>-</td>
<td>-</td>
<td>01</td>
</tr>
</tbody>
</table>
PRODUCTION ACTIVITIES FINANCIAL YEAR 2011-2012

DIRECTORATES OF PROCUREMENT (DPs):

AGAINST DEVELOPMENT PACKAGES:

<table>
<thead>
<tr>
<th>S/No</th>
<th>Org</th>
<th>Indents Received</th>
<th>Crossmandated</th>
<th>Cancelled/ Not Concluded</th>
<th>Contracts Concluded</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>DGP (Army)</td>
<td>25</td>
<td>-</td>
<td>03</td>
<td>*31</td>
</tr>
</tbody>
</table>

No contract has been concl by DP (Navy) and DP (Air) against Dev Packages.

AGAINST SERVICE BUDGET:

<table>
<thead>
<tr>
<th>S/No</th>
<th>Org</th>
<th>Indents Received</th>
<th>Crossmandated</th>
<th>Cancelled/ Not Concluded</th>
<th>Contracts Concluded</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>DGP (Army)</td>
<td>331</td>
<td>10</td>
<td>58</td>
<td>269</td>
</tr>
<tr>
<td>2.</td>
<td>DP (Navy)</td>
<td>753</td>
<td>96</td>
<td>383</td>
<td>271</td>
</tr>
<tr>
<td>3.</td>
<td>DP (Air)</td>
<td>307</td>
<td>22</td>
<td>27</td>
<td>291</td>
</tr>
<tr>
<td></td>
<td>Total:</td>
<td>1391</td>
<td>128</td>
<td>468</td>
<td>*831</td>
</tr>
</tbody>
</table>

* In few cases against 01 x indent two or more contracts have been concluded.
To assist in the proc of urgently required stores of those items, which are to be purchased from the supplier abroad or which are not aval indigenously or when the quoted rates are exorbitant, AsDP abroad are tasked for such proc. For this purpose indents are crossmandated by procurement agencies to AsDP abroad. Detail of indents crossmandated and contract concluded during last financial year is as under:-

**PROCUREMENT ACTIVITIES FY 2011-12**

**ATTACHES DEFENCE PROCUREMENT (AsDP)**

**AGAINST DEVELOPMENT PACKAGES:**

No contract has been concluded by AsDP against Development Packages.

**AGAINST SERVICE BUDGET:**

<table>
<thead>
<tr>
<th>S/No</th>
<th>Organization</th>
<th>Indents Received</th>
<th>Cancelled/Not Concluded</th>
<th>Contracts Concluded</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>ADP Washington</td>
<td>74</td>
<td>16</td>
<td>58</td>
</tr>
<tr>
<td>2.</td>
<td>ADP London</td>
<td>162</td>
<td>45</td>
<td>149 (31 x Partial contracts)</td>
</tr>
<tr>
<td>3.</td>
<td>ADP Paris</td>
<td>164</td>
<td>106</td>
<td>58</td>
</tr>
<tr>
<td>4.</td>
<td>ADP Beijing</td>
<td>55</td>
<td>31</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>455</td>
<td>198</td>
<td>*289</td>
</tr>
</tbody>
</table>

* In few cases against 01 x indent two or more contracts have been concl.
Procurement of Major Defence Equipment:

Major equipment procured during last financial year 2011-12 by DGDP and DPs is as under:

PROCUREMENT OF MAJOR DEFENCE EQUIPMENT

DURING FINANCIAL YEAR 2011-12

AGAINST DEVELOPMENT PACKAGES:

<table>
<thead>
<tr>
<th>S/No</th>
<th>Description of Stores</th>
<th>Qty</th>
<th>Contract Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>FE</td>
</tr>
<tr>
<td>1.</td>
<td>AH -1F Used Cobra Hels</td>
<td>08</td>
<td>US$ 22.320 M</td>
</tr>
<tr>
<td>2.</td>
<td>Bullet Proof Jackets</td>
<td>16822</td>
<td>-</td>
</tr>
<tr>
<td>3.</td>
<td>Lt Wt Cbt Helmet</td>
<td>55,211</td>
<td>-</td>
</tr>
<tr>
<td>4.</td>
<td>Toyota Hilux D/Cabin</td>
<td>78</td>
<td>-</td>
</tr>
<tr>
<td>5.</td>
<td>Sleeping Bag Large</td>
<td>24,860</td>
<td>-</td>
</tr>
<tr>
<td>6.</td>
<td>Staff Car Honda City 1800 CC</td>
<td>67</td>
<td>-</td>
</tr>
</tbody>
</table>

AGAINST SERVICE BUDGET:

