

2022
Managing Director's
Report

NATIONAL ENGINEERING SERVICES
PAKISTAN (PVT.) LIMITED





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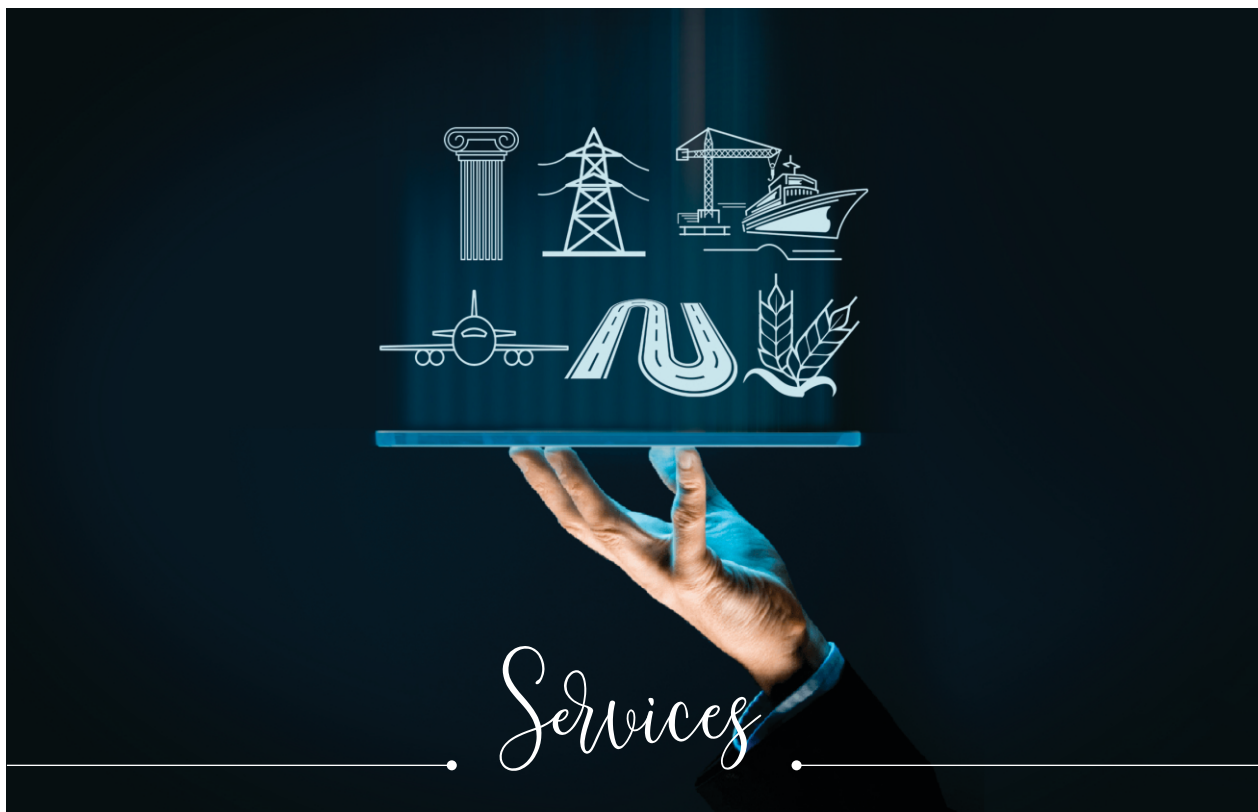
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- Front-end Engineering Design
- Technical and Economic Feasibility Studies
- Site Selection Studies
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- Topographic Surveys and Mapping
- Geographical Information System (GIS)
- Geotechnical and Soil Investigations
- Geological, Geophysical, Hydrological and Environmental Surveys
- Traffic Surveys
- Commercial Surveys
- Socio-economic Surveys
- Instrumentation and Monitoring
- Materials Prospecting

Design

- Design Vetting
- Preliminary Designs
- Numerical Modelling
- Model Tests
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- Detailed Designs and Specifications
- Construction Drawings
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Tender and Contract Documents

- Bill of Quantities, Technical Specifications, Cost Estimates and Schedules
- Tender Documents for all Contracts including Engineer-Procure-Construct (EPC) & Public-Private Partnership (PPP)

- Pre-qualification of Contractors
- Evaluation of Tenders and Recommendations
- Contract Documents

Construction Supervision & Contract Management

- Project Management
- Contract Administration
- Progress Monitoring and Control
- Works' Supervision and Quality Control
- Equipment Inspection and Commissioning
- Measurements
- Certification of Periodic Payments to Contractors

Post-construction Services

- Third-party Validation and Monitoring
- Completion Reports
- Operation and Maintenance Manuals
- Routine Maintenance and Safety Inspections
- Retrofitting and Rehabilitation
- Conservation of Structures
- Performance Monitoring

