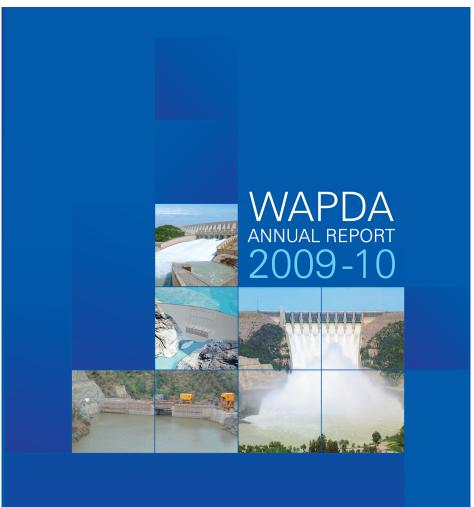
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PAKISTAN WATER AND POWER DEVELOPMENT AUTHORITY www.wapda.gov.pk

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ORGANIZATION CHART

Authority as on June 30, 2010



Shakil Durrani Chairman



Syed Raghib Abbas Shah Member (Water)



Muhammad Qasim Khan Member (Power)



Muhammad Imtiaz Tajwar Secretary Wapda

Member & M.D. (Water)

GM (Coord & Mon) Water GM (Planning & Dev.) GM (Technical Services) GM (Hydro Planning) GM (Diamer Basha Dam) CEO (Neelum Jhelum) GM (Central) Water GM C.D.O. GM (M&S) GM (Projects) North GM (Projects) North GM (Tarbela) GM (Finance) Water GM (Northern Areas) GM (GBHP)

Member & M.D. (Power)

GM (Hydel) Opr. GM (Hydel) Dev. GM (Finance) Power GM (Training) Principal WAPDA STAFF College, Islamabad Principal WAPDA Engg. Academy, Faisalabad



Nazakat Ali Shah Acting Member (Finance)

Member Finance

GM (CCC) Chief Auditor DG (Finance) B&C DG (Insurance)

ACKNOWLEDGEMENT

Pakistan Water and Power development Authority (WAPDA) is an autonomous Federal Institution created by virtue of an Act of Parliament 1958. WAPDA Authority comprises Chairman, M embers Water, Power & Finance & a Secretary. Its statutory mandate is to utilize water and power resources of the country in a unified and coordinated position. WAPDA was empowered to frame programme for the generation of Hydel and Thermal Power, Transmission and distribution lines and Grids etc. The functions of Power Wing except Hydel Power Development & running of Power Houses has now been transferred to Pakistan Electric Power Company (PEPCO).

WAPDA Authority every year prepares an Annual Report on development of water & power resources which is to be submitted to the Government of Islamic Republic of Pakistan in order to comply with the Section 21(1) of WAPDA Act 1958. In this regards, a compatible and a detailed picture of activities being undertaken, besides, a comprehensive description of the development of Water and Hydropower Projects under WAPDA's Vision-2025 are being executed on behalf of Govt. of Pakistan have been elaborated in the subsequent pages. Further, it also includes status of various feasibility studies, Engineering Design for different Small, Medium and Mega Hydel Projects with generation capacity of 25000 MW either have been completed or for advance stage of completion.

In compliance of instructions of the Govt. of Pakistan, WAPDA is going to construct 5 multipurpose storage dams in the country during the next 10 to 12 years. WAPDA would like to recognize and appreciate the services, contributed by its officers/staff and the consultants to obtain targeted progress, pertaining to different small and medium dam, as well as numerous Hydropower Projects in order to fulfill its obligations, being undertaken. The portfolio of Small/Medium Dams has been undertaken for the development of remote & under developed areas of Pakistan. In addition, WAPDA Authority also appreciated the collaborative assistance, given by various organizations and other agencies of the Provincial Governments and Federal Departments as well as foreign donor agencies. During the current year, the Members of the Authority and its management staff will continue to focus on the following major policy initiatives:

Improvement in Operational Efficiency

WAPDA Hydel Power Stations produced 27,363 Million KWh net energy during the FY 2009-10 which is 33.42% of the total Hydel-Thermal Generation Mix of the Power System. The up keep of generating units was properly focused upon to ensure high availability and reliability of cheap hydropower. However, the hydrological conditions were not as favourable as in the previous years.

WAPDA has also taken in hand rehabilitation of its old existing Hydel Power Stations to ensure more reliable and sustainable operation of these cheap sources of power generation. The rehabilitation of 22 MW Jabban Hydroelectric Power Station has been commenced which at present is in contract award stage. Rehabilitation of Mangla and Warsak Hydel Power Stations is also under active consideration and WAPDA is planning to hire consultancy services to carry out feasibility studies of the proposed schemes. Similarly, the rehabilitation of 1.1 MW Renala Hydel Power Station to increase its capacity to 4.0 MW is also being studied. Besides, the rehabilitation of Tarbela Power Station is also under process.

Revival of WAPDA as a Development Organization

It is indeed gratifying that WAPDA has undertaken Vision-2025 Programme comprising a comprehensive integrated Water Resources and Hydro Power Development Programme, which will boost up the economy of Pakistan. This has also revived WAPDA's primary developmental role as laid down in WAPDA's charter of duties.

In the first phase of the programme, the development work was started on three canals, five dams and four hydropower projects. Construction works on these projects are in their advance stages of completion.

Studies on Kohala (1100 MW), Dasu (4320 MW), Bunji (7100 MW), Lawi (70 MW), Spat Gah (567 MW), Palas Valley (621 MW), Keyal Khwar (122 MW), Basho (28 MW) and Phandar (80 MW) hydropower projects are in progress. WAPDA will soon start working on Studies of Thakot and Patan (each 2800 MW) hydropower projects.

The construction of Neelum Jhelum Hydropower Project, Concrete Gravity Dam, (969 MW, storage capacity Volume 8.0 million. Meter3) has been commenced and excavation of tunnels is in progress in order to speed up the civil work of tunnel. WAPDA has likely to arrange 02 Tunnel Boring Machine to expedite the completion of this project which is envisaged by diverting the Neelum river water into tunnel passing through a power house to generate 969 MW electricity before out falling into the lower limo of Jhelum River. The total annual generation is expected to be over five billion KWH electricity units at a nominal cost of Rs.3.00 per unit. The construction activities on Golen Gol Hydropower Project (106 MW) have also been commenced. Allai Khwar, Khan Khwar, Duber Khwar and Jinnah Hydropower projects are under implementation.

To meet water demands of large Agriculture sector of Pakistan, WAPDA is working on various Water Sector Projects which includes Raising Mangla Dam (additional 2.88 MAF Storage and 120 MW electricity), Gomal Zam Dam (0.892 MAF live storage and 17.4 MW), Satpara Dam (0.053 MAF live storage and 17.3 MW) and Kurram Tangi Dam (0.90 MAF live storage and 83.4 MW). The Mirani Dam (0.152 MAF live storage) is in operation since Nov.2006. Sabakzai Dam (0.0147 MAF live storage) is also in operation since Sept. 2007 and has been successfully handed over to Govt. of Balochistan in June 2010. Civil works on Mangla Dam Raising Project have been completed in December 2009. Irrigation projects of Rainee Canal (Phase-I), Kachhi Canal (Phase-I) and Greater Thal Canal (Phase-I) are under implementation. WAPDA is working under most difficult conditions at Gomal Zam Dam situated in South Waziristan a high security zone but with a mission to complete this project against all odds as Public Service to Pakistan.

WAPDA has also taken initiative on drainage projects. Right Bank Outfall Drain **RBOD-I**) covering area of Shikarpur, Dadu and Larkana in Sindh Province to provide outfall facilities to the existing and proposed drainage project to improve environmental and water conditions in Manchar and Hamal Lakes and water for the rehabilitation of existing drainage system, increasing agriculture production in an area of 114,1209 acres. The works include RBOD Indus Link, RBOD Extention upto Miro Khan Zero Point, Rehabilitation of Rato Dero, Miro Khan and Shahdadkot and Remodelling of Main Nara Valley Drain (MNVD) while Right Bank Outfall Drain (RBOD-III) covering the areas of Nasirabad, Jaffarabad Districts of Balochistan and Jacobabad, Kambar-Shahdadkot at Kambar Districts of Sindh has to provide the direly needed effluent disposal facilities for existing and proposed drainage projects. The work would increase crop production of agricultural land wasted due to ponds of water, increase in cropping intensity and environment condition will improve over gross commanded area of 7,09,536 acres.

To meet with the future requirements, WAPDA is working on studies of various projects; namely Akhori Dam (600 MW & 6.0 MAF live storage) - Munda Dam (740 MW & 0.67 MAF live storage) and Chashma Right Bank Canal (Lift Cum Gravity).

In addition to this, WAPDA has planned to construct 32 small medium/irrigation dams in the country to help the provinces in introducing the most modern high efficiency irrigation techniques. In the first phase, 12 small medium/irrigation dams will be constructed wherein MOU has been signed between Govt. of Pakistan and China Exim Bank to provide an assistance of \$ 700 million for this sector.

Process of tendering for construction of 12 small medium/irrigation size dams like Hingol Dam, Naulong Dam, Winder Dam, Garuk Dam, Pelar Dam, Nai Gaj Dam, Darwat Dam, Tank Zam, Bara Dam, Darban Zam Dam, Ghabir Dam, and Papin Dam is underway to store 2.9 MAF of water for irrigation development of 0.675 MA Land. While contracts for Winder Dam and Darwat Dam have been awarded, study on 20 medium irrigation dams in phase-II is underway. The feasibility study and detailed engineering design of Diamer Basha Dam have been completed and process of pre-qualification of contractors for construction of the dam has been initiated. The construction is expected to start in the year 2011. Besides, Multipurpose Kurram Tangi Dam will be constructed in the year 2011 as all the feasibility, design and other works have been completed.

WAPDA has signed four projects for seeking Carbon Credits, namely Dubair Khwar, Allai Khwar, Golen Gol and Jinnah Hydropower Projects respectively which are already under implementation since these projects are producing clean & environment friendly energy. These projects will be ranked first in the country to make efforts for reduction in Global warming, besides setting an example for others.

In addition to this, special studies/research has been initiated to check on Glacial Melting due to Global warming and future strategy to store/conserve the additional water likely to accrue from melting of Glacier, i.e. construction of large reservoir.

Thar Coal Reserves in Pakistan is one of the Reservoir the largest in the world. WAPDA has highlighted the importance of cheap power generation through coal and in this regard a study was initiated to provide water in Thar Coal area for meeting the developmental needs. WAPDA is also planning to introduce a pilot project on lining of main canals (Dadu, Rohri and Rice) under flowing condition using Comat

material of Germany is laying 5 KMs at Upper reach of Rohri Canal. Besides this, another initiative for treatment of RBOD, drainage effluent a treatment plant of 40 Cusec is also being procured and installed during 2011. it was unanimously agreed to make all out efforts for the pollution free - clean Manchar Lake and all options would be considered to make it practicable which includes

- installation of treatment plants both by Govt. of Sindh and (i) WAPDA respectively,
- (ii) fresh water supply to Manchar through ARALWAH by Govt. of Sindh.
- (iii) Completion of RBOD-II by GOS for the diversion of RBOD-III waters through RBOD-II to Arabian Sea.
- (iv) The issue of funding to treatment plants and importantly the 0&M cost after completion of project.

WAPDA through Ministry of Water and Power Government of Pakistan submitted a PC-I for Installation of Pilot Treatment Plant along RBOD System with tentative cost of Rs.3.891 billion to Ministry of Planning Division / Planning Commission for Consideration of Central Development Working Party (CDWP) and ECNEC to accord approval of the project and release of the money to start the Project works immediately.

WAPDA has actively participated in the Strategic Dialogue on Water with US Govt. wherein emphasis was focused on the introduction of Reform on Water Sector. Besides, USAID has provided special assistance for the rehabilitation of Tarbela Power House Unit 3-4 and construction of Gomal Zam & Satpara Dams, respectively. In addition, WAPDA has signed MOU with IWHR China and M/s Three Gorges China Company for the capacity building & training of WAPDA Staff.

WAPDA is working on the feasibility studies of several projects as mentioned above in the fields of hydropower and water sector, so that Govt. of Pakistan can have a convenient choice to pick up projects for implementation depending upon the requirement, finance viability and the time in which the project is required to be online. WAPDA is doing studies on the potential of storing water in underground shells during Floods/Hill Torrents. In addition to this, WAPDA has made tremendous achievements in Sports Sector by wining 137 Medals (Gold, Bronze and Silver) in National Games. Besides WAPDA has become the champion in Football, Culture & other sports.

WAPDA earnest endeavors are reflective of the commitment to support the national economy and poverty alleviation through improved Hydel-Thermal Mix of power generation, provision of electricity at affordable rates and above all perspective planning and timely execution of projects to meet water and power demands of growing population, agriculture and industry.

Muhammad Intiaz Tajwar)

Secretary WAPDA



FOREWORD

Public Relations Division presents the 52nd issue of Annual Report of the Pakistan Water and Power Development Authority (WAPDA).

This document has been compiled to fulfill the statutory requirements of WAPDA Act 1958.

WAPDA has made considerable progress on the work of various water and hydropower projects during the financial year 2009-10. This progress has profound impact on the socio-economic development of the country.

Authenticity and reliability of accounts has been the corner stone in documenting the annual performance of the Authority while pen-picturing its achievements.

Keeping in view, the enormous scope and range of the activities during the year under review, tables, charts and illustrations have been incorporated to make the report more comprehensible. An effort has been made to ensure that the report covers the entire gamut of activities and serves as a comprehensive document for the decision makers, researchers and public at large.

Your feed back to this humble effort is invaluable, and we look forward to your comments, suggestions and views to both point out any omissions on our part or improvement therein.

(Muhammad Abid Rana) Chief Editor

WAPDA in 2009 - 10 OVERVIEW

An overview of the performance of WAPDA including its operational and developmental activities during the year ending June 30, 2010 is as under:

Water Wing

The projects completed by Water Wing under Indus Basin Settlement Plan and those with WAPDA for operation and maintenance purpose kept functioning satisfactorily.

Irrigation releases from three reservoirs -Tarbela, Mangla and Chashma-registered constant trend. In aggregate, 14.683 million acre feet of water was released from these reservoirs corresponding to irrigation indents, in the fiscal year 2009-10.

The work initiated in the preceding years for water resource development gained momentum. Under "the Water Resources and Hydropower Development Programme – Vision 2025, civil work on Mangla Dam Raising Project has been completed during the year. The first phase of the Greater Thal Canal Project has been completed and handed over to Irrigation and Power Department, Government of Punjab for operation and maintenance in December 2009. Work on Gomal Zam Dam, Satpara Dam, Rainee Canal and Kachhi Canal continued, while construction work on two drainage projects, namely RB0D-1 and RB0D-III progressed satisfactorily. Mirani Dam and Sabakzai Dam, which achieved substantial completion in 2006 and 2007 respectively, are in operation.

Preparatory works to initiate construction of Diamer-Basha Dam, the largest-ever project in the history of Pakistan, also continued. In addition to above mentioned projects, WAPDA has planned to construct 32 small/medium dams in the country. In the first phase 12 small/medium dams will be constructed and Memorandum of Understanding (MoU) has been signed with the China Eximbank to provide an assistance of \$700 million for these projects. Darwat Dam Project has been awarded.

Special studies/research have been initiated on global warning system and to manage additional water, due to melting of glaciers.

Power Wing

Operation and maintenance work of the existing hydropower stations was carried out efficiently during the year 2009-10. WAPDA hydel power stations generated as many as 27,614 MKWH during the year under report.

The implementation work on five hydropower projects, including three high-head hydropower schemes, namely Khan Khwar, Duber Khwar and Allai Khwar, Jinnah Hydropower Project and Neelum-Jhelum Hydroelectric Power Project remained in progress. In addition, 4500-MW Diamer-Basha Dam and 106-MW Golen Gol Hydropower Project are ready for construction. WAPDA also carried out feasibility studies and detailed engineering designs of various hydropower projects with cumulative generation capacity of more than 25,000 MW including 1100-MW Kohala, 4320-MW Dasu, 7100-MW Bunji etc.

Besides planning and constructing new hydropower projects, rehabilitation of Jabban Hydropower Station has also been undertaken. WAPDA is also planning to take up rehabilitation of Warsak, Mangla, Renala and Tarbela power houses for their reliable operation.