<table>
<thead>
<tr>
<th>S/No</th>
<th>Description of Stores</th>
<th>Qty</th>
<th>Contract Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>FE</td>
</tr>
<tr>
<td>1.</td>
<td>Procurement of Medium Range Maritime patrol Aircraft</td>
<td>02</td>
<td>US$ 36.750 M</td>
</tr>
<tr>
<td>2.</td>
<td>WP-13F (B) Engine</td>
<td>20</td>
<td>US$ 23.474 M</td>
</tr>
<tr>
<td>3.</td>
<td>Thermal Wpn Sight for Long Range</td>
<td>1150</td>
<td>US$ 16.728 M</td>
</tr>
<tr>
<td>4.</td>
<td>MBA Egress Sys (PK-16LE Ejection Seats and CSS) for JF-17 Aircraft</td>
<td>21 L/Items</td>
<td>US$ 14.579 M</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Quantity</th>
<th>US$ (M)</th>
<th>Rs. (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Ni Sight 535N for IR SAM in SKD Form</td>
<td>253</td>
<td>US$ 6.891 M</td>
<td>Rs. 646.25 M</td>
</tr>
<tr>
<td>6</td>
<td>Low Level Air Defence Radar</td>
<td>2</td>
<td>US$ 6.306 M</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>ESM System for Ribat</td>
<td>2</td>
<td>US$ 4.440 M</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>WP-7B (IV) Engine</td>
<td>04</td>
<td>US$ 4.408 M</td>
<td>-</td>
</tr>
<tr>
<td>9</td>
<td>Security Surveillances System</td>
<td>15</td>
<td>US$ 4.224 M</td>
<td>-</td>
</tr>
<tr>
<td>10</td>
<td>Fully Integrated Harbour Protection and Security Surveillance</td>
<td>1</td>
<td>US$ 3.869 M</td>
<td>-</td>
</tr>
<tr>
<td>11</td>
<td>R&amp;S Radio Eqpt for JF-17 Aircraft</td>
<td>01</td>
<td>US$ 3.322 M</td>
<td>-</td>
</tr>
<tr>
<td>12</td>
<td>PEC Sets and Associated Spares for Block II JF-17 Aircraft</td>
<td>33 L/Items</td>
<td>US$ 2.490 M</td>
<td>-</td>
</tr>
<tr>
<td>13</td>
<td>RCIED Jammers</td>
<td>4</td>
<td>US$ 2.319 M</td>
<td>-</td>
</tr>
<tr>
<td>14</td>
<td>Aircraft Refueller 40,000 Ltrs</td>
<td>02</td>
<td>US$ 0.780 M</td>
<td>-</td>
</tr>
<tr>
<td>15</td>
<td>MB PK-10LZ Ejection Seat Mandatory Change Spares</td>
<td>64 L/Items</td>
<td>US$ 0.730 M</td>
<td>-</td>
</tr>
<tr>
<td>16</td>
<td>ALR-400 RWR Test eqpt for JF-17 Aircraft</td>
<td>04</td>
<td>US$ 0.660 M</td>
<td>-</td>
</tr>
<tr>
<td>17</td>
<td>Survival Radio and Homing Eqpt alongwith associated spares and services</td>
<td>14 L/Items</td>
<td>US$ 0.639 M</td>
<td>-</td>
</tr>
<tr>
<td>18</td>
<td>DVR Sub-system for JF-17 Aircraft</td>
<td>1943</td>
<td>US$ 0.634 M</td>
<td>-</td>
</tr>
<tr>
<td>19</td>
<td>CFD Sub-system for JF-17 Aircraft</td>
<td>01 L/Item</td>
<td>US$ 0.620 M</td>
<td>-</td>
</tr>
<tr>
<td>20</td>
<td>Spare Engine (PTA6A-27) for Y-12 Aircraft</td>
<td>1</td>
<td>US$ 0.564 M</td>
<td>-</td>
</tr>
<tr>
<td>21</td>
<td>Steel Bar Various Type</td>
<td>2,863.19 0</td>
<td>-</td>
<td>Rs. 205.869 M</td>
</tr>
<tr>
<td>22</td>
<td>Truck 1 Ton D/Cabin</td>
<td>57</td>
<td>-</td>
<td>Rs. 176.700 M</td>
</tr>
<tr>
<td>23</td>
<td>Toyota Hilux D/Cabin</td>
<td>50</td>
<td>-</td>
<td>Rs. 147.500 M</td>
</tr>
<tr>
<td>24</td>
<td>Tent 180 Lbs Modified Complete</td>
<td>1150</td>
<td>-</td>
<td>Rs. 81.42 M</td>
</tr>
</tbody>
</table>

The economy factor remained the hallmark of the financial year under report. In order to achieve competitive prices, deliberate efforts were made to achieve the desired rates which ultimately resulted in saving millions of rupees to the National Exchequer.
The details of saving during financial year 2011-12 against assessed rates, last procurement rates (LPR) and offered rates are as under:-

### SUMMARY OF TOTAL SAVINGS OF CONTRACTS
#### CONCLUDED DURING FINANCIAL YEAR 2011-12

### AGAINST DEVELOPMENT PACKAGES:

<table>
<thead>
<tr>
<th>Organization</th>
<th>Saving Against Assessed Rates</th>
<th>Saving Against User Est/LPRs</th>
<th>Saving Against Quoted/Offered Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>DGDP</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>DGP (Army)</td>
<td>Rs. 1.919 M</td>
<td>Rs. 121.030 M</td>
<td>Rs. 10.461 M</td>
</tr>
<tr>
<td>DP (Navy)</td>
<td>No Contract has been concluded by DP (Navy), DP (Air) &amp; AsDP against Development Packages.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DP (Air)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADP (Washington)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADP (London)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADP (Paris)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADP (Beijing)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>Rs. 1.919 M</td>
<td>Rs. 121.030 M</td>
<td>Rs. 10.461 M</td>
</tr>
</tbody>
</table>

### AGAINST SERVICE BUDGET:

<table>
<thead>
<tr>
<th>Organization</th>
<th>Saving Against Assessed Rates</th>
<th>Saving Against User Est/LPRs</th>
<th>Saving Against Quoted/Offered Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>DGDP</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>DGP (Army)</td>
<td>Rs.60.771 M</td>
<td>Rs. 300.107 M</td>
<td>Rs. 171.338 M</td>
</tr>
<tr>
<td>DP (Navy)</td>
<td>-</td>
<td>Rs. 17.459 M</td>
<td>Rs. 0.188 M</td>
</tr>
<tr>
<td>DP (Air)</td>
<td>Rs. 450.945 M</td>
<td>Rs.62.877 M</td>
<td>Rs. 736.020 M</td>
</tr>
</tbody>
</table>
## Contracts Concluded

The details of contract concluded during the financial year 2011-12 are as under:-