Specialised Services

- Institutional Strengthening and Capacity Building
- Tourism Planning
- Inspection of Dams and Barrages
- Development of Building Codes
- Asset Valuation
- Services for PPP and BOT (Build-Operate-Transfer) Projects
- Mines and Minerals
- Trainings
- Building Codes
- Landslide Study and Mitigation
- Deep Excavation Support

FIELDS OF ACTIVITY

- Water Resources Planning, Drainage, Salinity Control and Land Reclamation, Dams and Barrages, Irrigation and Drainage Systems, Water Resources Development and Management, Flood Management and Forecasting/Warning Systems and Institutional and Social Development
- Power Transmission and Distribution, Substations, Hydropower, Thermal Power, Nuclear Power, Rural Electrification, Renewable Energy, Supervisory Control and Data Acquisition (SCADA) & Telecommunications and Oil & Gas
- Motorways, Highways, Urban Roads, Rural Roads, Grade-separated Interchanges, Bridges and Flyovers, Subways and Underpasses, Tunnels, Computer Generated Transport Modelling and Planning, Rapid Mass Transit System, Railways, 3D Animation of Highway Projects (Real-life Simulation), Steel Structure Design, Pedestrian Bridges, Bus Shelters and Intelligent Transport System (ITS) Arrangement for Operational Facility
- Geotechnical, Geo-environmental, Geohazards, Site Investigations, Geological Characterisation, Geophysics Surveys, Construction Materials and Minerals, Dams, Landslide Mitigation, Seismotectonic Studies, Seismic Risk Evaluation, Ground Improvement, Problematic Ground Mitigation and Deep Excavation Support Systems
- Airport Terminal Buildings, Hangars, Runways, Taxiways and Air Traffic Control Towers
- Deep Seaports, Fish Harbours, Marine Terminals, Container Terminals, Inland River Navigation and Marine Jetties
- Architectural and Engineering Design, Healthcare Buildings, Educational Buildings, High-rise Buildings, Corporate Office Buildings, Commercial and Community Buildings, Sports and Recreational Facilities, Industrial Buildings, Low-cost Housing, Residential Communities, Urban/Rural Planning, Slum Upgradation, Landscaping, Interior Design and Rehabilitation & Refurbishment Works
- Seismic Hazard Microzonation, Disaster Risk Reduction and Management Studies & Trainings, Implementation Strategies, Policy Formulation, Residential Communities, Advocacy Planning, Preparation of Zoning Regulations and Bye-laws, Tourism Planning, Regeneration and Building Codes
- Water Supply, Sewerage, Stormwater Drainage, Solid Waste Management, Plumbing, Water and Wastewater Treatment
- Site Characterisation/Baseline Data for Environmental Impact Assessment, Environmental Risk Assessment, Environmental Planning and Management, Environmental Health and Safety, Air and Noise Pollution Control, Climate Change Studies, Contaminated Site Assessment and Mitigation, Environmental Audit and Resettlement Action Plans
- Steel Mills, Automobile Plants, Cement Plants, Fertilizer Plants, Polyester Plants, Sugar Plants, Chemical Industrial Plants and Textile Units
- Information Technology (IT) and Software Development, Business Process Re-engineering, Management Information System, Database Applications, Web Portals, Data Warehousing, Data Conversion, Networking and Data Centres, Satellite Imagery Processing, Digital Terrain Modelling, Global Positioning System (GPS) Survey, Remote Sensing, Geographic Information System (GIS) Development and Map Digitisation
- Land Surveying, Cadastral Surveying, Hydrographic Survey, Geodetic Survey, Drone Survey, Monitoring Design and Supervision of Heating Ventilation and Air-conditioning (HVAC), Fire-fighting, Elevators, Escalators, Platform Screen Doors, Building Management Systems and Building Energy Audits
- Agriculture Development and Management, On-farm Water Management, High-efficiency Irrigation Systems, Soil and Water Conservation, Social and Environmental Institutional Development, Natural Resources Development (Aquatic Life Study, Monitoring and Evaluation Tasks, Horticulture/Floriculture Forestry, Rangeland Management, Livestock, Dairy Development & Wildlife Management and Socio-economic Project Impact Evaluation



Fifty years of professional elegance and still counting, Alhamdulillah! The National Engineering Services Pakistan (Pvt.) Limited (NESPAK) is celebrating 50 years of its existence this year. NESPAK was founded in 1973 with the sole objective to reduce foreign dependence in the consultancy engineering. It soon rose to prominence among its contemporary firms due to the unflinching faith of its founders in hard work and commitment to excellence. The seeds of dedication sown by our predecessors have turned NESPAK into a strong tree laden with the fruits of success, prosperity and development. As the time goes by, the graph of NESPAK's performance continues to go upward.