SECTOR	SUBJECT	2009 - 2010		
Water	Public Sector DevelopmentProgramme (PSDP)	11,437.850		
Power	PSDP + ADP + NJHEP	54,817.000		
	35,167 + 3,650 + 16,000			
	TOTAL	66,254.850		
POWER	Installed Generating Capacity (MW)			
	Hydel (Including 30 MW from private sector)	6,444		
	Total (WAPDA)	6,444		
	Generation (MKWH) WAPDA			
	Hydel	27,614		
WATER	Water Releases from Reservoirs			
	(Million Acre Feet)			
	Tarbela	7.801		
	Mangla	5.22		
	Chashma	1.662		
	Total			
	Completed Scarps/Drainage Project (No)	70		
	Area covered (Million Acres)	18.3		

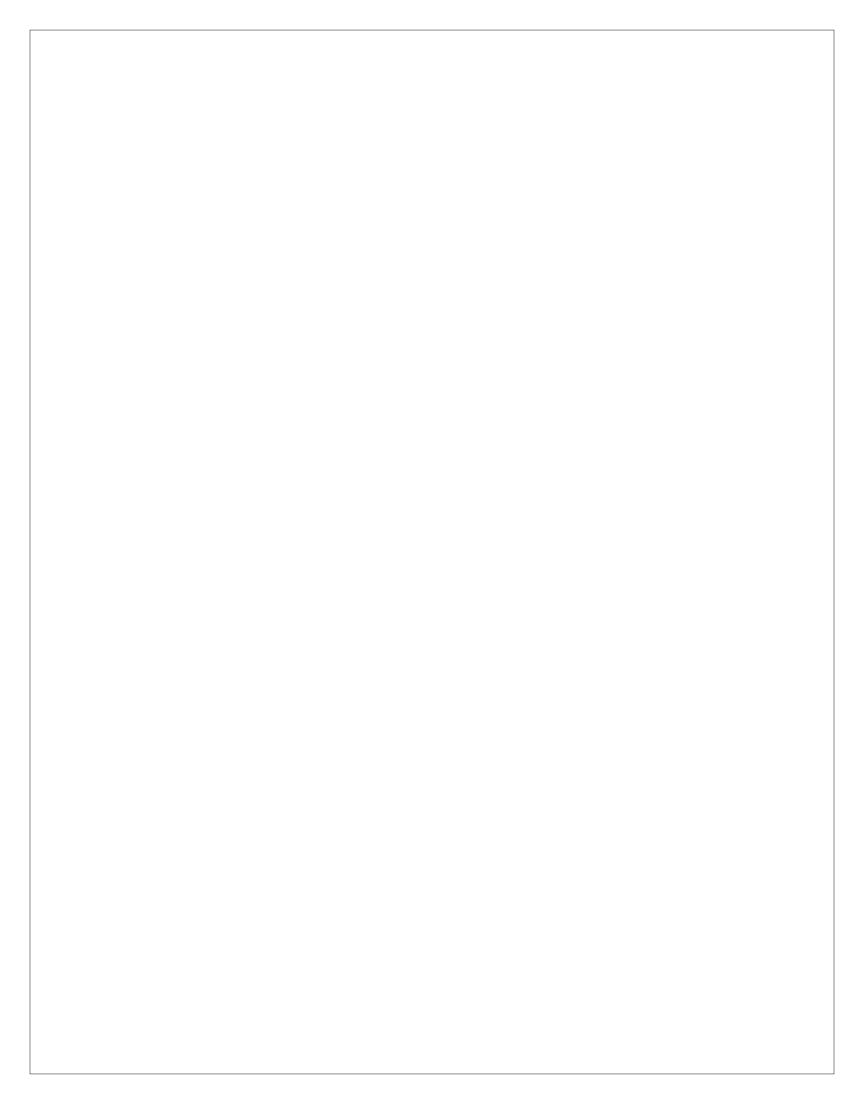
PERFORMANCE AT A GLANCE 2009 - 10



THE AUTHORITY



WAPDA Charter Human Resources Authority Fund



AUTHORITY

WAPDA Charter

The Pakistan Water and Power Development Authority (WAPDA) was established through an act of parliament in February 1958 for integrated and rapid development and maintenance of water and power resources of the Country. This includes controlling soil salinity and water logging to rehabilitate the affected land in order to strengthen the predominantly agricultural economy of the country. entities to operate in different zones. These are National Transmission and Dispatch Company (NTDC), four thermal power generation companies (GENCOs) and eight distribution companies (DISCOs). The present status of these companies is of corporate public limited entities under the Umbrella of PEPCO, ultimately to go privatized as planned. The Residual Power Wing is therefore now responsible for major hydroelectric power projects and schemes in operation and to come up along such up-coming private sector projects in the private sector under the reviewed "Energy Policy 2000".

As per the charter, amended in March 1959 to transfer the

existing electricity departments from the federating units to it, WAPDA has been assigned the duties of investigation, planning and execution of projects and schemes for:

- Generation, Transmission and distribution of power,
- Irrigation, water supply and drainage,
- Prevention of water logging and reclamation of saline land,
- Flood control and
- Inland navigation.

Under the later on developments, vis-à-vis the "Energy Policy 1994", setting up of thermal power generation projects has been shifted to the private sector. Similarly, as a result of restructuring of the Power Wing in the recent years, the utility part has been corporatised into independent companies. This shift from convergence to divergence has given birth to 13

Human Resources

The Authority comprises of a Chairman and three members, one each heading water, power and finance wing.

WAPDA House, Lahore

The Members oversee the affairs of their respective wings through General Managers for the streamlined operations in their respective areas.

During past 52 years of its operations, WAPDA has developed its human resource as a reservoir of knowledge, competence and expertise through training and experience gained at the accomplished projects and remaining associated with diversified development activities. Presently, the human resource number is around 1,45,000. These include professionals, specialists, scientists, economists, administrators, accountants and skilled workers for planning, building, managing and operating various projects. Power wing being the developer and custodian of the largest and most significant utility service in the country employs over eighty nine per cent of the human resource followed by water wing and common services.

Water Wing

Member (Water) controls the water wing which is divided into north, central and south zones. These zones cover, in general, Khyber Pakhtunkhwa (KPK), Punjab, Sindh and Balochistan respectively. The activity of water wing involves execution of surface and sub-surface water development and drainage-Salinity Control and Reclamation Projects (SCARPs). Chief Engineers and Project Directors at various levels are responsible for effective and timely implementation of Water Wing Projects.

Power Wing

Member (Power) controls the Power Wing, through General Managers, Director Generals, Chief Engineers in the field of planning, finance, grid system operation, grid system construction, thermal operation, hydro-electric power, coordination and WAPDA Power Privatization Organization.

WAPDA has an elaborate setup headed by a General Manager for training of its officers and officials at different levels covering all the wings of the organization.

Finance

Member (Finance) is responsible for the functioning of the departments of Finance, Internal Audit and Budget and Accounts headed by Chief Auditor (Internal Audit) and Director General Finance (B&C). He also exercises administrative control over General Manager (Central Contracts Cell), Director General (Taxes), Secretary WAPDA and Director Public Relations.

Managing Director (Admn) is vested with the responsibility for overall administration and services. He has two Director Generals to assist him, one each for Services and General Administration, and Medical Services. General Manager Monitoring and Surveillance has a Director General and a Chief Engineer (Monitoring) with him. He also handles matters relating to Wafaqi Mohtasib's office.

Secretary WAPDA in addition to looking after day-to-day affairs of the Secretariat, prepares minutes of the Authority's meetings, maintains records of its decisions and issues its directives and coordinates among the three Wings besides monitoring and implementation of Authority's decisions.

Authority Fund

The Authority Fund consists of the following:

- Loans and grants obtained from the federal and provincial governments
- Sale proceeds of WAPDA Bonds
- Loans obtained by the Authority with general sanctions of the government
- Foreign aids and loans obtained from he IBRD, ADB and other international loan giving agencies on such terms and conditions as may be approved by the government
- Sale of power
- All other sums received by the Authority

To achieve the goal of financial self-sufficiency, WAPDA is also required to finance part of its power development programme through funds raised from revenue surplus of the Electricity Operation Branch. The extent to which funds are raised through self-sufficiency is determined by the Federal Government.

Since FY 1974-75, the Federal Government is meeting the budgetary requirements of accelerated programme of SCARP and, from FY 1976-77, for smooth execution of the projects, the Government of Pakistan also assumed the responsibility of funding Surface Water Projects.

The annual allocation for Water Development Schemes comprising Surface Water Development Projects like Chashma Right Bank Canal Project and Pat Feeder Canal Project, Drainage and Reclamation projects as well as National Drainage Programme are earmarked in Public Sector Development Programme (PSDP) as interest bearing loans and advances from the Federal Government. The funds are made available to WAPDA as grant for financing General Investigation Schemes to provide research based future planning for exploring the best use of water and fight against twin menace of water logging and salinity.

The Ministry of Water and Power provides funds from its current expenditure budget, for continuous and recurring nature research schemes such as Mona Reclamation and Experimental Project, Lower Indus Management (LIM), Hydrology & Research (H & R) and Perspective Planning Organisation (PPO), while operation and maintenance of Khanpur and Hub Dam projects is carried out through interest free loans of Finance Division.

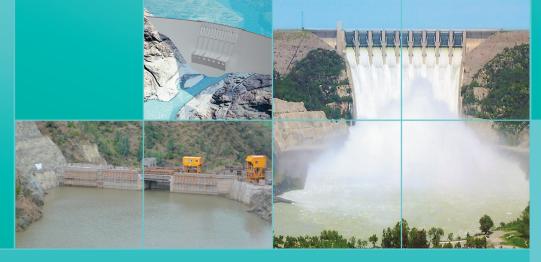
Funds for other schemes belonging to provinces are provided by the respective governments to WAPDA which acts as the executing agency on their behalf. Under an arrangement, approved by the Federal Government, Water Development Projects completed by WAPDA, after initial run for one year, are transferred to respective provincial governments for their operation and maintenance. Schemes under National Drainage Program (NDP) are being executed by respective Provincial Irrigation and Drainage Authority (PIDA) except inter provincial schemes or schemes under participating agreement with PIDA by WAPDA. These schemes will also be maintained by the respective provinces through financing out of their own kitty. The federal government provides Cash Development Loans (CDL) for drainage projects while grant funds through foreign loans and cash development loans in rupees. However, with effect from July 1, 1988, WAPDA's Development Programme are earmarked for dams (storages) canals and engineering studies through Public Sector Development Program (PSDP). The debt servicing liability in respect of power schemes is that of WAPDA which is also responsible for discharging its debt liability in respect of expenditure incurred on electrification of SCARP tubewells installed by it.

In FY 1987-88, the federal government permitted WAPDA to float WAPDA Bonds for Public subscription. Profit on all issues is being paid to the bond holders regularly.

Further, for various hydro electric power projects in Khyber Pakhtunkhwa (KPK), i.e. Khan Khwar (72 MW), Allai Khwar (121 MW) and Duber Khwar (130 MW); WAPDA required considerable finances. Since WAPDA's First Sukuk Issue proved to be a great success, it was decided that another sum of Rs.8.00 Billion be raised through Sukuk. Therefore a company named "WAPDA Second Sukuk Company Limited" was established as WAPDA's wholly owned subsidiary to act as Special Purpose Vehicle (SVP). The company was incorporated on 4th June 2007. This will provide comfort for raising funds for the completion/development of Khwar Hydro Electric Projects of WAPDA.



FINANCE & ADMINISTRATION



MANAAAAA

Public Sector Development Programme Financial Review Administrative Support Balance Sheet

PUBLIC SECTOR DEVELOPMENT PROGRAMME 2009-10

The final allocation for WAPDA's Water Sector Projects/Schemes financed by the Government of Pakistan through its Public Sector Development Programme 2009-10 stands Rs 11,437.850 million including Foreign Assistance of Rs 42.350 million as tabulated below:-

Expenditure & Physical Achievements During 2009-10

The expenditure on WAPDA Water Sector Projects/Schemes has finally been booked at Rs.16,503.160 million inclusive of disbursement from donor–ADB amounting to Rs. 146.856 million for CRBC (Additional Works). Additional resources were created to carry out envisaged Work Plan 2009-10 to maximum possible extent. The break up of expenditure and the physical achievements are as follows:-



Khan Khawar Hydropower Project

Description	•	riginal Allocation Excesses/Surrenders 2009-10 (Cut/Short Releasaes) 200			Final Allocation 10 2009-10				
	Total	Foreign Assistance	Total		Total		Foreign Assistance	Total	Foreign Assistance
Drainage Projects	2,500.00		-)	1,617.00		883.00			
Dams (Storages)	15,043.74		-)	7,443.24		7,600.50			
Canals (Irrigation)	7,220.00	70.00	-)	5,317.65		1,902.35	42.35		
Environmental Works	65.00				45.00	20.00			
General Investigation Schemes	170.00		-)	138	.00	32.00			
Construction of Small/Medium Dams in Balochistan, Sindh, KPK & Punjab	2,500.00		-)	1,500.00		1,000.00			
Grand Total	27,498.74	70.00	-)	16,060.89		11,437.85	42.35		

Description	Expenditure (Rs. in Million)	n) Physical Achievements		
Description	Total	Foreign Assistance	Earth Works (Mcft)	Structures (Nos.)	
Drainage Projects - RBOD-I - RBOD-III - Drainage System, Banizarabad	1,268.752 702.037 494.702 72.013		9,562.814 3.700 3.305 9,555.809		14 14
			Description	Units	Achievement During 2009-10
Dams:	10,899.799		Gomal Zam Dam Civil Works (EPC Contract) a) Earth Work b) Concrete c) Lining	Mcum Mcum Mcum	0.447 0.262 0.074
			Sabakzai Dam a) Earth Work b) Concrete Work c) Stone Pitching	Cum Cum Cum	1195 3810 7370
			Project has been completed on 30.06.09 Irrigation & Power Department, Governr		
			Raising of Mangla Dam Consultancy	Man Months	956
			Compensation Land Acquisition Built up property (Houses)	Acres Nos.	584 200
			Civil Work Main Work Earth Work Concrete	M.Cu.Y M.Cu.Y	3 0.040
			Power Houses Bypass Road & Bridge over Bong Canal Earth Work Concrete	Cu.m Cu.m	7,377 200
			Dhangali Bridge Earth Work Concrete	Cu.m Cu.m	4,500 5,040
			Infrastructure Development & Public Buildings in New City and four Towns Area	Acres	Infrastructure
			Buildings	Nos.	Development works in Progress
			Access Dykes	Km	About 2.00 Km length
			Construciton of Grid Station & Transmission Lines	Nos.	2
			Mics. Works etc.	Continuou	s Activity

	Expenditure (Rs. in Million)) Physical Achievements		
Description	Total	Foreign Assistance			Achievement During 2009-10
			Satpara Dam a) Earth Work b) Concrete c) Reber d) Penstock/Steel Liner e) Rip Rap	Mcft Cft Ton Ton Cft	12.285 186,156 114.58 - 1,139,283
Canals	4,170.240	146.856	Greater Thal Canal a) Earth Work b) Lining c) Structures d) Stone Pitching e) Land Acquisition	Mcft Mcft Nos. Mcft Acres	 9,400 (Under process)
			Kachhi Canal a) Earth Work b) Lining c) Structures d) Stone Pitching e) Land Acquisition	Mcft Mcft Nos. Mcft Acres	94.726 6.919 33 4,556.62 127
			Rainee Canal a) Earth Work b) Concrete Lining c) Concrete d) Piling e) Road	Mcft %Cft %Cft Rft Sft	87.967 30,078 3,548 3,560 1,149.000
Environmental Works	20.716		Mangla Watershed Management Project a) Survey & Planning b) Engineering Structures c) Improvement of cultivated land d) Extension Services (Springs/Ponds developed)	Sq miles Nos. Acres Nos.	60 04 10 02
General Investigation Schemes	143.653		Research activities continued at IWASRI, MONA & LIM Research Organizations besides Land & Water Monitoring/ Evaluation of Indus Plains by SMO. Further, work on Master Planning Study for Integrated Development of Swat, Chitral & Kabul rivers was also completed.		

POWER WING

Hydroelectric Development Projects

In order to meet the ever growing electric power demand of the nation, to control loadshedding, to provide quality customer services, to ensure safe, continuous electric power supply for industry/business and for maximum utilization of hydroelectric potentials of the country, Finance Division, Government of Pakistan had approved an amount of Rs.54,817.00 million including Foreign Loan of Rs.7,340.00 million for the PSDP 2009-10 (Power Wing). Out of above allocation a sum of Rs.3,605.00 million has been approved under ADP (Financing by Government of Pakistan).

Hydel Generation

An amount of Rs.51,005.00 million was earmarked for the construction of following ongoing major development projects:

- i. Construction of Diamer Basha Dam Project Lot 1-5 (4500 MW) including Land
- ii. Golan Gol Hydro Power Project
- iii. Khan Khwar Hydro Power Project
- iv. Allai Khwar Hydro Power Project

- v. Dubair Khwar Hydro Power Project
- vi. Jinnah Hydro Power Project
- vii. Neelum Jhelum Hydro Power Project
- viii. Rehabilitation of Jabban

The funds amounting to Rs.1,205.00 million were also allocated for the feasibility studies of the following some vital projects:

- i. Bunji Hydro Power Project
- ii. Dasu Hydro Power Project
- iii. Lawi Hydro Power Project
- iv. Keyal Khwar Hydro Power Project
- v. Basho Hydro Power Project
- vi. Chore Nullah Hydro Power Project
- vii. Spat Gah Hydro Power Project
- viii. Harpo Hydro Power Project
- ix. Phandar Hydro Power Project
- x. Kohala Hydro Power Project

Against the above allocation, the utilization position of WAPDA Power Wing Hydroelectric Development Projects during the year 2009-10 is as under:

		Rs. in Million Ex	cess (-) Saving (+)
SECTOR	LOCAL	FOREIGN	TOTAL
A) Generation (Hydel)			
PSDP Allocaton	29,970.000	5,242.000	35,212.000
Expenditure	4,992.300	2,131.600	7,123.900
Variation (Excess)/Less	24,977.700	3,110.400	28,088.100
B) Neelum Jhelum Hydro Power Project	13,902.000	2,098.000	16,000.000
Expenditure	8,041.000		8,041.000
Variation (Excess)/Less	5,861.000	2,098.000	7,959.000
Total (A + B)			-
PSDP Allocation	43,872.000	7,340.000	51,212.000
Expenditure	13,033.300	2,131.600	15,164.900
Variation (Excess)/Less	30,838.700	5,208.400	36,047.100
C) ADP (Financing By GoP)			
ADP Allocation	3,605.000		3,605.000
Expenditure	416.200		416.200
Variation (Excess)/Less	3,188.800		3,188.800
Grand Total $(A + B + C)$			
PSDP + ADP Allocation	47,477.000	7,340.000	54,817.000
Expenditure	13,449.500	2,131.600	15,581.100
Variation (Excess)/Less	34,027.500	5,208.400	39,235.900

FINANCIAL REVIEW

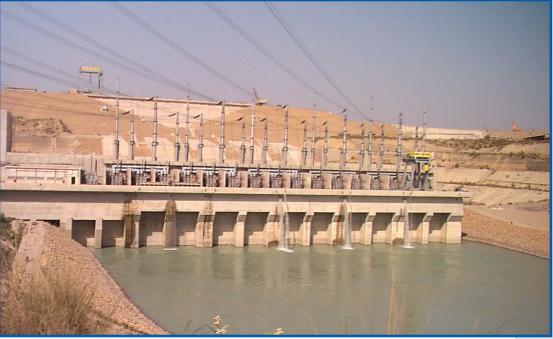
WAPDA Power Wing (Hydroelectric) is operating under the generation license granted by the power regulator 'NEPRA' for operation maintenance and development of hydel power resources in Pakistan.