**SUMMARY OF CONTRACTS CONCLUDED DURING FIN YEAR 2011-12**

**AGAINST DEV PACKAGES:**

<table>
<thead>
<tr>
<th>Organization</th>
<th>No. of Contracts Concluded</th>
<th>Value of Concluded Contracts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FE</td>
<td>LC</td>
</tr>
<tr>
<td>DGDP</td>
<td>01</td>
<td>-</td>
</tr>
<tr>
<td>DGP (Army)</td>
<td>04</td>
<td>26</td>
</tr>
<tr>
<td>DP (Navy)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DP (Air)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADP (Washington)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADP (London)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADP (Paris)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADP (Beijing)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>05</td>
<td>26</td>
</tr>
</tbody>
</table>

* All figures converted into Pak currency.
### AGAINST SERVICE BUDGET:

<table>
<thead>
<tr>
<th>Organization</th>
<th>No. of Contracts Concluded</th>
<th>Value of Concluded Contracts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FE</td>
<td>LC</td>
</tr>
<tr>
<td>DGDP</td>
<td>01</td>
<td>-</td>
</tr>
<tr>
<td>DGP (Army)</td>
<td>46</td>
<td>225</td>
</tr>
<tr>
<td>DP (Navy)</td>
<td>113</td>
<td>195</td>
</tr>
<tr>
<td>DP (Air)</td>
<td>97</td>
<td>194</td>
</tr>
<tr>
<td>ADP (Washington)</td>
<td>58</td>
<td>-</td>
</tr>
<tr>
<td>ADP (London)</td>
<td>149</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADP (Paris)</td>
<td>58</td>
<td>-</td>
</tr>
<tr>
<td>ADP (Beijing)</td>
<td>24</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>546</td>
<td>614</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Outstanding Contracts:

Details of outstanding contracts during the period under review are as under:

DETAILS OF OUTSTANDING CONTRACTS

<table>
<thead>
<tr>
<th>Organization</th>
<th>Total No. of Outstanding Contracts</th>
<th>Total Amount Involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>DGDP</td>
<td>14</td>
<td>Rs. 31,964 M</td>
</tr>
<tr>
<td>DGP (Army)</td>
<td>637</td>
<td>Rs. 15,487.114 M</td>
</tr>
<tr>
<td>DP (Navy)</td>
<td>52</td>
<td>Rs. 157.707 M</td>
</tr>
<tr>
<td>DP (Air)</td>
<td>138</td>
<td>Rs. 4,148.990 M</td>
</tr>
<tr>
<td>ADP (Washington)</td>
<td>01</td>
<td>Rs. 0.201 M</td>
</tr>
<tr>
<td>ADP (London)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ADP (Paris)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ADP (Beijing)</td>
<td>01</td>
<td>Rs. 1.310 M</td>
</tr>
<tr>
<td>Total:</td>
<td>843</td>
<td>Rs. 51,489.322 M</td>
</tr>
</tbody>
</table>
Recovery of Risk & Expense Money:

Details of Risk & Expense cases along with recovery made during financial year 2011-12 are as under:-

AMOUNT RECOVERED AGAINST RISK & EXPENSE

DURING FINANCIAL YEAR 2011-12

<table>
<thead>
<tr>
<th>Organization</th>
<th>Total No. of Contracts</th>
<th>Total RE Amount Involved (In Rs. Million)</th>
<th>Total Recovery Carried Out (In Rs. Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DGDP</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>DGP (Army)</td>
<td>1428</td>
<td>2,205.306</td>
<td>0.812</td>
</tr>
<tr>
<td>DP (Navy)</td>
<td>7</td>
<td>8.226</td>
<td>0.183</td>
</tr>
<tr>
<td>DP (Air)</td>
<td>104</td>
<td>29.088</td>
<td>7.959</td>
</tr>
<tr>
<td>Total</td>
<td>1539</td>
<td>2,242.620</td>
<td>8.954</td>
</tr>
</tbody>
</table>

REGISTRATION OF FIRMS

The results of registration activities during the last financial year are tabulated as under:-

a. New firms registered - 52
b. Renewal of registered - 180
c. Additional indexation of firms - 110
d. Total Number of defaulting firms - 3
Directorate General Munitions Production
(DGMP)
The importance of self-reliance through indigenization cannot be overemphasized. Phenomenon of indigenization is a function of numerable factors and considerations outside the control of developing countries like ours. In 1965, the embargo placed on Pakistan by our allies made the Government realize that there was a necessity of achieving self-reliance in production of essential defence hardware items. This led to the establishment of Directorate General Munitions Production and Procurement (DGMP&P) in 1967. It was bifurcated in 1970 into DGDP & DGMP. The former catering to defence procurement and the later for indigenous production of def eqpt. DGMP is organized on a tri-svc basis and has directorates dealing with Army, Navy and PAF projects respectively.

**Mandate of DGMP:**

Mandate of DGMP is as under:-

- To maximize indigenous production of def stores in public and private sector with the ultimate aim of attaining self-sufficiency.
- To assist Ministry of Defence Production in formulating plans for giving a defence bias to future industrial planning.
- Acquisition of technical know-how, rights of mfr and enter into collaboration arrangements whenever sizeable import of an item is made.
- Utilization of available research facilities within the country to maximize indigenous defence capability.

**Functions of DGMP:**

Functions of DGMP are as under:-

- Keeping close and constant liaison with the Services Headquarter and DGDP to identify requirements for indigenous production of defence stores and equipment.
- Development of prototype of major end items and their subsequent production in civ industries.
- Collaboration with foreign countries and manufacturers in joint development and production of defence stores.
Carrying out periodic survey of industries, their registration and profiling, to assess the potential available and to publish/publicize survey reports for information of all concerned agencies.

Provide Secretariat Service to Defence Production R&D Board and Inter Services Armament and Explosives Committee.

Issuance of NOC for import of Defence stores.

Recommend modification of Defence Procurement procedures where necessary, to support indigenous production.

Administer funds allocated for development of defence equipment.