NESPAK's contribution to Pakistan's national development has been enormous. In the first place, it not only generates its own resources for its financial and managerial operations but also contributes to the national exchequer through the revenues paid to the Government both by the Company and its employees. Secondly, NESPAK provides its state-of-the-art services for various projects of prime importance in Pakistan, thus raising the bar in the national arena. NESPAK is very well recognised at the international level due to its high-grade performance on various foreign projects. That is why the workforce trained by this Company is widely welcomed when it comes to job selection internationally.

NESPAK exhibited an outstanding performance during the Financial Year 2021-22 in terms of business acquisition. The Company secured record 180 projects, achieving a big milestone in its 50-year history. These include 176 projects in Pakistan and four (4) overseas. The business acquisition during the Year 2021-22 stands at Rs. 14.6 billion, showing more than 10 percent increase than the last year.

The important projects acquired during this fiscal include Revival of 415MW Guddu Combined Cycle Power Plant, Transmission Line from SECL Power Plant in Thar Block-1 to Matiari DC Converter Station, Energy Resource Centre, Lahore, ADB-funded Project Readiness Financing for Punjab Water Resources Management, Subprojects of SOP-1, Karachi Water & Sewerage Services Improvement Project, Odero Lal Branch Canal Project, Sindh, Chashma Right Bank Canal Project, Punjab. Chiniot Dam Project, Attabad Lake Hydropower Project, Bara Dam Multipurpose Project, Khwazakhela-Besham Motorway, Khyber Pakhtunkhwa, PSDP Road Projects in North & South Punjab, Karachi Circular Railway, Dualisation of PQA Main Access Road, Chitral-Booni-Mastuj-Shandur Road, Alipur Farash Low-cost Housing Scheme, Islamabad, FGEHA Employees Scheme at Mauza Tamma & Mohriyan, Islamabad, FG Servants Colony, Quetta, Minawar Apartments Scheme, Gilgit-Baltistan, Punjab Central Business Development Project and Consular Services Building at Pakistan Mission in Kabul, Afghanistan.

NESPAK has again won laurels in the world consultancy ranking this year. NESPAK has been ranked for the fourth consecutive year on the US-based ranking journal, ENR (Engineering News-Record) magazine in the Top International/Global Construction Management/Program Management Firms List, published as part of the ENR Top International/Global Contractors feature in the magazine's August 2022 issue. The ENR has ranked NESPAK 13th this year among the top non-US firms specialising in total global construction management and program management.

NESPAK has been implementing strict monitoring policies and quality standards through yearly audits. An effective quality management system is in place to set and achieve

the performance goals. During the year, NESPAK audit officials visited various Divisions and Offices to ensure compliance with the Quality Management System (QMS). The external Surveillance Audits were conducted in January 2022 at Karachi and Lahore Offices and in July 2022 at Lahore and Islamabad Offices by the Lead Auditor of TUV Austria Bureau of Inspection & Certification to check compliance with the requirements of the ISO 9001:2015 Standard. No corrective action requests were raised and NESPAK Certification was recommended up to February 11, 2024. The external audits were also conducted by the same in December 2021 at the NESPAK Head Office. NESPAK has received certifications of all the three standards including ISO 14001:2015 & 45001:2018. We were the first engineering consultants to achieve ISO 9001 Certificate in the year 1998 and now these three certifications together have again put us at the top as the premier engineering consultancy organisation to be certified to all the three Standards.