Capacity

The installed capacity of WAPDA Power Wing (Hydroelectric) which has made available during the year is 6,444 MW. Major hydro plants include Tarbela (3,478 MW), Ghazi Barotha (1,450 MW), Mangla (1,000MW) and Warsak (243 MW) which

Sales revenue during the period works out to Rs. 29,092 million consisting variable charge of Rs. 8,526 million and fixed charge of Rs. 20,566 million as per NEPRA approved tariff. Sales revenue has increased by Rs. 79 million from the previous year's figure of Rs. 29,013 million due to increase in net electrical output.

Operating and Admin Cost stood at Rs. 15,864 million (Cost of Electricity Rs. 9,604 & Operating Expenses Rs. 6,260 million), which has increased by 5,654 million over the last



generate 28,550 MKWH budgeted electricity.

Operational Performance

The Net Electrical Output (NEO) for the year stood at 27,614 MKWH, which is 251 MKWH more than the generation of last year. This increase in energy is due to increased water indents during the year 2009-10. Particularly from Ghazi Barotha Power stations

Financial Performance

Net profit of WAPDA for the year under review stood at Rs. 11,299 million, which is less than previous year figure of Rs. 15,794 million this drastic decline in profit is due to adjustment of Rs. 5,872 million Bad debts/ Doubtful debts against CPPA. year figure of Rs. 10,210 million.

Brief description of the Operating and Admin cost is as follows:

Employees cost during the period was Rs. 2,380 million, consisting of pay and allowances Rs. 1,467 million and employees benefits Rs. 889 million which is Rs. 244 million higher than last year due to increase in Pay & Allowances announced by Government of Pakistan.

Depreciation charge for the period worked out to Rs. 3,930 million, for the fixed assets valuing Rs. 152,171 million (gross value).

Provision of Bad Debts/Doubtful Debts of Rs. 5,938 million has been made in current year which has a prominent effect on increase of Admin Cost.

Ghazi Barotha Power House

WAPDA is paying Rs. 6,000 million annually, on account of net hydel profit, to Government of Khyber Pakhtoon Khwa as adhoc payment. Water usage Charges amounting to Rs. 696 million has accrued to Government of Azad Jammu & Kashmir, at the rate of Ps. 15 per unit of electricity generated by Mangla Power Station, as against Rs. 696 million paid last year. Due to equivalent generation in both year by Mangla Power Station.

Cash Flow

During the period under report, CPPA has made payment of Rs. 18,948 million against billing of Rs. 29,324 million inclusive of GST.

Funds received from CPPA during the year were mainly applied towards payments of net hydel profit of Government of Khyber Pakhtoon Khwa and WUC to Government of Azad Jammu & Kashmir, payment of markup on running finance/short term loan on WAPDA on behalf of PEPCO entities and operating cost.

Capital Expenditure budget provision of Rs. 38,817 million was made for FY 2009-10 against which release of funds to the development projects has been made for Rs.7,760 million which includes foreign loans of Rs. 2,351 million for financing of Khan Khwar, Allai Khwar and Dubair Khwar and CDL Rs. 1,373 million from other project. Moreover, Capital Expenditure of Rs. 10,352 million has been transferred to Jinnah Hydro Power Project incurred through China Exim Bank Supplier Credit (Direct Foreign Ioan). As such Capital Expenditures of Rs. 18,480 million has been incurred during the year for Water Resources and Hydro Power Development Vision 2025 Program envisioned by the Federal Government.

Assets

Increase in Capital Work in Progress of Rs.18,480 million is mainly because of capital expenditure on development projects

in progress i.e. Khan Khwar, Allai Khwar, Dubber Khwar and Jinnah hydropower.

Long term investment of Rs.184,298 million mainly comprise investment (deposit for shares) in ex-WAPDA Companies, comprising nine DISCOs, four GENCOs and NTDC. In addition to long term investment WAPDA has other investment in associates and subsidiaries of amount Rs.4,053 million and Rs.1,542 million respectively. This amount depicts the net worth of the formations as a result of the transfer of assets and liabilities from WAPDA to the corporatized entities. As per BTA, corporatized entities will issue shares to WAPDA against this investment and accordingly WAPDA will issue shares in the name of President of Pakistan, reducing the investment of GoP in Residual WAPDA Power Wing.

No significant change in the stock has been witnessed during the period under report.

Trade receivable of Rs.116,740 million from NTDC/CPP, includes receivable on account of hydel invoices of Rs. 45,484 million and adjustment for KAPCO loan pronote amounting to Rs. 51,083 million and dividend of Rs. 20,173.

Capital & Liabilities

Long term loans amounting to Rs. 56,508 million were outstanding as on June 30, 2010. Current portion of long term loan is Rs. 6,122 million reported separately comprising of Rs. 5,988 million of GoP Foreign Relent Loan and Rs. 134 million of Cash Development Loan.

Short term liabilities Rs.47,236 million includes pending Debt Service Liability (DSL) towards GoP of Rs. 43,545 million which has increased Rs. 11,433 million over the previous year balance of Rs. 32,112 million due to non payment of DSL for FY 2009-10.

ADMINISTRATIVE SUPPORT

INTERNAL AUDIT

Internal Audit as a part of Internal Control System reviews the Financial and Operation accounts of formations of WAPDA. This also conducts the physical verification of stock held at various stores, checking of payments made for Consultants services engaged on development projects and special audits as per directives of the Authority.

Audit Report for the years	2005-06
Audit Report for the years	2008-09
Audit Report for the years	2009-10

The meetings of Public Accounts Committee (PAC) and Departmental Accounts Committee (DAC) have also been held for discussion on the audit reports for the years 2005-06, 2008-09 and DAC meetings on draft audit reports 2009-10 during the above mentioned period 2009-10



As a result of review of payments made to consultants and

follow up of audits previously conducted a sum of Rs.10.78 and Euro: 17,999 has been recovered.

Internal Audit Division also assists the formations in finalizing replies to the audit reports of Auditor General of Pakistan for final examination by the Public Accounts Committee. During the year 2009-10, comments of the Authority on the following Audit Reports/Memorandum for Departmental Accounts Committee (MFDAC) were prepared and sent to the Ministry of Water & Power Islamabad for submission to National Assembly Secretariat, Auditor General of Pakistan and Director General Audit WAPDA for holding meetings of Public Accounts Committee (PAC) and Departmental Accounts Committee (DAC) as under:

Central Contracts Cell (CCC)

In order to implement projects through its own experienced Engineers with quality home office support, the Authority decided to create a department, which should provide the contractual and related services to the field formations involved in the Project implementation. Accordingly, Central Contracts Cell (CCC) was created by the Authority in May 1974. Besides formulating guidelines and issuing instructions to streamline the contact management functions within WAPDA on behalf of the Authority, CCC is providing specialized assistance on preparation/vetting of tender documents for construction, supply and other turn key contracts, evaluation of tenders, review of contractor's claims, variation orders etc. in respect of local/international contracts financed by International Funding Agencies or WAPDA/Pakistan's own resources. The Cell has rendered valuable services to WAPDA over a period of more than 36 years and selfless services rendered by all the staff of CCC has justified its existence.

The CCC is a common services department of the Authority, headed by a General Manager who is working in the association of one CE (Civil) and six Directors, drawn from Water and Finance Wings, each of whom is a specialist in his field. To provide services to PEPCO, a unit comprising of Chief Engineer (Power) PEPCO and two Directors with specialist expertise in distribution and T&G departments are also associated with the General Manager (CCC). The Cell has now grown into a self-sustaining institution, which is working as an independent advisory body to the Authority and its duties encompass all activities right from tender opening to implementation and ultimate completion of a project. Owing to Vision-2025 priority projects, role of CCC has attained more importance. An expert having sufficient exposures and background in contract administration has also been inducted in CCC as Advisor to handle extra work. Another important aspect dealt with by CCC is processing of cases of Registration of 'A' Class Civil Works contractors with WAPDA and their renewals.

During FY 2009-10, the CCC evaluated 67 cases of tender evaluation, reviewed 64 tender documents, processed enlistment/renewal of 10 contractors and dealt with 15 consultancy services cases. Besides, the cell participated in 34 tender opening, processed claims of EOT, TOC, Vos, advised on 71 contract cases to the field formations and handled 107 miscellaneous cases.

TRAINING

The performance and efficiency of an organization depends on the availability of trained manpower. Due importance is being given to this element in WAPDA and engineers, officers and staff are systematically trained. A number of training organizations have been established in WAPDA to meet present and future managerial and technical needs of officers and staff. At present, following institutions are functioning at various places:

- Wapda Staff College, Islamabad
- Wapda Engineering Academy, Faisalabad
- Regional Training Centres (RTCs); one each in Distribution Companies (Total 8)
- Training Centres at Gatti (Faisalabad) and Kot Lakhpat Lahore under Technical Services Group (NTDC).

- Hydel Training Centre Mangla
- Thermal Training Centre Guddu

During the year 2009-10, the existing training centres imparted training to large group i.e. 29,862 WAPDA personnel of which 1192 were officers between Grade 17 to 20 and the rest comprised staff of different grades.

Wapda Staff College Islamabad

WAPDA Staff College Islamabad is imparting training to the managers belonging to WAPDA/PEPCO to improve their managerial skills, groom their personalities as managers, broaden their knowledge base and perception. Besides the mandatory management courses i.e. the (i) Junior Management Course (ii) Middle Management Course and (iii) Senior Management Courses, various other management related courses are conducted to enable the managers of the Authority to control the complexed situational factors they are facing while performing their duties in different fields and to acquaint them with the ever-changing economical, operational and technological scenario/needs. Besides the management and management related training, this college has provided a platform to the officers of the organization to gather all the constituents of the Department, share their views and experience for the betterment of the organization.

The college has hosted various seminars and symposia on changed management and introducing the corporate culture. On various occasions, Chairman WAPDA, Members of the Authority and other high-ranking officers of the Authority as well as Government attended these functions in inaugural and concluding sessions.

During FY 2009-10, WAPDA Staff College has conducted 24 courses in which 22 were of long duration (6 to 11 weeks) and the remaining were 3 to 6 weeks duration. In all the 24 courses, 642 officers and 50 supervisory staff (BPS-16) have been provided training.

Latest management topics have been added into syllabus of various courses along with academic activities like random ability test (RAT), thought of the day, case studies, lectures/ book reviews etc.

Wapda Engineering Academy Faisalabad

WAPDA Engineering Academy, Faisalabad is imparting technical

training to electrical, mechanical, civil, electronics and computer engineers, technicians, supervisors, sub station operators and foremen etc. of WAPDA, Govt./Semi Government agencies, industries and private sector. Presently, 49 technical courses of different durations are being conducted. The salient disciplines are generation, transmission, distribution which encompass grid system operation, instrumentation and control, programmable logic controllers (PLC), mechanical electrical skills, information technology, internet and construction of dams, barrages, irrigation channels, vertical drainage systems/tubewells, open drainage, miscellaneous civil structures and their maintenance. The academy being unique of its kind in the country is playing vital role in boosting up the technical know-how of engineers, supervisory staff and technicians in WAPDA/PEPCO, as well as in private sector.

During the year under report, 49 courses were conducted, 779 personnel of different cadres were trained in this academy and they are rendering outstanding services to their parent departments which renewed vigor and confidence based on professional competence achieved through training at this academy.

The training is being imparted through the usage of the highly sophisticated equipments installed in mechanical, electrical and pressure gauge workshops, electrical circuit and electrical instrument laboratory, cable jointing and testing laboratory, high voltage laboratory, electrical machine laboratory, transformer laboratory, switch gear laboratory, meter testing laboratory, instrumentation and control (I&C) laboratory, computer laboratory, welding shop, analogue simulator, steam power plant simulator, gas turbine simulator and grid network simulator whereas the water wing training is being imparted through soil mechanical and concrete laboratories.

During the period under report, WAPDA Engineering Academy, Faisalabad has trained 779 WAPDA employees, which includes 377 officers (BPS 17- 20) and 341 staff (BPS 5-16). In addition to this, the academy has also trained 27 UET students and 34 persons from Government/Semi Government/Private/Public sector. The Academy possesses the following unique facilities:

- Air-conditioned classrooms equipped with modern Audio Visual facilities.
- Hostels comprising 152 single and 52 double rooms.
- Ten well furnished rest house rooms including two VIP Suits.

- One library to imbue the habit of reading in the trainees.
- An IT (Information Technology) Laboratory with broadband internet-connectivity.

Regional Training Centres (RTCs)

Eight regional training centres (RTCs) i.e one each in distribution companies are functioning where following courses are conducted for the employees of respective DISCO:

LS Technical (T-500), LM (T-300), ALM (T-100), ALM Special (S-200), ALM (S-100), LS Commercial (C-500), General Clerks (C-300), Meter Readers (C-200), Bill Distributors (C-100), Commercial Clerk (C-370), LS Management (M-300), Tariff Training, Senior Clerks Training Course, One Window Operation Training and Special Safety Course.

In all RTCs, 157 officers and 27,810 officials were trained during the year 2009-10.

Hydel Training Centre Mangla

To meet the training requirements of employees of hydel organization, only one training centre at Mangla is functioning at present where (16) junior engineers and 139 officials have been imparted training during the year under report. In addition to above, this centre has also trained 52 students of different universities have completed their internship from Hydel Training Centre Mangla.

In the year 2009-10, Deparatmental Promotion Training has been conducted in which 56 participants of BPS 5 to 16 appeared and passesd the Department Promotion Training.

Thermal Training Centre Guddu

Thermal Training Centre Guddu imparts training to the staff of steam power stations as well as the staff of chemical treatment in water and thermal power stations.

During the period under report, 11 courses were conducted and 161 staff were trained. Audio/visual training is also being imparted to the trainees through Video Cassettes pertaining to Boiler, Turbine and Generator operation/maintenance as a regular feature.

ADMN DIVISION

During the year 2009-10, the Directorates working under MD (A) maintained sustained improvement of their performance

as organizational mission. Brief achievements of ADMN Division are as under:-

MEDICAL SERVICES

WAPDA Hospitals / Dispensaries

WAPDA Medical Services is providing health care facilities to its employees through 12 regional groups bifurcated into 12 hospitals, 12 fortified dispensaries and 18 basic dispensaries spread all over the country. These units are functioning under the technical/financial control of Director General Medical Services for achieving the assigned mission of affording essential and effective medical care to WAPDA/PEPCO employees, their dependents and widows.

Establishment of 50-Bedded Hospitals

Presently, 50 beded hospitals are functioning at Peshawar, Tarbela, Faisalabad, Gujranwala, Multan and Guddu and buildings of WAPDA hospitals Rawalpindi, Hyderabad and Quetta are near to completion.

Up-gradation of 20-Beded WAPDA Hospital

Case for up-gradation of WAPDA Fortified Dispensary into a 20 Beded Hospital is under consideration.

Establishment of Basic Dispensaries

Two basic dispensaries at Bahawalpur and Bahawalnagar have become functional.

Appointment/Posting

WAPDA Medical Services has always emphasized to engage professionally sound and skilled human resource for the efficient and smooth functioning of the Medical Units. Sufficient number of doctors are always required to cater the patients spread all across the country by providing comprehensive medical cover. Durilng the year 2009-10, 13 specialists, 62 GDMOs and 4 dental Surgeons have been appointed in WAPDA Medical Services.

Training of Doctors

Management courses have been specifically designed to equip the participants with advance knowledge and skill in the field of management. Such courses enable the participants to implement the acquired skills towards running the department on professional lines and achieving organizational goals as well. During 2009-10 Specialists/GDMOs have successfully completed following Management Courses meant for their promotion to next grade:

a. Middle Management Course 03

b. Jr. Management Course 01

Continued Medical Educational Programme

The field of medicine has witnessed rapid technological advancements in the recent past. Therefore to update the knowledge of WAPDA doctors and keep them abreast with the latest skills and techniques, clinical sessions are being arranged at WAPDA Teaching Hospital Complex, Lahore on weekly basis in which specialist doctors are delivering lectures on various medical subjects.