Projects signed during 2011-12:

Number of contracts with their total signed during FY 2011-12 (incl u/c Estbs) are:-

- Total number of contracts signed - 50
- Value in LC - Rs 1504.0807 Mn
- Value in FE - US$ 30.6963 Mn
  £ 0.188863 Mn

Major Achievements:

Achievements of DGMP during the year are as under:-

- 71 x Land Rover Defender Vehs were assembled and delivered in FY 2011-12.
- Indigenous development of Surveillance Control and Reporting (SCR) System.
- Following locally assembled/manufactured vehicles delivered to Pak Army:-
  - 772 x Hino Vehicles
  - 452 x Land Rover Vehicles
  - 400 x Isuzu Vehicles
  - 226 x Mounts for Weapon Carrier Vehicles
  - 20 x Mobile Field Kitchen
- Indigenous development and local production of Software Defined Radios (SDRs).
- Indigenous Development of MUAV.
Following 8 x projects have been completed:-
- Local Assembly/Manufacture of Truck 5 Ton 4x2 Durto, Qty-90.
- Local Assembly/Manufacture of Hino Bus, Qty-100.
- Local Assembly/Manufacture of Truck 5 Ton 4x4 Hino GT1JHPA, Qty-500.
- Local Assembly/Manufacture of Hino Shop Sets 5 Ton 4x4 Hino GT1JHPA, Qty-82.
- Development of mobile Field Kitchen, Qty-20.
- Up-gradation of PRC-77 Radio Sets, Qty-1000 Sets (5th Order).
- Up-gradation of RBS-70 Training Simulators
- Establishment Specification and Development of Test Eqpt for Tow MsIs.

MESMA-2 Air independent Propulsion (AIP) system of Agosta 90B S/M has been delivered by DCNS and same is being retrofitted with PNS/M SAAD at SMC PN Dockyard Karachi.

FAC (M) No. 1 built at china, was delivered/accepted on 24 Apr 2012. CNS formally commissioned the craft in China. CJCSC graced the occasion as Chief Guest.

Construction activities of 4th F-22P Frigate being built at KS&EW are in progress. The commissioning of 4th ship is scheduled tentatively in the month of Apr 2013.

Following projects completed successfully in 2011-12 by Dte MP (Air):-

<table>
<thead>
<tr>
<th>Project</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chaff &amp; Flare</td>
<td>Ch-100000,</td>
</tr>
<tr>
<td></td>
<td>FL/2-17007,</td>
</tr>
<tr>
<td></td>
<td>FL/4-17300</td>
</tr>
<tr>
<td>Links 30 M</td>
<td>77544</td>
</tr>
<tr>
<td>OPS Loader</td>
<td>10</td>
</tr>
<tr>
<td>Flare FL-4</td>
<td>11000</td>
</tr>
<tr>
<td>Pair up (short closed)</td>
<td>2</td>
</tr>
<tr>
<td>Sum Pre Amplifier of Agave Radar</td>
<td>20</td>
</tr>
<tr>
<td>Difference Pre Amplifier of Agave</td>
<td>20</td>
</tr>
<tr>
<td>Rada</td>
<td></td>
</tr>
<tr>
<td>HUD-956 PCBs</td>
<td>70</td>
</tr>
</tbody>
</table>
- HUD 106 MG PCBs - 80
- Synchro Transformer Module - 42
- Mother Board of HUD-956 System - 22
- Interface Control Data Monitor - 4
- Bus Transport Layer Analyzer - 4
- ADS Power supply - 15
- Digital Video Recorder - 44
- Data transfer Cartridge - 36
- NVG Grd Version - 23
- ISUZU Truck for GPU - 22
- Ni-Cad Battery for K-8 Aircraft - 14
- Trailer 25 Ton - 10
- Air Charging Trolley - 21
- Roller Conveyer - 28

MVRDE:

MVRDE is a multi disciplinary organization capable of conducting research and development pertaining of military vehicles, engineer equipment an defence related mechanical system. MVRDE focuses on furnishing feasibility, design and technical details that present a solution to customer's stipulated problem or challenge. A large spectrum of equipment has been developed indigenously. Some of the categories are:-

- Tracked Vehicle
- Wheeled Vehicles
- Training Equipment
- Bridging Equipment
- Ground Support Equipment
- Simulators

Projects Completed by MVRDE. Following contracts have been completed by MVRDE during the FY 2011-12:-

<table>
<thead>
<tr>
<th>Projects</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drum Handler</td>
<td>05</td>
</tr>
<tr>
<td>Concepts Demonstrator of AVLB</td>
<td>01</td>
</tr>
</tbody>
</table>
- Air Conditioned Shelter on Vehicle Land Rover - 11
- Defender 130 High Capacity Pickup for
- Mobile Radio Operation Detachment (SMROD)
- Shooter Profile System (SPS) - 01
- High Pressure Air compressor - 01
- Test Measuring Diagnostic Eqpt (TMDE) Van - 01
- Printed Circuit Board (PCB) Van - 01
- Crain Cum Carrier - 03
- Bomb Lift Truck - 09

**ARDE:**

Desired results against the following projects have been achieved:-
- All Weather Electronic Anti Lifting Device (Modified)
- All Weather Mechanical Anti Lifting Device
- Multi channel Exploder
- Explosive Grid System
- Alligator Switch Multi Purpose
- Simulation Mines (AP)
- 125mm APFSDS/T DU NAIZA

**IOP:**

Following NVDs delivered during FY 2011-2012 by IOP:-

<table>
<thead>
<tr>
<th>Projects</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>AN/PVS-4A</td>
<td>175</td>
</tr>
<tr>
<td>Driver’s Night Vision Periscope (DNVP)</td>
<td>174</td>
</tr>
<tr>
<td>Single Tube Goggle (AN/PVS-7D)</td>
<td>6588</td>
</tr>
<tr>
<td>Weapon Sight (NS-685c)</td>
<td>1899</td>
</tr>
<tr>
<td>Aviator Goggle (AVS-9)</td>
<td>74</td>
</tr>
<tr>
<td>Aviator Goggle (Ground Version)</td>
<td>23</td>
</tr>
</tbody>
</table>
National Radio Telecommunication Corporation (NRTC)
National Radio and Telecommunication Corporation (NRTC) is engaged in design, development and manufacture of telecommunication equipment in Pakistan. NRTC is the pioneer in Telecommunication Equipment and leader in the field of communication in Pakistan for the last four decades. NRTC is producing high quality products for Defense services, Pakistan Telecommunication Corporation (PTCL) and other civil / military Organizations since 1965-66.