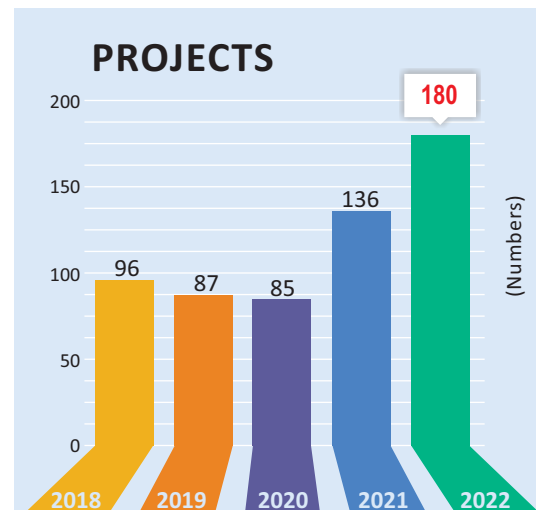
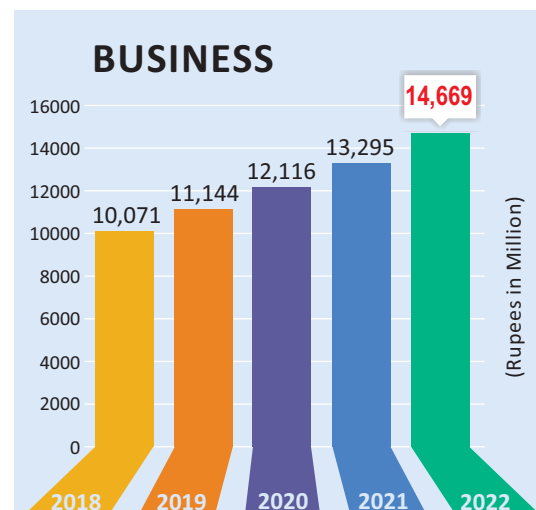
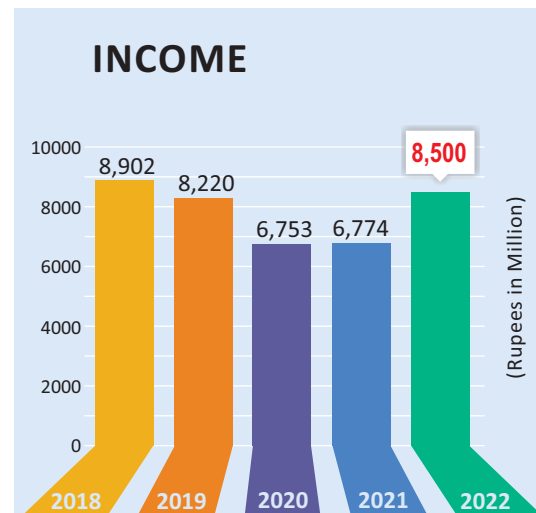
Training for readying the workforce for new skills and tasks has been top priority at NESPAK. During the year, the Company conducted 28 training sessions comprising 21 online lectures including eight (8) lectures delivered by foreign guest speakers via Zoom. The total number of NESPAK employees including professionals and para-professionals stands at 4,607.

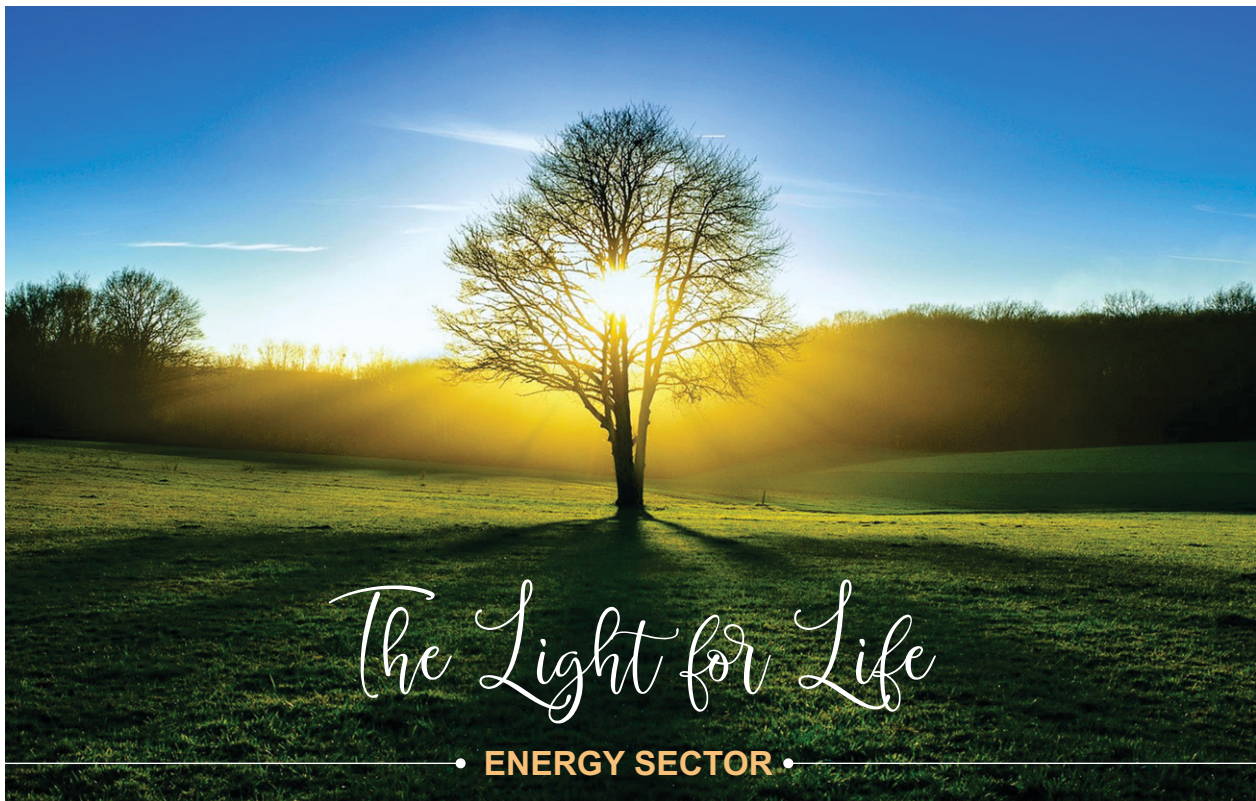
NESPAK is not lagging behind in making efforts for research and development. Established about three years ago, the Research and Development Cell at NESPAK is progressing swiftly with its basic agenda of developing work procedures, guidelines and manuals through all working Divisions and Offices. To date, 85 documents/manuals covering various work procedures have been prepared and 25 are in the making. The R&D Cell is contributing actively to promote industry-academia linkages to encourage pragmatic research activities at the national level.