Establishment of Burn Unit

A modern medicated technology 6-Bedded Burn Unit at WAPDA Teaching Hospital Complex has been completed and will benefit the patients suffering from serious and life threatening burn injuries. It will comprise the following services:

- Emergency
- Operation Theatre
- Intensive Care Unit
- Diagnostic Units
- Shower Room
- Sterilization Room
- Rescue Unit
- Dialysis Unit

Services Provided at Welfare Centers

The Family Planning Welfare Centre established in WAPDA Hospial Complex Lahore, is registered as RHS-B Health Centre, Family Welfare Planning Department, Government of Punjab. In this center free medical consultation, supply of medicines relating to Family Planning facilities, Vasectomy Tubes, Legation Operation facilities are also available. The Multan, Peshawar, Hyderabad and Gujranwala intended RHS-B centers are in process of registration. In the other WAPDA Medical Units, the establishment of Family Planning Welfare Centre is also working. These are not only serving the WAPDA employees but the common people are also getting acquaintance and enjoying the relevant benefits.

WAPDA Teaching Hospital Complex, Lahore

• WAPDA Teaching Hospital Complex, Lahore is the central largest Health Care Unit (250 bedded/24 Officers Rooms)

which strives to improve the Health Status of the WAPDA employees and their families through provision of state of the art, extensive and comprehensive medical facilities.

• This hospital has a daily OPD attendance of more than 1400 patients. Specialized cover is available in most of the clinical disciplines through a specialist OPD floor, which has all the hospitality facilities required for convenience and satisfaction of the patients. quality assurance WAPDA Hospital Laboratory is being monitored by RIQAS England. The quality of our testing accuracy is more than 95%. The RIQAS has given a certificate in this regard.

Eye Department

Two new Machines Argon Laser and YAG Laser and B S cane are functioning for providing Opthalmological care to the patients. A new Eye OPD has also been established with modern equipments and facilities for patients.



• Computerized reception is functioning. In Computer reception daily attendance of the staff is being carried out. Computerized laboratory test reports are also provided to the patients through reception.

• Hospital boasts of Hi-Tech diagnostic and therapeutic components including Echocardiogram, Exercise Tolerance Test, Cryoscopy (Skin treatment), G.I. Endoscopy, Laproscopic Surgery and theatre. Two new operation theatres are being added at 2nd Floor in addition to the three existing at 3rd Floor.

The following departments are functioning in the hospital:-

Pathological Department.

Pathological laboratory is functioning round the clock. For

X-Ray Department

New Automatic Film Processor X-Ray Machine in X-Ray department is functioning. Three Radiologists including a Female Radiologist have been posted to facilitate patients for quick X-Rays and Doppler Study. A new colour Doppler has been added to the existing two Ultrasound Machines.

Physiotherapy Department

Physiotherapy Department has been shifted at new place near to Emergency Department and added extra equipments for convenience of patients.

One Doctor per Floor

One doctor per floor in evening and night shifts has been deputed to look after the admitted patients.

Library

Library has been established in the hospital which is also a pre-requisite for its recognition by PMDC. Adequate books relating to all specialities and various other important topics, Medical Magazines and Journals are available. Two monthly magazines, Euro Time and England Journal of Medicines are also available. 33 books have been added during 2009-10.

Blood Bank

Blood bank is functioning round the clock and providing safe and hygienic blood to the needy patients. The screening include Hepatitis B,C & AIDS etc.

Recognition by PMDC for House Job

The PMDC has recognized WAPDA Hospital Complex, Lahore for the purpose of house jobs in the following categories:

Medicine	07 (Seven)
Surgery	06 (Six)
Eye	02 (Two)

Affiliation with Central Park Medical College Lahore

An agreement with CPMC has been made. CPMC will provide latest sophisticated dialysis, X-Ray, Ultrasound and other machines. The status of hospital has been upgraded as Teaching Hospital affiliated with CPMC. Qualified faculty has been awarded status of Assitant Professor. The first batch of CPMC shall report for clinical training/lectures in December, 2010.

Statistical data given below:

Province	Hospitals	Fortified Dispensaries	Basic Dispensaries
Punjab	6	7	9
Sindh	3	2	7
Khyber Pakhtunkhwa	2	3	2
Balochistan	1	0	0
Registered Patients Serving Retired Widows Consultants (BS-20) Additional Consultant Specialists (BS-19) Specialists (BS-18) GDMO (BS-20)	t (BS-20)	=	75162 46188 22447 6527 7 2 32 36 5

PMO (BS-19)	=	25
SMO (BS-18)	=	72
M0 (BS-17)	=	132
Dentist (BS-19/18/17)	=	15
Nursing Staff	=	227
Technician (All trade)	=	430
Lower Paramedics (All trade)	=	621
Grand Total	=	1604

Performance for the period July 2009 to June 2010 (Lahore Hospital)

Patients attended in outdoor

patients department		=	4,21,785		
Emergency/Casualty Attendance		=	27,310		
	ests investigated in				
WAPDA Hospital Complex, Lahore			15,84,978		
i)	X-Ray	=	34,327		
ii)		=	8,719		
	Laboratory Tests	=	15,32,365		
iv)	Ultra Sounds	=	8,169		
V)	Others	=	1,398		
No. of ca	ases referred to outside				
non WAI	PDA Hospitals And Specialists	=	8,315		
No. of pa	atients admitted in				
WAPDA	Hospital Complex,				
Lahore d	uring 2009-10	=	9,902		
i)		=	1,652		
ii)	Medical	=	2,405		
iii)	Gynaecology	=	387		
iv)		=	407		
V)	ENT	=	182		
vi)	Eye	=	627		
	, Cardiology	=	1,209		
	Oncology	=	787		
ix)	ICU Ward	=	1,259		
x)	Officer Ward	=	987		
No. of operations (minor/major) performed in WAPDA Hospital Complex,					
•	uring 2009-10	=	3,896		
i) Surgical		=	1,337		
ii)	Gynaecology	=	566		

v) ENT vi) Eye vi) Skin vii) Orthopaedic	= = =	203 828 172 790		
Antiviral treatment provided for Hepatitis B&C	=	200		
Cases referred for Renal Transplantation	=	6		
Services provided by Family Welfare Centre at WAPDA Hospital Complex, Lahore for 2009-10 = 18,666				
Overall Performance of WAPDA Hospitals / Dispensaries Overall performance of WAPDA Hospitals / Dispensaries at different stations for the period July, 2009 to June, 2010 is detailed below: Patients attended in outdoor patients				
department	=	19,75,109		
Emergency/Casualty Attendance	=	1,95,316		
No. of tests investigated in WAPDA Hospitals /Dispensaries i) X-Ray ii) E.C.G. iii) Laboratory Tests iv) Ultra Sounds	= = =	23,59,385		
No. of cases referred to outside institutes for investigation	=	33,248		
No. of cases referred to outside non WAPDA Hospitals and Specialists	=	68,300		
No. of patients admitted in WAPDA Hospitals/Dispensaries = 33,521				
No. of Operations (minor/major) performed in WAPDA Hospitals/Dispensaries	=	9,578		
Cardiac cases referred for interventional treatment i) PIC, Lahore		1,413 1,167		

ii)	AFIC, Rawalpindi	=	110
iii)	NICVD, Karachi	=	136
Antiviral	treatment provided for		
Hepatitis	B&C	=	930
Cases ref	erred for Renal Transplantation	=	6
			-
Family W	elfare Centre WAPDA Hospital / For	titied	Dispensaries
i)	Condom	=	87,820
ii)	0.Pills	=	5,512
iii)	Exolton	=	312
iv)	lnj. norigest	=	1,658
V)	Inj. Megestron	=	1,157
vi)	Inj. Depo provera	=	50
vii)	Capper T	=	1,522
viii)	Multi Load	=	347
ix)	Tubal Ligation	=	228
X)	Vasectomeries	=	66
xi)	Norplant	=	0
xii)	Postenor	=	167

WAPDA HOSPITALS

Name of Hospital	Bed Strength	
WAPDA Hospital Complex, Lahore	250	
WAPDA Hospital, Tarbela	50	
WAPDA Hospital, Guddu	50	
WAPDA Hospital, Peshawar	50	
WAPDA Hospital, Quetta	50	
WAPDA Hospital, Hyderabad	50	
WAPDA Hospital, Rawalpindi	50	
WAPDA Hospital, Multan	50	
WAPDA Hospital, Faisalabad	50	
WAPDA Hospital, Gujranwala	50	
WAPDA Hospital, Mangla	20	
WAPDA Hospital, Sukkur	20	

WAPDA FORTIFIED DISPENSARIES

Name of Fortified Dispensaries	
WAPDA Fortified Dispensary, Chashma (Mianwali)	
WAPDA Fortified Dispensary, D.I. Khan	
WAPDA Fortified Dispensary, Jamshoro	
WAPDA Fortified Dispensary, Sahiwal	
WAPDA Fortified Dispensary, Muzaffargarh	
WAPDA Fortified Dispensary, RBC, Tarbela	
WAPDA Fortified Dispensary, Barotha	
WAPDA Fortified Dispensary, Gujrat	
WAPDA Fortified Dispensary, Kasur	
WAPDA Fortified Dispensary, R.Y. Khan	
WAPDA Fortified Dispensary, Jhang	
WAPDA Fortified Dispensary, Dadu	

WAPDA BASIC DISPENSARIES

Name of Basic Dispensaries
WAPDA Dispensary,Warsak
WAPDA Dispensary, Islamabad
WAPDA Dispensary, SPS, Faisalabad
WAPDA Dispensary, HESCO, Hyderabad
WAPDA Dispensary, Kotri
WAPDA Dispensary, Sargodha
WAPDA Dispensary, Karachi
WAPDA Dispensary, Larkana
WAPDA Dispensary, Mirpurkhas
WAPDA Dispensary, Nawabshah
WAPDA Dispensary, Larkana
WAPDA Dispensary, Shalamar, Lahore
WAPDA Dispensary, Okara
WAPDA Dispensary, Dargai
WAPDA Dispensary, Sheikhupura
WAPDA Dispensary, Sialkot
WAPDA Dispensary, Bahawalpur
WAPDA Dispensary, Bahawalnagar

Human Resource & Administration

• Human Resource has been considered as capital in modern era of an organization, without which any organization ceases to exist. HR & Admn Directorate is a brain of WAPDA as it deals with the issue of processing the HR activities which ultimately becomes the lifeline of an organization. This Directorate is a hub of all HR activities dealing establishment matters of employees (BPS-1 to 20). The scope of this Directorate further widens with advices to Authority on different issues, handling of deputation cases, clarifications (other than Service Rules) and coordination between WAPDA and Ministry of Water and Power by passing off and on desired information.

• The Human Resource activities handled by this Directorate during the year 2009-10 includes processing of recruitment of 81personnel in various grades, training of 40 officers/staff, promotion of 32 Nos. employees, adjustment of 26 surplus employees, processing of welfare cases, pension/reward, long term advance cases etc. have been initiated by the Directorate.

0&M DIRECTORATE

0&M Directorate, WAPDA is mainly responsible for conducting 0&M studies of WAPDA formations, compiling/publishing WAPDA Manpower Statistics Ready Recknoner bi-annually and conducting Service Review of WAPDA employees BPS-1 to 19 on completion of 20 years service.

O&M Studies

The following O&M studies were carried out and completed

by the Scrutiny Committee of O&M Directorate during the year 2009-10:

- Revised Yardstick for 20 Beded Hospital Sukkur.
- Creation of 06 additional posts inWAPDA Engineering Academy, Faisalabad.
- Creation of post of Firefighting Staff for WAPDA Hospital, Lahore.
- Creation of 15 additional posts of Security Staff for WAPDA Staff College, Islamabad.
- Creation of new Directorate for Dams Safety Organization (DSO).
- Creation of additional post of Technical Staff at Khanpur Dam.
- Creation of post of Malies and Beldars at WAPDA Staff College, Islamabad.
- Upgradation of the post of Sr. Instructor (Management) as Director Training (Research & Development) in WAPDA Staff College, Islamabad.
- Additional Staff for WAPDA Cadet College, Tarbela Dam.
- Restructuring in Internal Audit WAPDA as a result of bifurcation into WAPDA/PEPCO.

Manpower Statistics Data (Ready Reckoner)

For effective manpower planning and development, it is necessary to collect and analyse available human resource data. With this frame of mind, O&M Directorate gathers manpower data, from all WAPDA formations. Ready Reckoner in a booklet shape illustrating necessary details of all categories of employees working in the Organaization is published on biannual basis.

Keeping in view the importance of Ready Reckoner, 0&M Directorate has introduced new "Human Resource Data base". Data collection system which will be installed in all offices of WAPDA in near future will save time and help in error free information. Accordingly, form of data collection has been squeezed from 5 to 2 only depicting maximum input for report generation in future.

EDUCATION DIRECTORATE

WAPDA is running 38 Educational Institutions comprising one degree college, one inter-college and 36 schools at various WAPDA projects throughout the country. These institutes are managed by 750 qualified teachers. More than 18500 students are receiving education in these schools and colleges. WAPDA

spent about Rs.251.16 million on education during the year 2009-10.

Facilitations during the year.

 Mehak Sabir daughter of Sabir Shaheen, a student of WAPDA Girls High School, Shalimar Town, Lahore had got 1st position in Lahore District in middle level by securing 729/800 marks conducted by Punjab Examination Commission. a highest degree of risk. Yet due to tremendous efficiency with no un-watched timings Security Directorate ensures that WAPDA employees feel protected even at remotest location. Thus, even under the worst security situation the WAPDA security is performing the tremendous job to let the projects work with least or no losses. So far, the Security Directorate has the best results as regard to its responsibilities, areas and tasks in the country as compared with other security set ups viz a viz resources provided and powers sanctioned against its mission.



- Sidra Mustafa, a student of WAPDA Girls High School, Shalimar Town, Lahore had got 2nd position in 19th Intra Board Science essay competition namely Islam and Science.
- 03 Nos. Senior most T.G.Ts were promoted as Headmaster/Headmistress.
- Contract services of 03 lecturers, 07 T.G.Ts and 01 Laboratory Assistant were regularized.

SECURITY DIRECTORATE

The ever increasing threat coupled with enhanced techniques of terrorism imposes extra responsibilities on the shoulders of the Security Directorate to combat all and few selected security aspects in mostly un-scheduled scenarios. The extra vigilance under all kinds of weather and terrain at such a vast magnitude round the clock places WAPDA security at

General

The WAPDA Security Directorate has taken numerous steps as regard to enhancing security duties during 2009-10. The pace is fast and traversing as per the situation demands. During the year under report, the WAPDA Security Directorate not only shedded away the druggries of monotony and repetition towards its duties but also reached to numerous alternative ways of combating security situations after deep analysis. Easy, understandable and practical ways/methods have been evolved. The few worth mentioning are appended in the succeeding paras.

Review of the Security Situation

The security situation has been reviewed as regard to following parameters:

Objectives of Terrorists

The main objectives of terrorists as regard to WAPDA are:

- Destruction and incapacitation of critical and key resources like Dams, Power Houses and Switchyard.
- (ii) Cause man casuality to employees
- (iii) Damage public and employees morale and confidence

Means and Methods of Terrorists

- (i) Improvised explosives device-most common weapons.
- (ii) Bomb-Blast-Time Bomb and Hand Grenade
- (iii) Suicide Bomber
- (iv) Explosive Laden vehicle with suicide bomber (FIA Building, Marriott Hotel)
- (v) Physical Attacks/Assault (Kohat Tunnel)
- (vi) Rocket Attack/Indiscriminate firing (Swat and Peshawar Incident)

Security Strategies

The main gradients under which the security strategy has been involved are:

- a Detect. Spot the presence of dangerous material and suspicious person.
- b Deter. Make the installation/building more difficult to attack
- c Defend. Response to the attack, protect installation and react aggressively.

Enhanced Security Measures

a. Research and Collection Services

Director Security and DD (S)-I Security alongwith the staff is committed to research and data collection duties with the help of other organizations and finding ways and means to ensure integrated security system. The Security Directorate ensures verification of antecedents, due diligence and background checks on each category of employees for security persons in particular and employees in general. Exhaustive validation on selection in security set up and their posting/placing is now being ensured at all levels.

b. Network

The wireless, mobile, network sets linked through sentry patrolling and mobile has made Security Directorate to have real picture at all times. A swift uniquely advantageous duty round the clock to show our presence with all set ups countrywide places us at a position of eye ball to eye ball contacts with all locations.

c. Tracing/Recovery

Security Directorate has enhanced its scope of work in keeping a track of culprits and defaulter and later succeeded in recovery. This aspect has minimized the rate of negative tendencies and thus providing more security.

Routine Security Measures

Following are the routine Security Measures being practiced:

a. Access Control

- (i) Controlled entrance (doors, locks, gates, turnstile and door alarm).
- (ii) Secure perimeter (Fence Boundary walls)
- (iii) Restricted access areas
- (iv) Access identification (Cards identification)
- (v) Signage
- b. Barriers
 - (i) Walls, Earth Banks and Berms
 - (ii) Fence/Barbed wire
 - (iii) Screens and shield-visual screening
 - (iv) Popup Barriers

Security Measures

Upgraded sescurity measures are stepped as:

a. Monitoring and Surveillance

- CCTV
- Monitor Detector
- Fire and Smoke Detector
- Heat Sensor
- Explosive Detector
- Metal Detector
- Lighting of building

b. Communication

- Telephone
- Wireless

c. Inspection

- Personal inspection employee, vendor, visitor, contractor
- Vehicle search Cars, truck, delivery van, motorcycle
- Trained dogs
- X-Ray screening

d. Security Force

- Force Size
 - Equipment weapons, vehicles, protective clothing
- Training
- SOP (Check point, patrol, calling of FC/Ranger)
- Coordination with other agencies

e. Personnel Protection

- Protection of high profile officers
- Protection of employees

Important Assignments

- a Responsible to the authority through MD (Admn) on security arrangements for execution and implementation of policies on security matters through Field Officers.
- b Review the security arrangements based on survey and observations of Federal Inspection Team/Provincial Survey Team.
- Maintain Liaison with the Government Agencies in matters related to security of national assets under the custody of WAPDA.
- d Recruitment, inter-formation transfer/posting discipline, discharge pension and establishment matters of subordinate security staff.
- e Exercise technical control over security staff on all Pakistan basis and Fire Fighting Staff of WAPDA "Technical Control" includes policy matters relating to security selection, recruitment, posting, promotion etc. who are under the administrative control of various GMs, CEOs/CEs/PDs of installations/projects of WAPDA.