By virtue of long experience in the field of telecommunication, NRTC has attained excellent technical backed-up knowledge and support with a modern infrastructure and standard expertise required to produce telecommunication equipment to the entire satisfaction of the users. We are ISO-9001-2008, IPC and Mil-Std-810 Certified as well.

LOCATION:

It is situated in T&T Complex Haripur - Pakistan, which is 80 Km North West of Islamabad.

QUALITY POLICY:

- To provide our customers world class quality Radio and telecommunication equipment which meets all their operational requirements, in time, at affordable costs.
User’s satisfaction must be given top priority by each employee in the process chain, from receipt of raw material, through manufacture and delivery, till final acceptance.

Employees performance must achieve the aim and delight the customers through continual improvement by supplying quality product.

Each product must qualify the user’s inspection and test, the first time, every time.

**MAIN PRODUCTS MANUFACTURED BY NRTC**

**ELECTRONIC FIELD TELEPHONES**

EFT-101  
RAFT-786

**LAND MOBILE RADIO**

LMR-BASE STATION  
LMR-BASE RADIO
96000 SERIES RADIO SET

EXCHANGE 64161

Ni-Cd BATTERIES AND DUAL Ni-Cd BATTERY CHARGER

DUAL BATTERY Charger

4AH/13.2V BATTERY FOR AN/PRC-77

4AH/14.4V BATTERY FOR PRC-9610
PERSONAL ROLE RADIO

POWER SUPPLY HIGH RATING

PRC-77/PK VHF-FM RADIO SET
TECHNICAL PERFORMANCE / CAPABILITIES

NRTC has the following technical facilities/capabilities for the Manufacture, Assembly, Testing and Measuring of following equipment/tasks:-

- HF and VHF Military Version Radios.
- VHF and UHF Commercial Mobile Radios.
- VHF and UHF Single/Dual/Multi Channel Extend Radios.
- Military Version Switches/EPABXs 16 lines, 20 lines, 40 lines and 96 lines.
- Commercial Version Switches/EPABXs 50 lines to 1024 lines.
- Digital Field Telephone and Ruggedized Auto Field Telephone.
- Linear, Regulated Power Supplies.
- Printed Circuit Boards for all type of Telecommunication equipment.
- DP Boxes, Cabinets and other accessories of outside plants.
- VHF/UHF Antennae for Military/Commercial Radios including Extend Radios.
- Environmental Test facilities as per MIL-STD-810E
- Mechanical and Surface treatment workshops
- PCB stuffing upto 16-layers

MAJOR PROJECTS 2000-2011

Following are major projects for the last nine years:-

- Local Manufacturing of VHF Frequency Hopping Radios (9600 Series)
- Up-graded PRC-77 Radios
- Automag 4+12 lines
- Digital Electronic Field Telephone Exchange PFX-6416
- Digital Electronic Field Telephone Exchange PFX-3208
- Digital Electronic Field Telephone Exchange PFX-1204
- Field Auto Telephone Exchange PFX-1604
- Electronic Field Telephone (EFT-101)
- Ruggedized Auto Field Telephone (RAFT-786)
- DP Boxes
- Cross-Connection Cabinets
- Power Supplies
- Walkie Talkies
- Dual Battery Charger
- Inter Trench Communication (ITC 2000)
- Antenna RC-292
- Land Mobile Radios (SK-2 System)
- Software Defined Radios (SDR)

**FINANCIAL PERFORMANCE**

Financial performance/Sales turnover of NRTC is as under:

<table>
<thead>
<tr>
<th>YEAR</th>
<th>DEFENCE</th>
<th>EXPORT</th>
<th>PTCL / OTHER</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-01</td>
<td>57.699</td>
<td>-</td>
<td>29.412</td>
<td>87.111</td>
</tr>
<tr>
<td>2001-02</td>
<td>113.807</td>
<td>-</td>
<td>47.508</td>
<td>161.315</td>
</tr>
<tr>
<td>2002-03</td>
<td>112.988</td>
<td>-</td>
<td>31.546</td>
<td>144.534</td>
</tr>
<tr>
<td>2003-04</td>
<td>474.003</td>
<td>-</td>
<td>94.869</td>
<td>568.872</td>
</tr>
<tr>
<td>2004-05</td>
<td>649.404</td>
<td>-</td>
<td>77.009</td>
<td>726.413</td>
</tr>
<tr>
<td>2005-06</td>
<td>867.582</td>
<td>471.475</td>
<td>45.227</td>
<td>1,384.284</td>
</tr>
<tr>
<td>2006-07</td>
<td>1199.292</td>
<td>129.397</td>
<td>15.62</td>
<td>1,344.309</td>
</tr>
<tr>
<td>2007-08</td>
<td>944.919</td>
<td>77.609</td>
<td>10.337</td>
<td>1,032.865</td>
</tr>
<tr>
<td>2008-09</td>
<td>461.417</td>
<td>236.291</td>
<td>1.012</td>
<td>698.720</td>
</tr>
<tr>
<td>2009-10</td>
<td>463.729</td>
<td>50.004</td>
<td>46.635</td>
<td>560.368</td>
</tr>
<tr>
<td>2010-11</td>
<td>573.017</td>
<td>362.928</td>
<td>29.042</td>
<td>964.987</td>
</tr>
<tr>
<td>2011-12</td>
<td>1,472.776</td>
<td>259.221</td>
<td>0.912</td>
<td>1,732.909</td>
</tr>
</tbody>
</table>
FUTURE PROJECTS AND TARGETS