With the grace of the Almighty, NESPAK continued to grow despite the country's struggling economy marred by the Corona pandemic and climate change. It is hoped that with better training and earnest efforts to seek business in Pakistan and abroad, particularly in the Middle East, Central Asian States and Africa. NESPAK will win new clientele to bring prosperity and development for itself and Pakistan.



DR. TAHIR MASOOD
Managing Director & President





NESPAK came up with a magnificent performance in the Energy Sector during the Financial Year 2021-22 as it secured 24 new projects worth Rs. 145 billion in the fields related to the hydel and thermal power, transmission lines and grid stations. Two new projects in the domain of solar and energy conservation have been acquired for the first time in the history of NESPAK. These are the Energy Resource Centre, Johar Town, Lahore and Validation of Solarisation and Retrofitting of Energy Inefficient Appliances in 13 Punjab District Hospitals. NESPAK continued to render its valuable services for 20 ongoing projects worth Rs. 2,455 billion in various energy-related fields. The Company completed its services for nine (9) ventures worth Rs. 43 billion including two thermal power projects during the fiscal year.

Among the fresh projects during the year, NESPAK entered into an agreement with the Central Power Generation Company Limited (CPGCL) to provide consultancy services for Revival of 415MW Combined Cycle Power Plant Guddu, Siemens Block. NESPAK scope of work comprises initial health assessment report of the power plant, preparation of front-end engineering and bidding documents, project planning, design review, construction supervision, testing & commissioning and the defects' liability period services. The project will be completed at a tentative cost of Rs. 100 billion in two years.

The National Transmission and Distribution Company (NTDC) has entrusted NESPAK with 500 kV Double Circuit Quad Bundle Transmission Line from SECL (Shanghai Electric Company Limited) Power Plant in Thar Block-1 to DC Converter Station at Matiari. NESPAK services include construction supervision and allied activities along with testing & commissioning of this Rs. 22 billion project with

*500 kV Double Circuit
Quad Bundle
Transmission Line from
SECL Power Plant in Thar
Block-I to Matiari
Converter Station, Sindh*



the foreign component of Rs. 11.5 billion. The project is part of the NTDC's overall power development programme for strengthening its transmission system by dispersing power from the Thar SECL Power Plant. The construction of 220km transmission line is divided into three lots having separate contracts.

The Punjab Energy Department has engaged NESPAK for tender documentation, design review and construction supervision of the Energy Resource Centre (ERC) Building

Installation of solar panels in District Gujrat Hospital for Solarisation and Retrofitting at 13 Punjab Hospitals Project



in Johar Town Lahore. The Rs. 5 billion project is also named as the Net Zero Energy Building. The ERC would be a state-of-the-art energy-efficient office building which will be Platinum LEED Certified. This building will serve as an educational platform for disseminating information on the concept of energy efficiency and conservation. The ERC will also be used for displaying renewable energy technologies and possible prototypes in an exhibition room. The ERC auditorium will be used for conducting seminars on energy efficiency and conservation.

A NESPAK-Barqaab Joint Venture was assigned by the NTDC with tender documentation, design review and construction supervision of 500/132kV grid station to be constructed at the Allama Iqbal Industrial City, Faisalabad. The project is likely to be constructed in three years at tentative a cost of Rs. 5 billion.

NESPAK and the Punjab Energy Efficiency and Conservation Agency have signed a project to validate solarisation and retrofitting of energy inefficient appliances with energy efficient appliances of 13 District Hospitals in Punjab. The Rs. 600 million project is being implemented in the district

hospitals of Bahawalnagar, Vehari, Sahiwal, Toba Tek Singh, Khanewal, Gujrat, Sialkot, Narowal, Jhelum, Chakwal, Khushab, Attock and Multan. These installations ranging from 80 kW to 850 kW shall have cumulative capacity of more than 6MW. The solarisation and retrofittings are being performed under the Punjab Green Development Program.