Security Protection

To ensure that all important assignments come true, following non fundamental options are being used:

- a. Mobile Patrol
- b. VIP Guards
- c. Executive Protection
- d. Escorts
- e. Key Holders at every key installation
- f. Reception offies
- g. Alarm response
- h. Physical protection
- i. Route control teams
- I. Event security
- m. Power plant security
- n. Security Training
- o. Remote site security
- p. Project security
- q. Under cover assignments for dignitaries and foreigners

Security Equipment/Ancillaries and Check Upgradation

WAPDA Security systems are although synonymous but this year Directorate ensured quality and consistency by not trying

it to particular system but we tailored specially different for different set ups as per their design and requirement. For this the Directorate introduced:

- (i) Surveillance devices
- (ii) CCTV Camera
- (iii) Videos
- (iv) Alarm installations
- (v) Access control machines
- (vi) Metal and explosive detectors
- (vii) Road Blocker and Barrier system
- (viii) Personal protection
- (ix) Risk Assessment
- (x) Fire Fighting, assessment and advice
- (xi) Addressable Alarm system

Conclusion

The security up-gradation is a continuous process and the Directorate is committed to overcome its deficiencies with new dimensions of course with the cooperation of all.

LABOUR AND WELFARE DIRECTORATE

Labour & Welfare Directorate is mainly responsible to assist the Authority for preservation of industrial peace in WAPDA. To achieve these objectives, this Directorate plans, coordinates, evaluates labour management relations through amicable settlement, human relations and motivation to the workers.

Labour & Welfare Directorate further maintains liaison between Authority, its officers/employees collective bargaining agent as well as other agencies operating in WAPDA to resolve labour conflicts.

This Directorate has been able to control the labour situation effectively throughout Pakistan. Hence, Labour management relations in WAPDA remained cordial and noticeable progress was achieved towards promoting sense of security and belongingness amongst WAPDA employees.

A resume of major activities of this Directorate during the period under report is appended below:-

 Notifications for application of Pakistan Essential Services (Maintenance) Act, 1952 for all cases of employment in Tarbela Dam Project and other Small Hydel Power Stations were got issued from the Ministry of Interior, Government of Pakistan.

- Two bipartite meetings were held between the Authority and CBA Union in which the Authority accepted many demands of CBA union.
- Two hundred and one complaints/representations regarding individual grievances received from WAPDA employees were processed, genuine grievances were got redressed and decisions were communicated to all concerned.
- A meeting of Works Council was held at Mangla in which a large number of outstanding cases of employees were

Legal advice was imparted after thorough examination on numerous cases of labour laws received from subordinate formations. Besides, important cases of WAPDA employees instituted under labour laws were briefed to WAPDA Counsel and monitored successfully in NIRC.

TRANSPORT

Transport Directorate WAPDA is operating and maintaining 214 vehicles with a staff of 269. Salient contributions of this Directorate are as under:-



CBA Union Representative in a meeting with WAPDA Authority

decided and implementations followed up with the concerned quarters.

- Seventeen nominees of CBA were notified by this Directorate to perform duties of Shop Stewards in various offices.
- 4,117 cases of retired/deceased employees and widows of deceased employees were processed and got settled as detailed below:-

-	WAPDA employees pension cases	=	478
-	Grant out of W.W.Fund	=	127
-	Marriage Grant	=	510
-	Educational Scholarship	=	2504
-	Grants to handicapped children of		
	WAPDA employees	=	9
-	GLI	=	489

- Community Service is provided on daily basis to 2,916 WAPDA employees through 43 large vehicles (buses/ coasters / vans) on various routes in and around Lahore.
- Transport facility is provided daily to 822 school/college going children of WAPDA employees through 19 large vehicles (buses/coasters/vans).
- 53 old/unserviceable vehicles of different WAPDA formations were inspected and recommended for auction.
- 02 old/unserviceable vehicles of Transport Directorate were auctioned.
- 08 new vehicles were purchased to augment existing Transport Pool.
- Appointments of six drivers and six bus conductors were made.

- Fortnightly training programme for new inductees (drivers) to educate them on traffic rules and regulations was carried out. Curriculum also included Islamic education to improve their conduct. Training has been given to 150 drivers/conductors during the year under report.
- To enhance the driving skills of drivers, Transport Directorate also arranged lecture/presentation through audio/video means on traffic rules and regulations, delivered by Senior Superintendent of Police, Traffic Police, Lahore from June 09 to 11, 2010. In addition, general awareness of traffic laws & road sense seminar was held on June 30, 2010 at Drivers Hall, Sunny View, Lahore. The presentations were very educative and informative and attended by a large number of drivers.
- A refresher Training Class was conducted from March 1 to 3, 2010 to improve the fire fighting skill of employees of Transport Directorate.
- In view of good services of the Transport Directorate Staff, ceremony to award reward/honorarium was held at Sunny View Complex in which 72 x persons were rewarded.

PROPERTY MANAGEMENT CELL

The authority established this cell in March, 2002 for expediting transfer of ownership rights of the assets to WAPDA and its corporatized entities. Since its inception, about 70 percent of identified assets have been got title transferred in favour of WAPDA/its corporatized entities. Achievements of this Cell can be truly classified as outstanding, keeping in view the fact that in many cases, prolonged delays in transfer/mutation had resulted in dislocating/disappearance of record/payment proof.

PRINTING PRESS

WAPDA Printing Press, Lahore is rendering its services to all formations of Residual WAPDA/PEPCO in respect of printing tasks.

After modernization management of WAPDA Printing Press gradually improved their skill to deliver quality printing well in time. As far as the printing charges of WAPDA Printing Press are concerned, the cheaper rates are ensured after comparison with the charges of any A class printing press in the private sector.

All the jobs of different formations of WAPDA/PEPCO are

received through Director (CSS) and their timely completion is made and handed over to Director (CSS) for delivery to indenter.

CAREER MANAGEMENT CELLS

Career Management Cells deal with career- planning, development, management of officers of WAPDA and its Satellite Entities to the defined limits. Transfers, promotions, up-gradation, deputations, Training within and outside country, assisting in acquisition of higher qualifications within criteria, formulation of career planning related policies on assignment, etc. of officers from BPS-18 to BPS-20, are also processed in these cells.

During the year under report, Career Management Cell (S&C) processed/finalized promotion cases of 61 officers, upgradation of 10 officers and regularization of 05 WAPDA officers of different cadres. The Directorate arranged local and abroad training/inspection visits of 53 officers. 09 court cases were pursued out of which 05 cases were decided in favour of WAPDA. Annual Confidential Reports of 295 officers of Grade-17 and above were completed. In addition, new promotion policy was also implemented.

CAREER MANAGEMENT (POWER & FINANCE)

Career Management (P&F) Cell deals with career planning and management of Grade 17, 18 & 19 of Hydel Generation and IT officers and BPS-18 & 19 officers of Finance Division, WAPDA. Besides, maintaining ACRs of the Hydel, IT and Finance Division Officers, it deals with transfers/postings as per criteria of "right man for right job".

Up-gradation to higher scale, training (Local/abroad), inspection of material abroad and deputation (Local as well as Abroad) of Hydel, IT and Finance Division officers are also taken care by Career Management (P&F).

The salient achievements of Career Management (P&F) Directorate during the year 2009-10 are as follows:

- Two Promotion Boards for Hydel Generation officers for promotion from BPS-18 to 19 was conducted during December, 2009 and June, 2010 in which twelve officers were approved for promotion.
- One Upgradation Board for Hydel Generation officers for upgradation from Grade-18 to 19 was conducted during June, 2010 in which one officer was approved for upgradation.

- One Upgradation Board for Finance Division officers for upgradation from BPS-18 to 19 was conducted during June, 2010 in which two officers were approved for upgradation.
- Two Promotion Boards for Hydel Generation officers for promotion from BPS-17 to 18 were conducted during December, 2009 and June, 2010 in which thirteen officers were approved for promotion.
- Two Boards for Service Regularization of Hydel Generation officers (BPS-17) were conducted during September, 2009 and May, 2010 in which 27 officers were approved for regularization.
- Nine Hydel IT and Finance Division officers (BPS-19) were sent to attend Senior Management Course (SMC) held during February, 2010 to August, 2010.
- Three BPS-19 officers of Hydel and Finance were sent to attend Refresher Course held during October, 2009.
- Fourteen BPS-18 officers of Hydel, IT and Finance Division were sent to attend Middle Management Course (MMC) held during December, 2009 to February 2010, March to July 2010.
- Twenty BPS-18 officers of Hydel Generation were sent to attend Refresher Course (RC) held during May, 2010.
- Twenty three BPS-17 officers of Hydel Generation were sent to attend Sector Specific (Pre-promotion) Course (SSC) held during October, 2009 to November, 2009 and February, 2010 to March, 2010.
- Twenty three BPS-17 officers of Hydel Generation were sent to attend Junior Management Course (JMC) held during March, 2010 to August, 2010.
- Three BPS-17 officers of Hydel Generation were sent on deputation abroad during September to October, 2009 and February, 2010.
- Two BPS-18 and 19 officers of Hydel Generation were sent to Switzerland during August to September, 2009 for testing/inspection of 132 KV XLPE Cable and allied material for Units 1 & II HPS, Mangla.
- Two BPS-18 and 19 officers of Hydel Generation were sent to Jeddah, KSA during October, 2009 for testing/inspection of 132 KV XLPE Cable and allied material for Units 1 & II HPS, Mangla.
- One BPS-19 officer of Hydel Generation was sent to China during December, 2009 for witnessing Factory Acceptance Tests (FATs) of turbine nozzles.

- One BPS-19 officer of Hydel Generation was sent to Germany during February, 2010 for witnessing FATs and inspection of 18 sets of 145 KV, 40 KA, 230 VDC SF-6 Circuit Breakers for HPS, Mangla.
- One BPS-19 officer of Finance Division was sent to Japan to attend Seminar on "Contract Administration for Japanese ODA Loan Projects in Asia" held from July 26, to August, 2008, 2009.
- Seniority lists of Hydel Cadre Officers of BPS 18 to 19 were finalized and circulated during October, 2009.
- Seniority lists of IT Cadre Officers of BPS 17 to 19 were finalized and circulated during July, 2009.
- 301 ACRs of BPS 17, 18 & 19 officers of Hydel, IT and Finance Division were got cleared during 2009-10.

SERVICES & ESTATES

The Services & Estates Directorate is responsible for provision of services to the Authority offices and Directorates under MD (Admn). This Directorate looks after the affairs of official/residential accommodation, rest houses and single officers hostel at Lahore. This also assists the Authority in formulation of accommodation and telephone policy and ensures its implementation. The salient contributions of this Directorate are as under:-

- The Services & Estates Directorate has generated/collected an annual income of Rs.43 million approximately from commercial tenants.
- Boarding & lodging facilities were provided to the WAPDA/PEPCO officers (BPS-17 to 20) at single officers hostels in a befitting manner.
- The touring WAPDA/PEPCO officers were provided boarding and lodging facilities at WAPDA rest house Shadman.
- Allotment of WAPDA residential accommodation to the officers and officials of WAPDA/PEPCO was made on vacation.
- The allocation of office space was made at WAPDA House and Sunny View as per requirement on availability.
- Proper messing services were provided to the Authority, sr. officers, VIPs and foreign delegates through WAPDA Officers Mess.
- The Services & Estates Directorate ensured provision of quality food at subsidized rates to WAPDA/PEPCO employees at WAPDA House and Sunny View Employees Canteen.

- 305 x rent assessment reports of houses to be acquired for WAPDA employees were processed/finalized during the year under report.
- 1620 x house acquisition cases/renewals were processed/finalized during the report year.

CENTRAL STORES STATIONERY

The Central Stores Stationery was established in 1962. Since then it is playing a vital role. It was re-organized in 1966, and Paper Store and Forms Store, which were previously functioning under WAPDA Printing Press, were placed under Central Stores Stationery. The Central Stores Stationery is a self financing unit. It comprises of three Stores known as Paper Stores, Forms Stores and Stationery Stores, which handle approximately 348 items and deal with approximately 1200 formations up to the level of Revenue Officers.

Primary function of this Directorate is to procure stationery/paper items on competitive rates and store them for subsequent issue to WAPDA formations scattered all over Pakitan by adding very nominal charges of store handling.

After bifurcation of WAPDA in 2004 into WAPDA and PEPCO/Corporate Entities, this Directorate is also catering to the stationery and forms requirements of PEPCO/Corporate Entities. The sanctioned budget for the financial year 2009-10 was Rs.9,49,07,000/-.

The Central Stores Stationery was computerized in the year 2006 and the process for the issue of material to the indenting formations was confined to one window operation, which resulted in the saving of time and money, contributing to the efficiency of this Directorate.

In the near future, Central Stationery Stores Directorate intends to launch its Web Page in order to make available the stock position etc. to the indenting formations at their working places to facilitate them to place their stationery indent on CSS. This will further enhance the efficiency of this Directorate.

WAPDA SPORTS

WAPDA is one of the largest organizations creating and developing remarkable sporting atmosphere within its units all over the country. WAPDA Sports Board was established in 1960 for promotion of sports in WAPDA with ultimate goal to uplift the National sports. It was affiliated with Pakistan Olympic Association in 1984. It has made worthwhile contribution towards promotion of almost all disciplines of sports at the National and International level. Salient features of performance of WAPDA Sports Board, during the financial year 2009-10 are the following:

National Standing of WAPDA Teams:

WAPDA is presently maintaining 36 Men and 20 Women Teams which is a rare honour of any institution at National level. The current National Standing of WAPDA Teams is as under:-

Champion

Men

Baseball, Bodybuilding, Cycling, Gymnastics, Hockey, Judo, Ju-Jitsu, Kabaddi (Circle), Karate, Powerlifting, Squash*, Table Tennis, Tennis*, Weightlifting, Volleyball, Wrestling and Tug of War (17 #)

Women

Athletics, Basketball, Cycling, Handball, Hockey, Ju-Jitsu, Karate, Squash*, Table Tennis, Volleyball and Wushu (11 #)

Runners up

Men

Athletics, Badminton, Handball, Swimming, Taekwondo and Wushu (6 #)

Women

Badminton, Judo and Taekwondo (3 #)

Third Position

Men

Football, Netball, Rowing, Rugby, Machine Rowing and Water Polo (6 #)

Women

Netball and Swimming (2 #)

OTHERS

Men

Basketball, Boxing, Chess, Cricket, Golf, Kabaddi (Asian) and Rifleshooting (7 #)

Women

Football, Golf, Rifleshooting and Tennis* (4 #)

*Based on results of National Games-Championships in these disciplines are not held.

Participation in International Competitions

During the period from July 2009 to June 2010, 428 x players and officials of various sports disciplines were selected to represent Pakistan during various International Competitions.

Performance at International Level

It is a great honor for WAPDA that its players are showing outstanding performance as representatives of Pakistan in International Competitions as under:

- After qualifying Group Stage of AFC President's Cup 2009 in Nepal, WAPDA Football Team participated in Final Stage of AFC President Cup 2009, Tajikistan held from 25 - 27 September, 2009 at Tursunzade, Tajikistan (Ever best performance of any Football Team in Pakistan).
- Mr. Saadi Abbas of GEPCO won Gold Medal in below 67 Kg class during 5th Commonwealth Karate Championships held from 15-17 October, 2009 at Johannesburg, South Africa.
- 11th Rashid International Volleyball Tournament was held from 22-28 October, 2009, Dubai, UAE, Pakistan secured 3rd position in this Tournament. M/s Farooq Khan & Imran Sultan of PESCO and Ali Abbas & Munir Khan of LESCO were members of Pakistan Team.
- Hockey World Cup Qualifying Tournament was held from October 30, 2009 to November 8, 2009 at France. Pakistan won this Tournament and qualified for Hockey World Cup 2010 in India. M/s Rehan Butt (NTDC), Waqas Sharif of GEPCO and Sohail Abbas & Waseem Ahmad (LESCO) were members of Pakistan Hockey Team during above Tournament.
- Champions Challenge-I Hockey Tournament was held from 6-13 December, 2009 at Salta, Argentina. Pakistan Hockey Team secured Second Position in this Tournament. M/s Rehan Butt (NTDC), Waqas Sharif of GEPCO and Sohail Abbas & Waseem Ahmad (LESCO) were members of Pakistan Team during above mentioned competitions.
- Commonwealth Wrestling Championship was held from 17-20 December, 2009 at Jalandhar (India). M/s Muhammad Umar, Muhammad Ali and Muhammad Salman of GEPCO and Basharat Ali and Imran Ali of FESCO won 1 x Silver and 5 x Bronze Medal for Pakistan in said Championship.