Following are the future manufacturing potential projects:-

- Software Defined Radio (SDR)
- PRR (Personal Role Radio)
- IP Based Military Exchanges
- IP Exchanges
- Solar Solutions including battery charger
- Alternative Energy Solutions
- IP Security Gateway (Network Security)
- Secure Phone / Fax / Data Device
- IP Encryptors
- Bulk Encryption Units
- Secure Data Links
- Radio Intercom System for APC’s and tanks
- Microwave Solutions
- Platoon Early Warning System
- Communication Networking

NRTC is also planning to get access to the other segments on telecommunication market both for Defence and Commercial Sectors.
Karachi Shipyard and Engineering Works (KSEW)
KARACHI SHIPYARD & ENGINEERING WORKS LIMITED

VISION:

To make Pakistan a leading shipbuilding country of the region, in line with its true potential and ideal location, thus contributing towards our economic development and poverty alleviation.

MISSION:

KSEW is committed to deliver quality products built to agreed specifications on scheduled dates and at competitive prices.

INTRODUCTION:

The Karachi Shipyard & Engineering Works Limited (KSEW) is a public limited company, with all shares owned by the Government of Pakistan / Pakistan Navy. It is an autonomous body under administrative control of Ministry of Defence Production. The KSEW is situated geographically within the boundaries of Karachi Port, covering an area of 65 acres (approx). The set up has been designed and built to undertake construction & repair of small to medium size ships and to undertake heavy engineering activities. It was built with the technical assistance of H. C. Stulcken Schon of Germany, in 1956.

MAIN FUNCTIONS:

PAKISTAN NAVY’s REQUIREMENT:

- As per Government’s mandate KSEW caters for Pakistan Navy’s requirements as PAC KAMRA and HIT cater for PAF and Pak Army’s requirements respectively.

- Additionally, KSEW undertakes commercial activities mainly, Shipbuilding, Shiprepair and General Engineering.
SHIPBUILDING:

➢ **Commercial Activities:**

KSEW is equipped to build all types of Marine crafts, cargo vessels, containerships, oil tanker, bulk carrier up to 26000 TDW, Harbour tugs, pilot boats, Hopper barges, Dredgers and Launcher etc.

➢ **Defence Related Activities:**

KSEW has the capability of indigenous construction of Naval vessels such as Fast attack craft, Patrol boats, Gun boats Missile craft, Submarine and Frigate F22P.

➢ **Infrastructure**

To carry out the shipbuilding activities KSEW has three shipbuilding berths with following sizes and capabilities.

<table>
<thead>
<tr>
<th>Berth No.</th>
<th>Size</th>
<th>Max TDW</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>169 x 23 M</td>
<td>15000</td>
</tr>
<tr>
<td>2</td>
<td>118 x 23 M</td>
<td>6000</td>
</tr>
<tr>
<td>3</td>
<td>213 x 31 M</td>
<td>26000</td>
</tr>
</tbody>
</table>

**MAJOR DEFENCE PRODUCTS MANUFACTURED BY KSEW**

➢ **FAST ATTACK CRAFT (MISSILE)**

Multipurpose Auxiliary Craft (MPAC) fitted with the most modern missile system. The craft has designed speed of 32 knots and maximum displacement of 250 tons. Fitted with C802 surface to surface Missile, the boat makes a lethal platform at sea.
FAST PATROL BOAT

A-180 tons Fast patrol boat which has been indigenously designed and built for Pakistan Navy. The craft has capable of doing max speed of 23 Knots. Its main function is salvage, shallow water operation as well as self defence, search & Rescue operation.
AGOSTA 90B SUBMARINE

Agosta 90B is a modern conventional submarine built for Pakistan Navy under transfer of Technology from DCN France. The Agosta 90B submarine can be fitted with MESMA, an Air independent propulsion system that increases underwater endurance during operation at sea.

FLOATING DOCKS

State of Art Floating Docks indigenously constructed at KSEW for Pak Navy. Built in various sizes ranging from 1000-4000 tons lifting capacity, these docks provide extremely sophisticated mini dockyard facilities at point of choice. This facility is extremely useful for ports having no dry docks can be towed & parked at small ports for use as required.
ACHIEVEMENTS / PROGRESS DURING THE YEAR 2011 – 2012:

ORDERS COMPLETED:

- 02 x 10 Tons Bollard Pull tugs for KPT delivered to client on 13 July 2011.
- 02 x 500 ton Cargo barges for KPT delivered to client on 27 Aug 2011.
- 01 x Dredge Tender for KPT delivered to client on 16 Nov 2011.

SIGNING OF NEW ORDERS:

32 Ton Bollard Pull Tug for Pak Navy (01 No):

Contract for construction of 32 tons Bollard pull tug for Pak Navy was signed on 29th June 2012. This vessel will be delivered within 16 months from contract effective date (CED).

Multipurpose Barge for PN (01 No):

Contract was concluded with Pak Navy for construction of barge on 29th June 2012. The barge will be ready for delivery within 10 months from contract effective date (CED).
Aluminum Boats for Bridge Erection for MVRDE (09 Nos):

Inking of an agreement has been made with MVRDE for construction of 09 Nos Aluminum boats on 29th June 2012 which will be delivered to the client within 12 months from CED.

ILS Package for Small Tanker Cum Utility Ship:

- Contract has been conclude on 29th June 2012 for provision of ILS Package of Small Tanker cum Utility Ship (STUS) within 12 months from CED.
- Installation of 02 sets of under water telephone set on Small Tanker cum Utility Ship (STUS). Contract signed on 15th June 2012.