Among the ongoing projects, work on the Diamer Basha Dam is moving forward with full gear under the supervision of the NESPAK-led Diamer Basha Consultants Group (DBCG) for this project located in Gilgit-Baltistan. The DBCG is a joint venture comprising six firms including Pöyry (AFRY) Switzerland Limited, MWH (Stantec) International, Inc. USA, DOLSAR Engineering Inc. Co. Turkey, Associated Consulting Engineers (ACE) Ltd. and Mott MacDonald Pakistan (Pvt.) Ltd. The NESPAK-led joint venture is also involved in design, contract administration and services related to the environment and resettlement aspects of this mega project having an overall cost of Rs. 1,862 billion. The NESPAK-led Joint Venture has been awarded main dam civil works and 21MW Tangir Hydropower Project costing Rs. 442 billion under the 4,500MW Diamer Basha Dam Project. During the year, site works for contractor's facilities, diversion tunnel lining and inlet & outlet structures and diversion canal remained in progress. Excavation for the main dam, left & right bank power intake, dam foundation pit, 21MW Tangir Hydropower Project and permanent roads & bridges have progressed at a rapid pace for this project. Construction adit for access to diversion tunnel and underground excavation of diversion tunnel-2 and upstream bridges have been completed so far.

Diversion tunnel for Mohmand Dam Project in progress



Cutting/excavation of re-regulation pond for Mohmand Dam Project



A view of Diamer Basha Dam Project right abutment and diversion canal



Good progress was reported on the three lots of works for the Mohmand Dam Hydropower Project during the year under the supervision of NESPAK-led Joint Venture (JV) viz. Mohmand Dam Consultants Group. The lots include preparatory works, main civil works and irrigation facilities for this 800MW project costing Rs. 309 billion. Under the civil works, excavation for the diversion tunnel is almost complete and its concrete lining has been started. Excavation and foundation treatment for spillway, main dam plinth, power intake and re-regulation pond area is in progress. Work on irrigation facilities i.e., left & right bank tunnels, left & right main canals and ancillary structures has been initiated. Command area development has been added to the scope of NESPAK services during the year on the directions of the Client. Construction activities at Project Colony and permanent access roads under the preparatory works are moving forward at a fast pace for this project located on Swat River in Mohmand District, Khyber Pakhtunkhwa. NESPAK is also engaged in design review and contract management services for this project awarded by the Water and Power Development Authority (WAPDA).

Overseas, work on the 24MW Rabat Hydropower Project was initiated in Kashkandarya Region, Uzbekistan. NESPAK in a joint venture with DOLSAR Engineering Inc. Co. is involved in the project management, performance monitoring, design review of technical documents and construction supervision of this venture. The US\$ 75 million project entails the construction of three hydropower plants and allied facilities on the Aksu River, Kashkandarya Region, Uzbekistan named Rabat, Chappasuy and Tamshush Hydropower Projects. The Joint-Stock Company, Uzbekhydroenergo (Uzbekhydroenergo), is executing the project with the financial aid from the Asian Development Bank (ADB).

Smooth progress was reported on the Mangla Power Station Refurbishment and Upgradation Project under the supervision of a NESPAK-led Joint Venture during the year.

Construction work in progress for 900MW Bin Qasim Combined Cycle Power Station and associated Projects



An aerial view of 1,263MW Regasified Liquefied Natural Gas (RLNG)-based Combined Cycle Power Plant (CCPP) near Trimmu Barrage at Haveli Bahadur Shah, District Jhang

NESPAK along with the MWH International Inc. and ACE Pvt. Ltd. is also involved in design services for this project awarded by WAPDA. The Rs. 52 billion project includes a variety of restoration and renovation works under different contracts.

Sound progress was recorded on the 900MW Bin Qasim Combined Cycle Power Station (BQPS-III) and associated Projects under the supervision of NESPAK during the financial year. The erection/installation of the First Unit (450MW) has been completed and commissioning & testing is in progress. The erection/installation activities of Second Unit (450MW) are in full swing. NESPAK, as part of a consortium of engineering firms, continued providing owner's engineer services for this Rs. 100 billion project being executed by the K-Electric Ltd. NESPAK scope of work comprises design review, construction supervision and two-year defects' liability period services.

Construction activities have entered the final stage of completion for the 1,263MW Regasified Liquefied Natural Gas (RLNG)-based Combined Cycle Power Plant (CCPP), near Trimmu Barrage at Haveli Bahadur Shah, District Jhang under NESPAK supervision. During the year, entire construction and majority of the installation activities related to simple cycle operation of the plant including auxiliary systems and 220kV switchyard along with BOP Systems were successfully completed. Synchronisation of gas turbine No. 1 & 2 has successfully been achieved. Construction as well as installation activities of combined cycle part and its auxiliary systems & related BOP systems are also in progress under this project which is also called the Punjab Power Plant. NESPAK also carried out feasibility study, tender documentation and design review for this Rs. 52 billion project awarded by the Punjab Thermal Power (Pvt.) Limited.