- M/s Aamir Sajjad and Muhammad Rifatullah of NTDC created New World Record for Second Wicket Partnership by scoring 580 Runs while playing against SNGPL in First Class Match of Quaid-e-Azam Trophy Grade-I Tournament 2009 at Sheikhupura.
- 11th South Asian Games was held from Jaunary 28, 2010 to February 9, 2010 at Dhaka (Bangladesh). Likewise 10th South Asian Games 2006 Colombo, WAPDA athletes have contributed major share in winning medals for Pakistan during these 11th South Asian Games 2010. Summary is given below:

	Gold	Silver	Bronze	Total
Individual Events	9	10	10	29
Team Events	1	3	4	8
Team Sports	1	1	0	2

 8 x WAPDA Kabaddi Players and 2 x Officials represented Pakistan in the Kabaddi World Cup held from 1 - 12 April, 2010 at India. Pakistan Kabaddi Team got Runners up Position in this Cup.

Sports Activities

 Annual Sports Prize Distribution Ceremony 2009 for WAPDA Annual Inter Unit Sports Competitions 2008-09 was organized by WAPDA Sports Board at WAPDA Auditorium, WAPDA House, Lahore on November 4, 2009. Mr. Shakil Durrani, Chairman WAPDA/Patron in Chief WAPDA Sports Board graced this ceremony as Chief Guest while Ch. Abdul Qadir, Member (Finance), Mr. Naveed Akram Cheema, M.D (Admn)/President WSB, Chief Executive Officer(s) LESCO, FESCO, GEPCO and NTDC were also present on the occasion.

LESCO won Chairman's Trophy while FESCO and GEPCO were awarded Patron's Trophy and President's Trophy respectively.

 5 x disciplines i.e. Handball, Swimming, Table Tennis, Tug of War and Volleyball of WAPDA Annual Inter Unit Sports Competitions 2010 have been held upto June 30, 2010.

Todate standing of Units is summarized below:

1st FESCO	638 Points
2nd NTDC	489 Points

3rd	LESCO	447 Points
4th	GEPCO	408 Points
5th	MEPCO	173 Points
6th	PESCO	60 Points
7th	H/Office	14 Points
8th	IESCO	7 Points

 Besides, organizing other Annual Inter Unit Sports Competitions 2010, WAPDA Sports Board organized following National Championships at Lahore. objective of creation of this Fund is to arrange regular source of financing to provide sports and education facilities to our youth together with an ultimate aim to enhance the medal tally of Pakistan in International competitions. In this regard, Selection process has been completed in three phases of trials held in 28 x cities throughout the country and 73 x youngsters have been selected / enrolled. The youngsters enrolled for this scheme and are being paid education and extra diet allowance of Rs.(2,000 + 3,000) = 5,000/- per month. Every youngster has been provided coaching /



WAPDA Sports Complex - Lahore

- (1) 47th National Table Tennis Championship, 13-17 April, 2010 at WSC, Lahore
- (2) 24th National Junior Volleyball Championship, 27-31 May, 2010 at WSC, Lahore

Sports Infrastructure

WAPDA Sports Board is maintaining sports infrastructure for training and competition purpose which include football / cricket grounds with flood lights arrangements, International standards swimming pool, gymnasium (all indoor & mat games), hostel, fitness centre and sports library.

WAPDA Endowment Fund for Sports

Recently a Scheme named as "WAPDA Endowment Fund for Sports" has been established by WAPDA. The prime

training facilities nearby his home place. WAPDA Coaches are imparting training to them. This Scheme shall be a milestone in history of Pakistan Sports – remarkable contribution for our youth. Company wise detail of above selection is as under:

FUTURE PLANS

- a. 2nd intake of youngsters for WAPDA Endowment Fund for Sports 2010-11
- Participation in National Training Camps and National Championships as per selection/plan of Pakistan Sports Board and National Sports Federations
- c. Participation in National 31st Natonal Games 2010 Peshawar

Residential Status

WAPDA

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- The construction activities in Phase-I of WECHS are in full swing, presently over 4,808 Nos. members are residing in the town while 1078 houses are under construction. Total membership is over 9858.
- The construction activities in Phase-II are underway where 44 houses are under construction. Presently, 45 members are residing in this phase.
- The construction activities in Ph-I (Ext) have also started and 20 Nos. houses are under construction. Presently, 21 members are residing.

Roads

The roads network in Phase-I/Ph-I Ext. (A-1 & A-2 Blocks) is 100% complete whereas, in Phase-II 90% physical achievement has been made. Repair of one million sft, worn out roads of Phase-I has been taken up in different blocks.

Water Supply

 Water supply network is 100% completed in Phase-I and Phase-I Extension (A-1 & A-2 Blocks) whereas, 95% achievement has been made in Phase-II.

Sewerage System

Sewerage system is 100% completed in Phase-I and Phase-I Extension whereas, 98% has been completed in Phase-II.

Sui Gas

- The provision of 100% sui gas has been completed in Phase-I.
- The provision of 99% sui gas has been completed in Phase-I Extension (Blocks A-I & A-2).

 About 91% of pipeline of sui gas has been laid in Phase-II whereas efforts are being made vigorously for the remaining network. The gas supply in Blocks M & N-I has been started.

Electrification

- External electrification works are in progress and almost 70% works have been completed.
- Trifurcation of existing WAPDA Town has been completed.
- Installation of 12 Nos. energy meters at H-4 Corner Shops has been carried out.
- Separate energy meters for Air-conditioners in different Masjids have been provided.

Horticulture

- 500 plants have been planted in Phase-I, WAPDA Town, Lahore.
- Grass was planted in main round about and Usman Chowk.
- A strip was developed as a park in E-2 Block along Khamba distributary.
- A jogging track was developed in Park H-4 Block.
- Improvement of already developed parks was done.
- Construction of concrete slides in E-I & F-2 parks was made.

Education

Adopting previous practice and the efforts of teachers and students, WAPDA Public Girls High School in J-I Block has shown 100% result of 10th class (Lahore Board) examination and all the students secured very high marks.

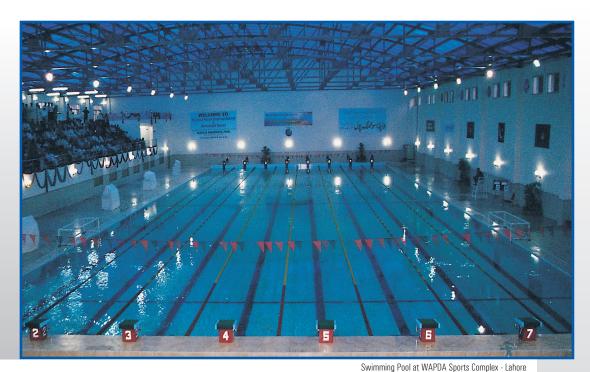
Descipline	LESCO	GEPCO	FESCO	IESCO	MEPCO	QESCO	HESCO	PESCO	TOTAL
Athletics	1	1	8	0	1	0	0	0	11
Boxing	1	0	0	0	0	1	0	0	2
Football	1	1	8	0	0	1	2	2	15
Hockey	5	0	3	1	3	1	0	2	15
Karate	2	1	0	0	3	5	0	0	11
Swimming	0	0	2	0	0	1	0	2	5
Volleyball	0	0	5	0	1	0	1	0	7
Weightlifting	0	0	0	0	0	2	1	0	3
Wrestling	0	1	2	0	1	0	0	0	4
TOTAL	10	4	28	1	9	11	4	6	73

Masjid

- Construction of B-4 Block Masjid has been completed.
- Construction of F-2 Jamia Masjid has been completed.
- Construction of G-3 Block Masjid Ground floor has been completed whereas, 1st floor is in progress which is near to completion.
- Construction of N-I Block Masjid is in progress.
- Left over works in less different area Phase-II (roads, water supply & sewerage system) are under way and will be completed very soon.

Security

Security measures are advancing with good patrolling, communication by induction of new wireless system, training of the personnel and provision of vehicles to the staff.



Boundary Wall

• Construction of boundary wall in Phase-I Extension Blocks A-2, A-3 has been completed (1200 running feet).

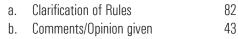
Development Projects/Activities

- Construction of Moazzan's residence in Block D-2 has been completed.
- Construction of Marriage Hall in Block G-I is under way.
- Construction of Imam and Moazzan residences in Block G-3 is under way.
- Pre-mix carpeting of worn out roads in Phase-I has been completed.
- Widening of Main Boulevard in Phase-I has been completed.
- Construction of accommodation for security guards in Phase-II has been completed.

RULES DIRECTORATE

The Directorate is responsible of carrying out amendments and issuance of clarifications, on Service/General Rules on receipt of reference from various WAPDA formations. Rules Directorate is playing pivotal role in providing guidance, counseling and issuing clarifications to all formations for smooth functioning of office system as per instructions of Authority. The Directorate also corresponds with various Ministries for bringing WAPDA Rules at par with Federal Government. All amendments in the Service/General Rules are processed by Rules Directorate for obtaining Authority's approval through item notes or circulations.

During the year 2009-10, the progress of Rules Directorate has been as under:



c. Amendments of Rules 07

PUBLIC RELATIONS DIVISION

WAPDA

Annual Report 09 - 10

This division effectively continued to project WAPDA's achievements and activities through print and electronic media to enhance the organization's image. In addition, efforts were made to educate the public on the achievements and its role in nation building activities through publication of articles in newspapers as well as stories and executives participation in electronic media programme.

During the year, this division issued 325 press releases and clarifications to project WAPDA's activities and to alleviate misgivings created in public mind by certain news items

published in the national and regional press. Projection through documentaries and talks on TV and Radio were organized. With a view to imparting information about WAPDA, press conferences of Chairman were arranged.

The division arranged publication of as many as 1,141 tenders, pre-qualification and other notices for various WAPDA formations in the national and regional newspapers of Pakistan during the year. Protocol was provided to a number of delegates from inland and abroad who visited WAPDA's completed and ongoing projects and WAPDA headquarters.

Publication of WAPDA Khabarnama, WAPDA Annual Report and Telephone Directory continued. Circulation of these publications was ensured inland and abroad to the interested readers.

CONSOLIDATED BALANCE SHEET (Power, Water and Co-ordination Wings) as at June 30, 2010

e 30, 2010	
	(Thousand Rs.)
	Consoidated Amounts
Fixed Assets	
Operating fixed assets	112,057.714
Capital Works	011 000 000
In progress	211,360.239
Completed Works	125,260.094
Total Capital Works	336,620.333
Long Term Investments	189,894.270
Notes Receivables	9,614.715
Long Termadvances, deposits, prepayments & deferred co	8,652.390
Total Fixed Assets	656,839.422
Comment Assets	
Current Assets	
Stock & Stores	1,527.876
Printing Work in progress	3.697
Sundry Debtors	111,888.436
Endowment Fund for Sports	80.000
Advances	2,508.964
Other Receivables	20,397.588
Short term investments	1,956.000
Cash and Bank balances	3,611.129
Total Current Assets	141,973.690
Total Assets	798,813.112
Capital / Contributions & Surplus	
Share Capital	9,522.000
Revaluation Surplus	14,847.487
Investment by Govt. of Pakistan	387,713.840
Contributions / Grants	62,250.186
Surplus up-to previous year	157,146.531
Surplus (Deficit) for the year	11,238.978
	168,385.509
Total Capital / Contributions & Surplus	642,719.022
Non-Current Liabilities	
Long Term Loans and Bonds	67,814.399
Liability under Ijara Financing	8,000.000
Deferred Credits of GST	1,443.623
Total Non-Current Liabilities	77,258.022
Comment Linkillation	
Current Liabilities	00 707
Deposits	88.787
Creditors	4,285.713
Accounts Payables	12,542.456
Current Maturity of Loans & Bonds	6,122.356
Short Term Liabilities and borrowings	55,645.821
Accruals and other liabilities	150.935
Total Current Liabilities	78,836.068
Total Capital & Liabilities	798,813.112
וטנמו טמאונמו מ בומטווונופט	/ 30,013.112

CONSOLIDATED BALANCE SHEET (Power, Water and Co-ordination Wings) as at June 30, 2010

	Co-ordination Wing	Water Wing	Power Wing	Consolidated Amoun
	30.06.2010	30.06.2010	(Hydro Electric) 30.06.2010	30.06.2010
	85.	SU.UU.2010 Rs.	SU.UU.2010 Rs.	Rs. In Millions
Fixed Assets	110.	110.	113.	113. 111 101110113
Operating fixed assets	674,690,053	10,277,000	111,372,747,000	112,057.714
Capital Works	071,000,000	10,217,000	111,072,717,000	112,007.711
In progress		157,600,160,000	53,760,079,000	211,360.239
Completed Works		125,260,094,000		125,260.094
Total Capital Works		282,860,254,000	53,760,079,000	336,620.333
Long Term Investments			189,894,270,000	189,894.270
Notes Receivables			9,614,715,000	9,614.715
Long term advances, deposits,			8,652,390,000	8,652.390
prepayments & def			0,002,000,000	0,002.000
Total Fixed Assets	674,690,053	282,870,531,000	373,294,201,000	656,839.422
Current Assets	074,000,000	202,070,001,000	070,204,201,000	000,000.422
Stock & stores	103,631,517		1,424,245,000	1,527.876
Printing work in progress	3,697,418			3.697
Sundry Debtors	688,850,927	331,148,000	110,868,437,000	111,888.436
Endowment Fund for Sports	80,000,000			80.000
Advances	638,344,629	342,614,000	1,528,005,000	2,508.964
Other Receivables	2,479,108,909	96,698,000	17,821,781,000	20,397.588
Short term investments	1,685,000,000		271,000,000	1,956.000
Cash and bank balances	55,885,874	851,593,000	2,703,650,000	3,611.129
Total Current Assets	5,734,519,274	1,622,053,000	134,617,118,000	141,973.690
	0,704,010,274	1,022,000,000	104,017,110,000	141,070.000
Total Assets	6,409,209,327	284,492,584,000	507,911,319,000	798,813.112
Capital/Contributions & Surplus				
Share Capital			9,522,000,000	9,522.000
Revaluation Surplus			14,847,487,000	14,847.487
Investment by Govt. of Pakistan		203,415,760,000	184,298,080,000	387,713.840
, Contributions/Grants	39,068,294	61,524,844,000	686,274,000	62,250.186
Surplus upto previous years	5,963,238,253	3,402,225,000	147,781,068,000	157,146.531
Surplus (Deficit) for the year	(217,815,430)	156,908,000	11,299,885,000	11,238.978
	5,745,422,823	3,559,133,000		
T (10 1/ 1/0 1/ 1/ 0.0 1/ 1/			109,000,900,000	168,385.509
Total Capital/Contributions & Surplus	5,784,491,117	268,499,737,000	159,080,953,000 368,434,794,000	168,385.509 642,719.022
	5,784,491,117			
Non-Current Liabilities	5,784,491,117	268,499,737,000	368,434,794,000	642,719.022
Non-Current Liabilities Long Term Loans and Bonds	5,784,491,117 		368,434,794,000 56,508,206,000	642,719.022 67,814.399
Non-Current Liabilities Long Term Loans and Bonds Liability under Ijara Financing	5,784,491,117 	268,499,737,000	368,434,794,000 56,508,206,000 8,000,000,000	642,719.022 67,814.399 8,000.000
Non-Current Liabilities Long Term Loans and Bonds	5,784,491,117 	268,499,737,000	368,434,794,000 56,508,206,000	642,719.022 67,814.399
Non-Current Liabilities Long Term Loans and Bonds Liability under Ijara Financing Deferred Credits of GST Total Non-Current Liabilities		268,499,737,000 11,306,193,000 	368,434,794,000 56,508,206,000 8,000,000,000 1,443,623,000	642,719.022 67,814.399 8,000.000 1,443.623
Non-Current Liabilities Long Term Loans and Bonds Liability under Ijara Financing Deferred Credits of GST Total Non-Current Liabilities Current Liabilities	 	268,499,737,000 11,306,193,000 11,306,193,000	368,434,794,000 56,508,206,000 8,000,000,000 1,443,623,000	642,719.022 67,814.399 8,000.000 1,443.623 77,258.022
Non-Current Liabilities Long Term Loans and Bonds Liability under Ijara Financing Deferred Credits of GST Total Non-Current Liabilities Current Liabilities Deposits	 62,596,875	268,499,737,000 11,306,193,000 11,306,193,000 26,190,000	368,434,794,000 56,508,206,000 8,000,000,000 1,443,623,000	642,719.022 67,814.399 8,000.000 1,443.623 77,258.022 88.787
Non-Current Liabilities Long Term Loans and Bonds Liability under Ijara Financing Deferred Credits of GST Total Non-Current Liabilities Current Liabilities Deposits Creditors	 62,596,875 203,852,027	268,499,737,000 11,306,193,000 11,306,193,000 26,190,000 4,081,861,000	368,434,794,000 56,508,206,000 8,000,000,000 1,443,623,000 65,951,829,000	642,719.022 67,814.399 8,000.000 1,443.623 77,258.022 88.787 4,285.713
Non-Current Liabilities Long Term Loans and Bonds Liability under Ijara Financing Deferred Credits of GST Total Non-Current Liabilities Current Liabilities Deposits Creditors Accounts Payables	 62,596,875	268,499,737,000 11,306,193,000 11,306,193,000 26,190,000	368,434,794,000 56,508,206,000 8,000,000,000 1,443,623,000 65,951,829,000	642,719.022 67,814.399 8,000.000 1,443.623 77,258.022 88.787 4,285.713 12,542.456
Non-Current Liabilities Long Term Loans and Bonds Liability under Ijara Financing Deferred Credits of GST Total Non-Current Liabilities Current Liabilities Deposits Creditors Accounts Payables Current Maturity of Loans & Bonds	 62,596,875 203,852,027	268,499,737,000 11,306,193,000 11,306,193,000 26,190,000 4,081,861,000	368,434,794,000 56,508,206,000 8,000,000,000 1,443,623,000 65,951,829,000 11,607,411,000 6,122,356,000	642,719.022 67,814.399 8,000.000 1,443.623 77,258.022 88.787 4,285.713 12,542.456 6,122.356
Non-Current Liabilities Long Term Loans and Bonds Liability under Ijara Financing Deferred Credits of GST Total Non-Current Liabilities Current Liabilities Deposits Creditors Accounts Payables Current Maturity of Loans & Bonds Short Term Liabilities and Borrowings	 62,596,875 203,852,027 356,442,256 	268,499,737,000 11,306,193,000 11,306,193,000 26,190,000 4,081,861,000	368,434,794,000 56,508,206,000 8,000,000,000 1,443,623,000 65,951,829,000 65,951,829,000 5,122,356,000 55,645,821,000	642,719.022 67,814.399 8,000.000 1,443.623 77,258.022 88.787 4,285.713 12,542.456 6,122.356 55,645.821
Non-Current Liabilities Long Term Loans and Bonds Liability under Ijara Financing Deferred Credits of GST Total Non-Current Liabilities Current Liabilities Deposits Creditors Accounts Payables Current Maturity of Loans & Bonds Short Term Liabilities and Borrowings Accruals and other liabilities	 62,596,875 203,852,027 356,442,256 1,827,052	268,499,737,000 11,306,193,000 11,306,193,000 26,190,000 4,081,861,000 578,603,000 	368,434,794,000 56,508,206,000 8,000,000,000 1,443,623,000 65,951,829,000 65,951,829,000 5,645,821,000 149,108,000	642,719.022 67,814.399 8,000.000 1,443.623 77,258.022 88.787 4,285.713 12,542.456 6,122.356 55,645.821 150.935
Non-Current Liabilities Long Term Loans and Bonds Liability under Ijara Financing Deferred Credits of GST Total Non-Current Liabilities Current Liabilities Deposits Creditors Accounts Payables Current Maturity of Loans & Bonds Short Term Liabilities and Borrowings	 62,596,875 203,852,027 356,442,256 	268,499,737,000 11,306,193,000 11,306,193,000 26,190,000 4,081,861,000	368,434,794,000 56,508,206,000 8,000,000,000 1,443,623,000 65,951,829,000 65,951,829,000 5,122,356,000 55,645,821,000	642,719.022 67,814.399 8,000.000 1,443.623 77,258.022 88.787 4,285.713 12,542.456 6,122.356 55,645.821