PROGRESS OF ONGOING ORDERS:

F22P FRIGATE FOR PAK NAVY:

- A multi mission conventionally powered Frigate having displacement of 2800 tons & designed for a maximum speed of 29 Knots. Its main role include Air defence of force at sea, interdiction of hostile surface combatants, patrolling protection of EEZ, radiate combat power in the area of interest and undertake heliborn operation. The work is in progress in collaboration of China Trading Co M/s CSTC at KSEW.
- All construction milestones have been achieved.
- Harbour trials of the vessel have almost completed.
- Sea trials and additional trials are scheduled to commence in Sept 12 & Nov 12 respectively.
- Vessel will be delivered to the client as per contract schedule.
500 TONS FAST ATTACK CRAFT (MISSILE) FOR PAK NAVY

- Construction of FAC (M) in collaboration with China Shipbuilding and Offshore International Co Ltd (CSOC) is in hand.
- All steel blocks erected on berth.
- Work on Aluminum blocks, Fabrication of foundation for machinery & electrical equipment, ventilation ducts, cable cutting and cable routing is in progress.
- Launching has been carried out on 16 Aug 12.

PUSHER TUGS FOR PAK NAVY (02 NOS):

- The construction was started in June 12.
- Fabrication of Bulkhead & foundation of main engine is completed.
- Marking, cutting, installation of profiles & hull assembly is in progress.
- Next milestone, launching and delivery of tugs are scheduled on 30 Nov 12 and 25 Jan 13 respectively.
FUTURE PROSPECTS / PROJECTS IN PIPELINE:

- Complete construction of Next Generation Submarine for PN at KSEW.
- Construction of Submarine Rescue & Salvage vessel for PN.
- Construction of Corvettes for PN.
- Repeat order of MPAC class Fast Attack Craft (Missile) for PN.
- Construction of floating pontoons for Gawadar port.
- Construction of 04 Hopper Barge for KPT.
- Construction of Survey vessel for KPT.
- Construction of 02 Pilot boats for KPT.
- Construction of 02 Research Survey Vessel for Marine Fisheries Deprt (MFD).
- Construction of 01 Fleet Oil Tanker for PN.
- Construction of 01 x Hover craft for PN.

SHIPREPAIR

- Good facilities exist in KSEW for undertaking all types of above water and underwater repairs of ships and offshore drilling rigs. KSEW Shiprepair Section is organized to undertake above water repairs of vessels within KSEW premises, in Karachi Harbour and at the outer anchorage (if required). Uptill now, KSEW has repaired over 5000 Ships, including foreign flag carriers and warships belonging to France, Iran, Oman, Yemen and Royal (UK) Navies.

- For under water repairs, two Dry Docks are available, which can take vessels upto 26,000 TDW.

<table>
<thead>
<tr>
<th>DRY DOCK</th>
<th>LENGTH x WIDTH</th>
<th>CRANE (TONS)</th>
<th>MAX. TDW.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>186 X 27 m</td>
<td>30 &amp; 10</td>
<td>26,000</td>
</tr>
<tr>
<td>2.</td>
<td>170 X 24 m</td>
<td>15 &amp; 10</td>
<td>18,000</td>
</tr>
</tbody>
</table>
A 500 Meters Quay Wall is available on the northern end and 165 Meters on the southern end for maintenance/berthing of vessels and above water repairs.

The Shiprepair Section of KSEW undertook repairs of over 22 vessels of various clients such as PN, KPT, PQA, MSA including two foreign flag vessels each from China & UAE during the year 2011-2012. Further docking / undocking of 3 vessels were undertaken during the period under review. The docking facilities are booked till Jan 2013.

**GENERAL ENGINEERING:**

The Engineering Division undertakes construction of Package Type Fire-tube Boilers of upto 600 HP - 250 PSI, Water Tube Boilers upto 80 tons/ hour, Pressure Vessels, LPG Tanks, Heat Exchangers, Storage Tanks of all sorts, Gates for Dams, Barrages & Head Works, Conveyors and Elevators for Chemical, Petroleum and Cement Industries, complete Sugar Plant 4000 – 5000 TCD capacity, Sugar Mill Machinery, all types of Cranes, Steel Structures and Towers, Caravans, Overhead Steel Bridges and Sewage Treatment Plants etc.
GENERAL ENGINEERING PRODUCTS:

- Sewage Treatment Plant
- LPG Storage Tanks
- Fire Tube Boilers
- FRP Tanks
- Wind Turbine Towers
ORDERS COMPLETED DURING 2010-2011:

- Repair / Refurbishment of X-Craft Hoisting / Lowering Trolley for PNS ABDOZE.
- Head Stock Repairing for M/s Khairpur Sugar Mills Ltd.
- Head Stock Repairing for M/s Matiari Sugar Mills Ltd.
- Machining of Tube Sheet for M/s BYCO.
- Manufacture of Caisson Dry Dock No.1 of Ship Repair Division at KSEW.
- Skimming / Machining of Motor Armature for PN Dockyard.
- Fitting of New Sleeve on Main Propeller Shaft of PNS Hurmat.
- Machining of Rotor Shaft for Siemens Pakistan.
- Repair of Bent Shaft of Motor for International Power Global Development.
- Supply of Weight for Load Testing for EASE.
- Machining of Segment for Harbin Electric Corporation.
- Machining of Turbine Blades for Harbin Electric Corporation.
- Manufacture & Installation of Components, associated fitting and fixtures of Ship Lift System for TPK Company Ltd.
- Manufacture of various Sugar Machinery Parts for M/s Bandhi Sugar Mills Ltd.
- Manufacture of Super Heater Coil for M/s AL-Abbas Sugar Mills Ltd.
- Manufacture of Pontoons for Ship Repair division at KSEW.
- Refurbishment of Main Deflooding Pump of DD-1 for Ship Repair Division at KSEW.
- Refurbishment of Structure & Electric System of Luffing Crane at KSEW.