Construction works for the 500 kV Transmission Lines Interconnection Arrangement for Power Evacuation from Suki Kinari, Kohala and Mahl Hydropower Projects speeded



220 kV Double Circuit Transmission Line on Rail Conductor from Dera Ismail Khan in Khyber Pakhtunkhwa to Zhob in Balochistan

up with the interconnection of a hydropower plant. The Interconnection of the Karot Hydropower Project with the Neelum-Jhelum Transmission Line has been completed under the supervision of NESPAK. The Karot Plant is the maiden hydropower plant under the China-Pakistan Economic Corridor (CPEC) with the Neelum-Jhelum Transmission Line. The construction of 500kV Transmission Line from Suki Kinari to Sangal is in progress under NESPAK supervision. NESPAK is also involved in design, bidding documents and design review for this Rs. 17 billion venture.

The 220kV Double Circuit Transmission Line on Rail Conductor from Dera Ismail Khan to Zhob is fast nearing completion under the supervision of NESPAK-led Joint Venture with Barqaab. The construction works for this ADB-funded Rs. 7 billion project continued on a fast pace during the year. The 220 km long transmission line is meant to improve the power distribution system in the Balochistan Province

Good progress was reported on the 500kV Double Circuit Quad Bundle Transmission Line from Nokhar Substation (Gujranwala) to Lahore North Substation and Lahore HVDC Converter Station during the year. NESPAK is supervising the construction of civil, erection and stringing works along with testing & commissioning of this Rs. 8 billion project assigned by the NTDC.

Construction activities progressed at a brisk pace for the 500kV Double Circuit Transmission Line for Interconnection of K-2/K-3 Nuclear Power Plants with 500kV Single Circuit Port Qasim-Matiari Transmission Line under NESPAK's supervision. Upon delay in dispersal of power from the original scope, an interim Scheme was planned and implemented by utilising the starting portion of 17km of this 102 km transmission line for evacuating power from K-3 Nuclear Power Plant to Hub and Jamshoro ends by interconnecting it with the Single 500 kV Hub-Jamshoro Transmission Line. Both the circuits were energised on emergent basis within two and a half months for this Rs. 2 billion project.

NESPAK continued design review and construction supervision for 500 kV Faisalabad West Grid Station and its

associated 500 kV/220 kV Transmission Lines Project. The substation was partially energised during the year. Both 500 kV and 220 kV transmission lines have also been put into operation. The aim of this project is to enhance the capacity of NTDC and the Faisalabad Electric Supply Company networks. NESPAK is also involved in tender documentation of this Rs. 8 billion project funded by the Japan International Cooperation Agency.

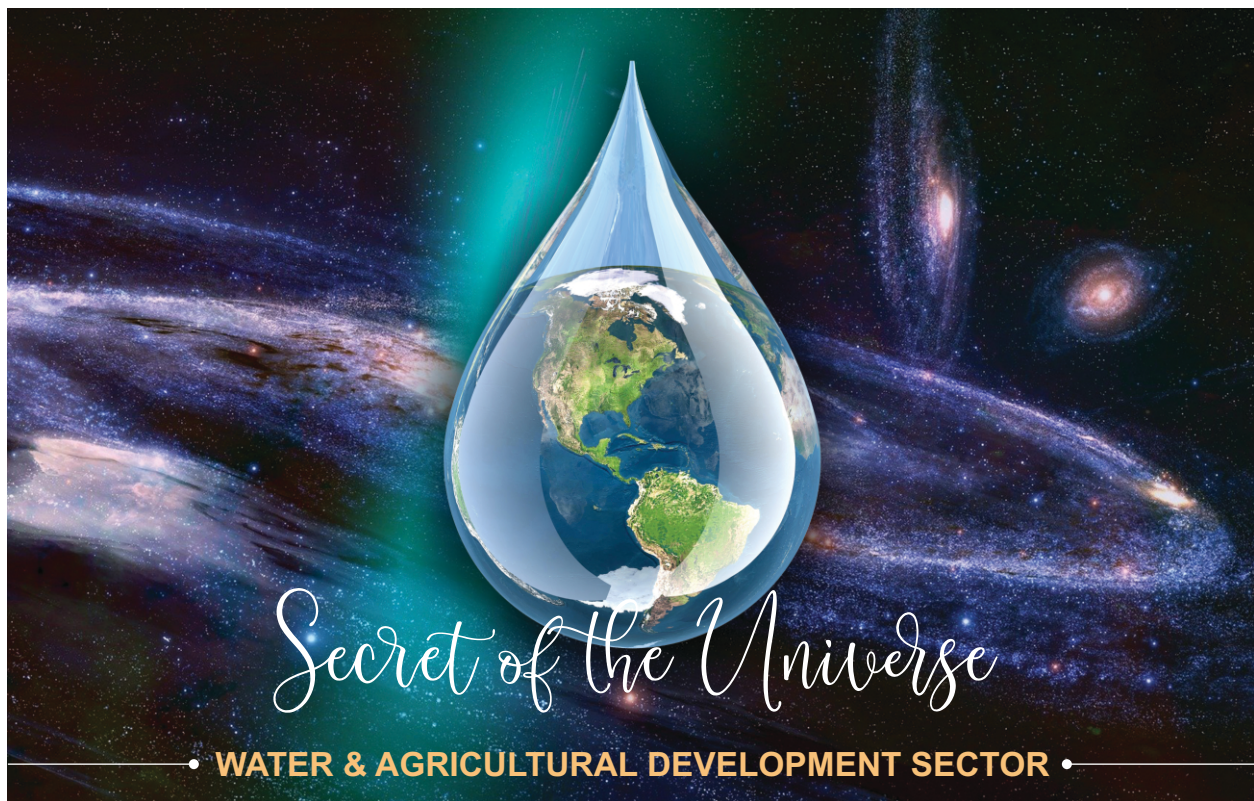
Among the projects wrapped up during the year, NESPAK completed consultancy services for 1,180MW RLNG-based CCPP at Bhikki, Sheikhpura. NESPAK was hired for feasibility study, design, design review, construction supervision and defects' liability period by the Quaid-e-Azam Thermal Power Company (Pvt.) Limited for this Rs. 52 billion project.