WAPDA WATER WING (WATER SECTOR PROJECTS / FORMATIONS) BALANCE SHEET as at June 30, 2010

	R	s. in Million
	AS AT 30-06-2010	AS AT 30-06-2009
Assets		
INFRASTRUCTURE DEVELOPMENT	282,860.254	265,762.419
On-Going Projects	157,600.160	165,900.874
Completed Projects	125,260.094	99,861.545
OTHER ASSETS	10.277	7.903
CURRENT ASSETS	1,622.053	3,672.470
Cash, Bank & Imprest Balances	851.593	3,144.279
Deposit & Advances	342.614	280.617
Sundry Debtors	331.148	176.882
Clearing Account	96.698	70.692
TOTAL ASSETS	284,492.584	269,442.792
CAPITAL & LIABILITIES		
CAPITAL EMPLOYED	276,246.797	264,435.649
On-Going Projects	149,173.656	162,351.913
Completed Projects	127,073.141	102,083.736
CURRENT LIABILITIES	4,686.654	1,291.102
Sundry Creditor	4,081.861	1,021.596
Account Payable	0.841	0.549
Deposit Accounts	26.190	24.970
Clearing Account	542.493	103.376
Inter Wing Account	35.269	140.611
OTHER RECEIPTS	3,559.133	3,716.041
TOTAL CAPITAL & LIABILITES	284,492.584	269,442.792



Power Wing (Hydro Electric) BALANCE SHEET as at June 30, 2010

, 00, 2010	30-06-2010		30-06-2009
		Rupees in thousand	(Restated)
EQUITY AND LIABILITIES			
Share Capital and Reserves			
Share Capital	9,522,000		9,522,000
Capital Reserves	358,226,520	J	3,52,926,638
	367,748,520		362,448,638
NON - CURRENT LIABILITIES			
Long term loans	56,508,206] [49,196,250
Liability against assets subject to ijarah	8,000,000		8,000,000
Grants	686,274		1,593,391
Deferred liabilities	1,443,623		1,239,890
	66,638,103		60,029,531
CURRENT LIABILITIES			
Other payables	11,607,411		12,557,523
Accrued Interest	149,108		1,285,883
Short term borrowings	8,409,163		47,162,908
Short term liabilities	47,236,658		34,263,371
Current portion of long term loans	6,122,356		4,765,631
	73,524,696		100,035,316
	140,162,799 507,911,319		160,064,847 522,513,485
	307,911,313		322,313,403
ASSETS			
NON-CURRENT ASSETS			
Property, plant and equipment	165,132,826] [149,826,725
Investment in associates	4,053,363		4,053,363
Investment in subsidiaries	1,542,826		1,542,826
Long term investments	184,298,081		184,298,081
Notes receivables	9,614,715		10,535,638
Long term advances	8,650,274		47,361,053
Long term security deposit	2,116	J	1,998
	373,294,201		397,619,684
CURRENT ASSETS			
Stores, spare parts & Loose Tools	1,424,245		1,441,536
Trade debts	110,868,437		104,208,132
Advances and other receivables	19,349,786		18,200,942
Short term investments	271,000		271,000
Cash and bank balances	2,703,650		772,191
	134,617,118		124,893,801
	507,911,319		522,513,485

Power Wing (Hydro Electric) Income Statement for the year ended June 30, 2010

	30-06-2010	Rupees in thousand	30-06-2009
			(Resteated)
Sales	29,092,611		29,013,170
Cost of Electricity	9,603,756		9,091,051
Gross Profit	19,488,855		19,922,119
Operating expenses	6,260,187		1,119,174
Operating profit	13,228,668		18,802,945
Other Income	4,722,087		4,154,566
	17,950,755		22,957,511
Financial Cost	6,650,870		7,163,407
Net profit for the year	11,299,885		15,794,104
	-		



POWER WING (HYDRO ELECTRIC) CASH FLOW STATEMENT FOR THE YEAR ENDED 30-06-2010

FUR THE YEAR ENDED 30-06-2010	2010		2009
		Rupees in thousand	(Restated)
CASH FLOW FROM OPERATING ACTIVITIES			(Hestated)
Net Profit for the year	11,299,885		15,794,104
Adjustment for:			
Depreciation	3,930,111		3,896,022
Financial cost	6,650,870		7,163,407
ljarah rental	1,501,848		1,501,848
Other adjustment for doubtful debts	5,938,154		
Amortization of grant	(907,117)		
	17,113,866		12,561,277
	28,413,751		28,355,381
Working capital changes:			
(Increase)/Decrease in current assets:		— , r	
Stores, spare parts and loose tools	17,291		(117,552)
Trade debts	(12,598,459)		44,664,527
Advances and other receivables	(1,148,844)		4,627,732
Short term investments			132,874
(Increase)/(Decrease) in current liabilities:			
Short term liabilities	(950,112)		11,608,367
Accrued interest	(1,136,775)		363,025
Short term borrowings	(38,753,745)		616,046
Other payables	12,973,287		(24,460,428)
	(41,597,357)		37,434,591
Cash generated from operations	(13,183,606)		65,789,972
Finance cost paid	(6,650,870)		(7,163,407)
Net hydel profit paid to Khyber Pakhtun Khuwa	(6,000,000)		(6,000,000)
Increase in defferred liability	(210,869)		
ljarah rental	(1,087,246)		(1,158,904)
Net cash (used in) / generated from operating activities	(27,132,591)		51,467,661
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditure incurred on property, plant and equipment	(19,236,213)		(14,286,635)
Proceeds from sale of property, plant and equipment			
Long term investment - net			12,308
Increase in notes receivables	920,923		(4,488,449)
Long term advances	38,710,779		(33,790,656)
Long term security deposit	(118)		(295)
net cash (used in) / flow from investing activities	20,395,371		(52,553,727)
CASH FLOW FROM FINANCING ACTIVITIES			
Decrease in investment by the government of Pakistan			
Proceed through long term loans	14,191,756		2,545,478
Long term loans repaid / transferred	(5,523,075)		(4,818,713)
Net cash used in financing activities	8,668,681	L	(2,273,235)
Net (decrease) in cash and cash equivalents during year	1,931,461		(3,359,301)
Cash and cash equivalents at beginning of year	772,191		4,131,492
Cash and Cash equivalents at end of year	2,703,650		772,191

CO-ORDINATION WING FINANCIAL STATEMENTS FOR THE YEAR ENDED 30-06-2010

	30-06-2010 Bs.	30-06-2009 Rs.
TANGIBLE FIXED ASSETS	110.	110.
Operating fixed assets	674,690,053	622,798,084
Capital work in progress		
	674,690,053	622,798,084
CURRENT ASSETS		
Stock & stores	103,631,517	97,743,049
Work-in-progress	3,697,418	636,344
Debtors, advances & other receivables	3,806,304,465	3,141,555,472
Endowment fund for sports	80,000,000	
Short term investments	1,685,000,000	2,405,000,000
Cash and bank balances	55,885,874	198,095,297
	5,734,519,274	5,843,030,162
TOTAL ASSETS	6,409,209,327	6,465,828,246
EQUITY/CONTRIBUTION & SURPLUS		
Equity/Contribution	39,068,294	39,068,294
Surplus up-to previous year	5,963,238,253	5,680,830,324
Surplus (Deficit) for the year	(217,815,430)	282,407,929
	5,745,422,823	5,936,238,253
CURRENT LIABILITIES		
Deposits	62,596,875	47.200,498
Creditors and accounts payable	560,294,283	415,147,896
Accruals and other liabilities	1,827,052	1,173,305
	624,718,210	463,521,699



Ministry of Water & Power, Govt. of Pakistan, Islamabad (As on June 30, 2010)

Senior WAPDA Managers (As on June 30, 2010)

(As on June 30, 2010)		Mr. Shakil Durrani		
Member (Water) Syed Raghib Abbas Shah	Member (Power) Mohammad Qasim Khan	Acting Member (Finance) Syed Nazakat Ali Shah	Secretary WAPDA Mr. Muhammad Imtiaz Tajwar	Managing Director (Admin) Mr. Naveed Akram Cheema
GM (Coord & Mon) Water Mr. Muhammad Ali Shah	GM Hydel (Operation) Mr. Hamdillah	GM (CCC) Mr. Muhammad Hanif		DG (S&GA) Mr. Pervaiz Ahmed
GM (Planning & Dev) Mr. Irshad Ahmed	GM (Finance) Power Mr. Anwar-ul-Haq	GM (Finance) Power Mr. Anwar-ul-Haq		DG (MS) Mr. M. Ashraf
GM (Technical Services) Dr. Muhammad Siddique	GM (Training) Brig Tariq Hamid Khan	Chief Auditor Mr. Ghulam Mustafa		Vice President of WAPDA Sports Board Mr. M. Khalid Mahmood
GM (Hydro Planning) Mr. Maqsood Shafiq Qureshi	CE/Principal WEA Faisalabad M. Mansha Zahid	DG (Finance) B&C Syed Nazakat Ali Shah		
CEO/GM (DBDO) Dr. Izhar-ul-Haq	CE/Principal W.S.C. Islamabad Eng. Kiramat ullah	DG (Insurance) Mr. Najeeb Tariq		
GM (Neelum Jhelum) Mr. Husnain Afzal				
GM (Central) Water Mr. Manzoora Ahmed Gabole				
GM (Projects) South Mr. Ali Sher Baloch				
GM (Projects) North, Mr. Fazale Mehbood				
GM (M&S) Mr. Atta ullah Khan				
GM (Tarbel a Dam) Mr. Khanzada Khan				
GM (GBHP) Malik Asif				
GM (Finance) Water Mr. Iftikhar Rafique				
GM (Projects) N. Areas Brig (R) Muhammad Zareen				
GM (CDO) Dr. Muhammad Akram Kohlown				
Consultant (Mega Dams) Mr. Abdul Khaliq Khan				
Advisor (CCC/WAPDA) Mr. Mirajuddin Khan				

Minister for Water and Power

Raja Pervez Ashraf

Mr. Shahid Rafi

Secretary

Chairman WAPDA Mr. Shakil Durrani



POWER WING



MANAAA

Power Generation (Hydel)

HYDEL ENERGY GENERATION

The total installed generating capacity of 13 WAPDA Hydroelectric Power Stations is 6444.00 MW. These Power Stations produced 27,927 GWH of the net electrical energy during the year 2009-10.

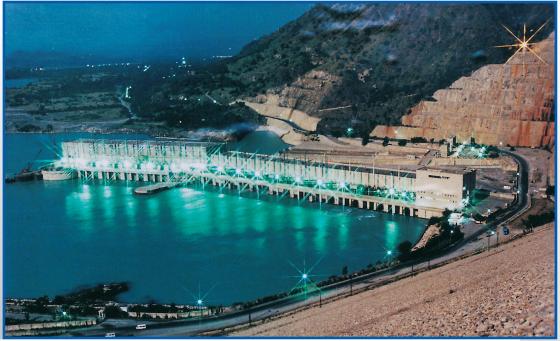
The station-wise performance is given as under:

TARBELA

The annual generation parameters of the Power Station having

Repair of Gen: Rotor Support Blocks of Unit-2 (Electrical works)

This unique opportunity chance was availed on 18-01-2010, thorough inspection of the stator winding of unit-2 carried out, and winding was upgraded from class-B to Class-F in 1997-98. The unit was restored on 20-02-2010 after carrying out additional threading & binding of the stator bars and coating the complete stator with layer of glyptyle.



total installed capacity of 3478 MW (10 units of 175 MW and 4 units of 432 MW each) are as follows:

• Repair / rehabilitation of Gen: Rotor Support Winding Unit-4

The stator winding of the unit got damaged on 04-10-2009. The repair of generator was carried out by Tarbela Engineers & Tech: Staff in minimum possible time and restored the unit for commercial operation.

Net Electrical Output	13833.5791 MKWH
Maximum monthly generation during August, 2009	2,657.620 MKWH
Maximum daily generation on Sep 06, 2009	86.661 MKWH
Maximum load attained on Sep 03, 2009	3,642 MW

Brief Description of Major works carried out during the year 2009-10:

Tarbela Power House

• Station Collapse/Total Shutdown

On 23-06-2010 at 1715 hrs: during hurricane/dust storm in Tarbela, a heavy jerk observed on the system resulting in the tripping of all generating units and Transmission lines at Tarbela. Upon inspection some spares/accessories of 500KV DSWs B16010(R & B Phases), B16020 (R-Phase), B17020 (R-Phase) and B18020 (R-Phase) found damaged/broken, which were replaced with spare ones. Unit No. 1 \sim 12 were back on bar on 23-06-2010 and Unit No. 13 \sim 14 B.O.B. on 24-06-2010 after necessary repair and MIG welding.

SUCCESSFUL MODIFICATION IN TURBINE INLET VALVES FOR UNITS 1&2.

Power tunnel No. 1 was shutdown in March, 2010 for modification and repair works in inlet valve of Units 1 & 2

carried out by Resident Engineer (Mechanical). Till date, performance of inlet valve has been trouble free with no sign of noise or vibration at full guide vanes opening and reservoir level. These were also checked under partial and full load operation condition and found without sign of vibration.

TUNNEL NO.3 SHUTDOWN

During last few years leakage through disc of inlet valve of Units 12, 13 & 14 was observed. The leakage reached beyond the extent of adjustment. The tunnel No.3 was shut down on 24-12-2009 for one month and then extended up to 07-02-2010. The tunnel was pressurized and final adjustment of disc seals of inlet valve Units $11 \sim 14$ carried out without the assistance of foreign experts. The sealing through inlet valve disc was tested after adjustment and found drop tight.

GHAZI BAROTHA

The annual generation parameters of the Power Station having total installed capacity of 1450 MW (5 units of 290 MW each) are as follows:

6,715.606 MKWH
737.050 MKWH
25.828 MKWH
1,450 MW

Brief description of major works carried out during the year 2009-10.

Major Works

The 515/V3/18KV, 107 MVA Unit # 4 Generator Transformer (Yellow Phase) tripped on "Buchholz Relay" due to internal fault in the High Voltage winding. The above said transformer was replaced with a spare one by 0 & M staff of Power Station Barotha .

MANGLA POWER STATION

With the total installed capacity of 1000 MW from 10 Units of 100 MW each, the Power Station has been one of the major contributors to the National Grid during the year. The maximum load of 1150 MW was recorded on various dates. The Power Station contributed 4772 million units during the year, which are 25 million units less than the last year generation (4797 million units). Total generation since commissioning is 188.324 billion units (KWH) upto 30.06.2010. Brief data of 2009-10 is given below:

Major Works

- 11 KV Power Supply Cables and Control Cables for Intake & Spillway were laid and commissioned under Mangla Dam Raising Project.
- Testing & commissioning of Intake gate No 1-5 was carried out from New Intake Control Room at El. 1264 ft SPD.
- Repair work of concrete slab of Tail-race channel of Unit No.9&10 was carried out under Mangla Dam Raising Project
- Consequent upon bursting of 132 KV Cable (Blue Phase) for Unit No.1 due to its insulation failure at 2242 hours dated 28-06-2009, all other oil filled cables of Unit No1-8 laid adjacent and beneath the burst cable got damaged, depressurized and became unserviceable. 220 KV XLPE cables for Unit No.9&10 running lower most also got damaged but were declared repairable through jointing. Resultantly all the units of Mangla Power Station were rendered out of operation due to severing of 132 and 220 KV power connection Power House and Switchyard
- Overhead interconnection lines were constructed between Power House to switchyard for generating unit No.1-8 for restoration of power connection and dispersal of power to Switchyard. The repairing of 220 KV XLPE Cables for Unit No.9&0 was carried by applying 2 No. straight through joints.