FUTURE PROJECTS:

- Fabrication of Ballast Panel for PN Dockyard.
- Repair / Refurbishment of Railway Trolley for PN Dockyard.
- Vision Calm Buoy for Bureau Veritas PN Dockyard.
- Provision and Installation of (02) sets of underwater telephone set for STUS for DP (Navy) Rawalpindi.
- Fabrication and supply of 80 Tons Bagasse / Oil Fired Water Tube Boiler for Adil Sugar Mills.
- Refurbishment / Renovation of 10 Tons / Hr Wet Back Package Fire Tube Boiler for Usman Anjarwala Group of Companies.
SAVING THROUGH INDIGENIZATION:

Shipbuilding and Shiprepair are capital intensive business. Out of the work handled at KSEW considerable amount of foreign exchange has been saved during 2011-12.

CAPACITY BUILDING/YARD UPGRADATION:

➢ YARD UP-GRADATION OF KSEW:

In order to enhance capacity and to handle production on modern lines, KSEW has undergone extensive up-gradation which includes civil works, installation of workshop machinery and purchase of mobile machinery. Additionally, 82 in number workers and officers of KSEW were trained by HZ Shipyard at Shanghai, China. This up-gradation is worth billions of Rupees and has converted KSEW into a state of the art Shipyard which should be able to compete with the similar size yards in the international market.

➢ SHIP LIFT AND TRANSFER SYSTEM (SL&TS):

The project for installation of Ship Lift and Transfer System to lift and park ships, submarines and commercial vessels for repair, was approved by the Government in Sep 2007 and revised in Feb 2011. This is a PSDP project the Consultancy Services were hired. Once completed, the project has great potential to attract a vast range of clients for repair and new construction of warships, submarines and commercial vessels.

FINANCIAL PERFORMANCE / REVITALIZATION:

Undoubtedly, KS&EW has recovered from its ever worsening financial position, which despite Government subsidies in the past suffered huge losses. The company reported to have accumulated losses of more than Rs 3.30 Billion as on June 30, 2006 as against Rs 2.12 Billion (approx) as on June 30, 2011. Though, the company is determined to meet its expenses from its self-generated income.
Defence Export Promotion Organization (DEPO)
DEFENCE EXPORT PROMOTION ORGANIZATION

Defence Export Promotion Organization (DEPO), since its inception in 2000, has been promoting the products of public and private sectors defence industries. Details of achievements of DEPO in 2011-2012 are given in the subsequent paragraphs.

Export Promotion:

The defence export figures, as compiled after taking feedback from Public and Private sector, are US$ 39.9 Million for the year 2010-2011. For FY 2011-2012, the data will be compiled on receipt of the same from public / private sector.

Participation in Foreign Defence Exhibitions (01 Jul 2011 to 30 June 2012):

Pakistan Pavilion was established in the following international exhibitions to promote export of defence related equipment / products and to market International Defence Exhibition and Seminar (IDEAS), scheduled from 7-11 November 2012 at Expo Centre, Karachi:-

- Defence Services Asia (DSA-2012) - from 16-19 April 2012 at Kuala Lumpur, Malaysia.
- Kazakhstan Defence Expo (KADEX-2012) from 3-6 May 2012 at Astana, Kazakhstan.
- International Exhibition Land Security and Defence (Eurosatory-2012) from 11-15 June 2012 at Paris, France

Expected Participation in Foreign Defence Exhibition 01Jul 2011 to 30June, 2012:

DEPO has planned to attend following exhibitions in year 2012-2013:-

- International Defence Exhibition & Conference (IDEX-2013) from 17-21 Feb 2013, at Abu Dhabi, United Arab Emirates.
• Latin America Aero & Defense (LAAD-2013) from 9-12 Apr 2013, at Rio De Janerio, Brazil
• International Defence Industry Fair (IDEF-2013) from 07-10 May 2013, at Istanbul, Turkey

**Foreign Delegations Visit to DEPO:**

Since the Display Halls of DEPO are still under construction, therefore, no visit could be planned till their completion.

**Preparation of IDEAS-2012:**

IDEAS-2012 is scheduled to be held from 7-11 Nov 2012 at Expo Centre, Karachi. Aggressive marketing and administrative preparations are in hand to make IDEAS-2012 a success. Few activities related to IDEAS-2012 are appended below:

• **Selection of Event Manager for IDEAS-2012/14:** Event Manager for IDEAS-2012/14 was selected after processing of bids on 06 Oct 2011.

• **Soft Launch IDEAS-2012:** Soft Launch of IDEAS-2012 was held at Pakistan National Council of Arts (PNCA) Auditorium, Islamabad on 30 March 2012. Prime Minister of Islamic Republic of Pakistan Syed Yousuf Raza Gilani was the Chief Guest. A large number of Federal Ministers/Secretaries, Ambassadors/High Commissioners/Defence Attaches, Senior Civil and Military Officers and CEOs of national and multinational companies attended the event. Besides giving IDEAS-2012 a kick start, it displayed our resolve to hold the event and created good will where after positive response is expected from friendly countries.

• **Invitation to Foreign Delegations IDEAS-2012:** A total of 326 delegations from 96 countries have been invited for IDEAS-2012 by the following:

  ➢ Minister of Defence Production. 82
  ➢ Secretary Defence Production. 54
  ➢ Chairman Joint Chiefs of Staff Committee. 84
  ➢ Chief of Army Staff. 29
  ➢ Chief of Naval Staff: 49
  ➢ Chief of Air Staff. 27
  ➢ Director General Defence Export Promotion Organization 01
Public Sector Defence Product Documentary:

A comprehensive 30 minutes documentary covering public sector defence products, services and capabilities has been prepared for marketing and promotional purpose.

Defence Product Catalogue:

On the instructions of Secy MoDP, a Product Catalogue covering all the defence related products of Public / Private Sector, is being prepared for marketing and promotional purpose.

DEPO Website:

As a step towards E-Commerce activity, DEPO website www.depo.org.pk has been revitalized. The website provides a single window to explore the Defence Industries of Pakistan, both in the Public and Private Sectors. It provides list, addresses, products and capabilities of Defence Industries through web linking.