Financial Benefits

The IRSA indented 5.22 MAF of storage releases for irrigation purpose during 2009-10 against 5.51 MAF during the previous year 2007-08. Resultantly, Mangla Power Station generated 4772 million kilowatt hours (MKWH) of electricity which were 25 million units i.e. 0.99% less than the last year generation (i.e. 4797 MKWH).

Hydel Training Centre Mangla

Hydel Training Center Mangla is playing a pivotal role in capacity building of officers and officials of Hydel Organizations.

MANGLA POWER STATION

Net Electrical Output	4,638.563 MKWH
Maximum Monthly Generation attained during Sep. 2008	725.511 MKWH
Maximum Daily Generation attained on Sep. 22, 2008	27.600 MKWH
Maximum load attained on various dates	1150 MW

It is the sole institution functioning at present to impart training to all the technical/non-technical employees of WAPDA Water and Power wing formations. During the period under report sixteen (16) junior engineers and two hundred seven (207) officials have been imparted training. Fifty-six (56) officials participated in departmental Promotion Exams conducted under control of this training centre. In addition to above, fiftytwo (52) students of Engineering Universities have completed their internship from Hydel Training Centre Mangla.

Following courses were conducted for the employees of Hydel Organization:

Jr. Engineer Induction Course (TC-01), Special Junior Induction Course (TC-01) on the instruction of Member (Power) WAPDA, Advance Operators Training Course (TC-061), Basic Operators Training courses (TC-050), Basic Craftsman training course (Electrical-TC-060). Basic Craftsman training course (Mechanical-TC-060), Ministerial Staff Training Course (Jr. Clerks/ Sr. Clerks/Assistants)(M-01), Training Course of Steno Grade-II to Grade-I (M-03), Drawing staff Training Course (TD-01), Training course of store staff (S-03), Training course of Telephone Staff (TL-01), Computer Office application course (CA-01) for local staff and internship training course for Student Engineers.

WARSAK

The annual generation parameters of the Power Station having total installed capacity of 243 MW (4 units of 40 MW and 2 units of 41.48 MW each) are as follows:

CHASHMA

Introduction

Chashma Hydel Power Station is located on the River Indus close to right embankment of Chashma Barrage. It is low head Hydel Power Station utilizing available head of 04 meters to 13 meters. Bulb type turbines have been installed here and

WARSAK

Net Electrical Output during FY 2009-10	1054.407 MKWH
Maximum monthly generation attained during Aug, 2009	135.822 MKWH
Maximum daily generation attained on 05.09.2009.	5.033 MKWH
Maximum load attained on 14.09.2009	213 MW

Brief description of major work carried out during fiscal year 2009-10.

Major overhaul of Unit No.2 carried out w.e.f 09-10-2009 to 28-05-2010.
2nd Highest generation of 1063-261 MKWH has been recorded in financial year 2009-2010. Since commissioning of the station.

it is the 1st one of such type in Pakistan. It is run-of-river plant and its operation / loading is dictated by the releases downstream Chashma reservoir being controlled by the Indus River System Authority (IRSA).

A large quantity of trash travels towards intake of Power House. The quantum of trash increases manifold during flood and rainy seasons. All the available trash disposal resources are best coordinated to minimize the generation loss for obtaining optimum output. The removal of trash is being handled with the following installed equipment:

- 1. Trash Rack Cleaning Machines
- 2. Mobile Crane
- 3. Dragline
- 4. Monorail Cranes

During the year, huge quantity of trash removed, was 33791 m3 with the help of above-mentioned equipments.

SMALL HYDEL POWER STATIONS

Eight (08) Small Hydel Power Stations Rasul (22.0 MW), Dargai (20.0 MW), Nandipur (13.8 MW), Shadiwal (13.5 MW), Chichoki (13.2 MW), Kurram Garhi (4.0 MW), Renala (1.1 MW) and Chitral (1.0 MW) with a total installed capacity of 88.6 MW collectively generated 333.070 GWH (Net Electrical Output) during the year.

HYDEL DEVELOPMENT PROJECTS

To meet the ever increasing power demand of the Country, and to ensure optimized, sustainable and economical power supply, WAPDA has undertaken rehabilitation/ refurbishment of existing old Hydel Power Stations in addition to construction of new Hydel Power Projects.

The details of the rehabilitation projects, both ongoing and proposed, under jurisdiction of WAPDA Hydro-Electric are as under:

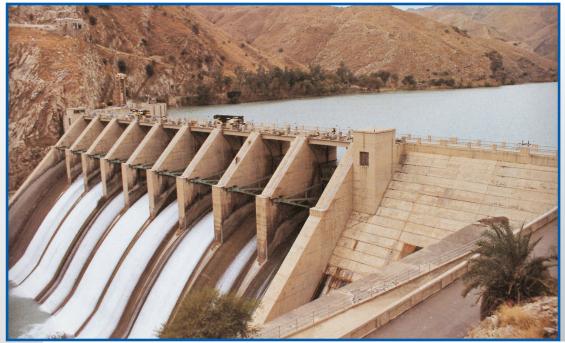
CHASHMA

Net Electrical Output during FY 2009-10	1058.076 MKWH
Maximum monthly generation attained during May, 2010	122.989 MKWH
Maximum daily generation attained on May 24, 2010.	4.348 MKWH
Maximum load attained on 7th& 8th July, 2009	184 MW

REHABILITATION OF JABBAN HYDROELECTRIC POWER STATION

Jabban Hydroelectric Power Station is located in district Malakand, (KPK), at a distance of 45 Km from the city of Mardan and 7 Km upstream of 20 MW Dargai Hydroelectric Power Station. The British Government constructed the Jabban Hydroelectric Power Station in 1937 with three units of installed capacity 3.2 MW each (9.6 MW in total) on Upper Swat Canal. Addition of 2 Units was made in 1952 (5 MW each) increasing the total installed capacity to 19.6 MW. The power plant The detail design, tender documents and prequalification of constructors completed by M/s NESPak in 2008. Tenders were issued to the six (6) pre-qualified JVs in July, 2008. Tenders were opened on 03-12-2008. Only two bids from the following JVs were received:-

- Bid of M/s HMC-Energy Power (Brazil) was non-responsive.
- Bid of M/s HRL-CCPG (China) JV was evaluated in detail.



Warsak Dam

utilizes the water of upper Swat Canal through Benton & Barkit Tunnels.

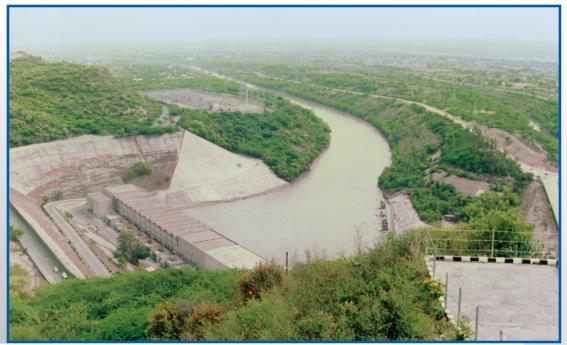
The 70 year old Power Station was badly damaged due to a fire incident on 12-11-2006. Restoration of old units was not possible due to extent of damage. The Authority decided to carry out rehabilitation of power station on "Fast Track basis."

PC-I for rehabilitation of Jabban Hydroelectric power station amounting to Rs.1037.552 Million (FEC Rs. 573.71 Million) was approved by ECNEC on 19-09-2007. The consultancy services agreement was signed with M/s NESPAK on 31-08-2007 at a total cost of Rs.53.632 million for detail design, preparation of tender documents and construction supervision. After bid evaluation and settlement of all deviations through lengthy negotiations with the successful bidder HRL-CCPG JV, the letter of acceptance was signed on 15-10-2009 at total contract price of Rs. 2087 million (FEC US\$ 17.904 million). Dismantling/disposal of old Powerhouse, all of five (05) Penstocks, 66 KV Switchyard and disposal of three (03)power transformers have been completed. 20% of CIF cost of electromechanical equipment and 15% of civil works has been released to the contractor. Order to commence issued to contractor on 17-02-2010 with the date of commencement as 19-02-2010. Scheduled completion is 21 months from the commencement date i.e. 19-11-2011. Anticipatory approval of revised PC-I with a total project cost of Rs. 3734.396 million has now been accorded by Chairman ECNEC on June 16, 2010. Formal approval of the revised PC-I is expected in ECNEC's next meeting.

AFD France committed to provide 25 Million Euro for Jabban Rehabilitation Project. Loan agreement between GoP and AFD France was signed on July 26, 2010 which was previously pending for want of approval from ECNEC. A subsidiary loan agreement between GoP and WAPDA is in finalization stages. Strenuous efforts are being made by WAPDA to get the project completed in time.

REHABILITATION OF MANGLA HYDEL POWER STATION Mangla Dam Project completed in 1967 is located on River increase water head by 40 ft and power generation of 644 GWH per annum and further flood alleviation.

In the light of increase in aforesaid parameters, WAPDA intends to carry out a feasibility study for up-gradation & refurbishment of the old generating units and allied equipment of Mangla Power Station to ensure their optimized, reliable and sustainable operation in the Post Raised Mangla Dam Scenario. Electrical & mechanical equipment of the existing units after having spent 30 years or more of their useful lives deteriorated due



Mangla Power House

Jhelum at about 120 Km from Capital Islamabad. The Power House was completed in four stages, the initial phase comprising of four units of 100 MW each was completed in 1967 ~ 1969. The first extension of Units 5 ~ 6 (2X100 MW) was completed in 1974 while second extension comprising units 7 ~ 8(2X100 MW) was completed in 1981. The project attained its maximum capacity of 1000 MW with the final extension of units 9&10(2X100 MW) in 1993-94. During high reservoir level period, Mangla is able to generate 1150 MW against the rated capacity of 1000MW due to permissible over loading of 15%.

Since, the reservoir capacity had reduced to 4.674 MAF from 5.88 MAF due to sediment deposition, Raising of Mangla Dam by 30 ft. was taken in hand which has now completed. The Project will provide additional water storage of 2.88 MAF,

to aging effects resulting in reduction of efficiency and dependability.

The intended feasibility study is aimed to assess the present operating conditions of existing civil structures & plant machinery and study of various options of refurbishment of electrical & mechanical equipment and to recommend the most viable option for up-gradation / refurbishment of Power House generating units for achieving optimum benefits as a result of enhanced water availability and increased head after Mangla Dam Raising.

Seven Consulting Firms/JVs were short-listed on the basis of their EOIs, invited by WAPDA for the above task. Requests for Proposals (RFP) were issued to short-listed Consulting Firms/JVs on 05-12-2009 with last date of submission as 17th

February, 2010. Six Consulting Firms/JVs have submitted their Proposals upto the due date. Initial technical evaluation of these proposals was carried out and sent to Standing Committee. Standing Committee reviewed and sent the final report to Secretary WAPDA to get the approval from the Authority for technical ranking of the consultants and authorization to open the financial proposals of the First-Ranked Joint Venture. The Authority referred back the case to Standing Committee for review. The process of hiring of consultancy services will now be finalized after the review by Standing Committee.

Total cost of the Project is roughly estimated to be US \$ 300 to 500 million. However, better cost estimation of the project will be available after completion of the above study. USAID has shown interest to finance the subject Project.

REHABILITATION OF WARSAK HYDROELECTRIC POWER STATION

Warsak Hydel Power Station is located on River Kabul at 30 KM in North – West of Peshawar. The Project was completed under Colombo Plan under two phases and financed by Canadian government. The first phase completed in 1960 consisted of construction of Dam, irrigation tunnels and installation of four power generating units, each of 40 MW capacity with 132 KV transmission system which was completed in 1960. Two additional generating units each of 41.48 MW capacity were added in 1980-81 in the second phase. The total installed capacity of the station thus became nearly 243 MW.

WAPDA intends to carry out a Feasibility Study for rehabilitation, up-gradation & modernization of electrical & mechanical equipment of Warsak Hydroelectric Power Station to ensure its reliable and sustainable operation at the total installed capacity of 243 MW. The electrical & mechanical equipment of the existing units having spent 50 years (Units $1 \sim 4$) and 30 years (Units $5 \sim 6$) of their useful lives, have deteriorated due to aging effects resulting in reduction of reliability and dependability. The intended feasibility study is aimed to study and determine viable solutions and required works for rehabilitation, upgradation and modernization of old E&M equipment, recommend necessary remedial measures to overcome the defects in civil structures and to carry out sedimentation management studies. Further, preparation of detail design, tender documents and PC-I for Warsak Rehabilitation Project (Phase-II) will also be a part of the required consultancy services.

Seven consulting firms/joint ventures were short-listed on the basis of their EOIs, invited by WAPDA for the above task. Requests for proposals (RFP) have been issued to the short-listed consulting firms/JVs on 23-01-2010 with last date of submission of proposals as 26th March, 2010. Four Consulting Firms / JVs submitted their proposals within due date. Initial technical evaluation of these proposals was carried out and sent to Standing Committee. Standing Committee is reviewing the initial technical evaluation to send the final report to Secretary WAPDA to get the approval from the Authority for technical ranking of the consultants and authorization to open the financial proposals of the First-Ranked Joint Venture.

WAPDA approached Canadian High Commission Islamabad through EAD to seek Financial Assistance from CIDA as was done earlier for the first phase of Warsak Rehabilitation Project (1996 \sim 2006). But CIDA showed inability to provide any funding for the proposed rehabilitation scheme. WAPDA then requested EAD on 22.12.2009 to approach JICA, KFW, ADB, IDB or any other Financing Agency to provide funds for the subject Project.

Economic Affairs Division has forwarded above request of WAPDA to Asian Development Bank. In response ADB demanded a Concept Note of the Project from WAPDA which was provided. The reply from ADB is still awaited.

Approximate cost of the Project is US \$ 200 to 300 million.

INSTALLED CAPACITY OF HYDEL POWER STATIONS

STATION	WATER WAY (RIVER/CANAL)	UNITS NO.	CAPACITY OF Each Unit (MW)	INSTALLED Capacity (MW)	DATE OF Commissioning
TARBELA	INDUS (Reservoir)	1~4	175	700	Jul. 1977
		5~8	175	700	Dec. 1982
		9~10	175	350	Apr. 1985
		11~14	432	1728	Feb. 1993
			TOTAL	3478	
GHAZI BAROTHA	INDUS (D/S Tarbela)	1	290	290	Jul. 2003
		2	290	290	Aug. 2003
		3	290	290	Oct. 2003
		4	290	290	Dec. 2003
		5	290	290	Mar. 2004
			TOTAL	1450	
MANGLA	JHELUM (Reservoir)	1~4	100	400	1967/1969
		5~6	100	200	Mar. 1974
		7~8	100	200	1981
		9~10	100	200	1993-1994
			TOTAL	1000	
WARSAK	KABUL (Reservoir)	1~4	40	160	Jul. 1960
WATIOAR		5~6	41.48	82.96	Mar. 1981
			TOTAL	242.96	Mai. 1301
СНАЅНМА	INDUS (Chashma Barrage)	1	23	23	May. 2001
		2	23	23	Apr. 2001
		3	23	23	Apr. 2001
		4	23	23	Mar. 2001
		5	23	23	Mar. 2001
		6	23	23	Feb. 2001
		7	23	23	Dec. 2000
		8	23	23	Dec. 2000
		0	TOTAL	184	Dec. 2000
RASUL (R)	UJC*	1~2	101AL	22	Jul. 1952
RASUL (R)	UJU	1~2		22 22	Jul. 1952
	Swat**	1~4	TOTAL 5	20	Dec. 1050
DARGAI (R)	Swat	1~4			Dec. 1952
	1100***	1 0	TOTAL	20	May 1000
NANDIPUR ®	UCC***	1~3	4.6	13.8	Mar. 1963
	11.10*	1 0		13.8	1 1001
SHADIWAL (R)	UJC*	1~2	6.75	13.5	Jan. 1961
			TOTAL	13.5	4050
CHICHOKI (R)	UCC***	1~3	4.4	13.2	Aug. 1959
		<u> </u>	TOTAL	13.2	E 1 4050
K/GARHI (R)	KUCHKOT****	1~4	1	4	Feb. 1958
			TOTAL	4	
RENALA (R)	LBDC****	1~5	0.22	1.1	Mar. 1925
			TOTAL	1.1	
CHITRAL (R)	LUDKO	1~2	0.3	0.6	1975
		3~4	0.2	0.4	1982
			TOTAL	1	
	TOTAL HYDEL INSTALLED C	APACITY		6444.0	

(R) *

Run-of-River (Canal) Projects Upper Jhelum Canal from River Jhelum Swat Canal from River Swat **

**** Upper Chenab Canal from River Chenab
Kachkot Canal from River Kurram
Lower Bari Doab Canal from Balloki Headworks on River Ravi