NESPAK as a lead partner with Barqaab completed tender documentation, design review, construction supervision and allied activities including testing & commissioning of Transmission Scheme for Dispersal of Power from the 969MW Neelum-Jhelum Hydropower Project. The two-phase Rs. 22 billion project was financed under the NTDC's own resources programme.

Site activities in progress for 500 kV Transmission Lines interconnection arrangement for power evacuation from Suki Kinari, Kohala and Mahl Hydropower Project



An aerial view of 1,180MW RLNG-based CCPP at Bhikki, Sheikhpura



NESPAK emerged as a steady and sturdy performer by getting 16 new projects worth Rs. 225 billion in the Water and Agricultural Development Sector during the Financial Year 2021-22. The Company continued to provide its remarkable services for 25 jobs worth Rs. 703 billion in various domains related to irrigation and agricultural development during the fiscal year.

Among the fresh projects during the year, NESPAK as a lead in a joint venture with A. A. Associates, Karachi signed a consultancy agreement with the Sindh Irrigation Department for the cement-concrete lining of Otero Lal Branch Canal Project. NESPAK services include design review, contract management and construction supervision for this Rs. 10 billion project. The proposed works will reduce seepage and saved water will be used to enhance agriculture in the command area of the canal. The project is likely to be completed in two years.

The Khyber Pakhtunkhwa Irrigation Department awarded NESPAK consultancy services for the Flood Mitigation Structures, Marking of Flood Plain and Flood Management of Swat and Panjkora Rivers. The scope of works includes surveys, investigations, design of flood mitigation structures, detailed cost estimates, contract management, as-built drawings, revised PC-I proforma and construction supervision for this Rs. 3 billion project which is expected to be completed in two years.

A NESPAK-led Joint Venture has been selected for Project Readiness Financing (PRF) for Punjab Water Resources



Work in progress for cement-concrete lining of Otero Lal Branch Canal Project, Sindh

Management — Detailed Design for Irrigation Canal and Link Canal Projects. The project is jointly funded by the Asian Development Bank (ADB) and Punjab Irrigation Department (PID). The PRF will support accomplishing high project preparation readiness of four priority projects identified by the PID. This will be accomplished by reviewing and revising feasibility studies to ensure the efficacy and compliance with funding agency's requirements, preparing detailed design & procurement documents and providing other project readiness support. The project costing Rs. 157 billion is expected to be completed in three years. Besides NESPAK, the joint venture includes Associated Consulting Engineers (ACE), Barqaab (Pvt.) Limited and Mott Macdonald Pakistan (Pvt.) Limited.

A NESPAK-led Joint Venture has been awarded Chashma Right Bank Canal Project (Lift cum gravity) by the Water and Power Development Authority (WAPDA). During the reporting period, NESPAK submitted draft design report and PC-I for this project. The canal will command vast areas of Dera Ismail Khan plains, extending up to boundaries of the Khyber Pakhtunkhwa and Punjab Provinces. The services include review of the previous feasibility study, updating of the project planning report, detailed engineering design, tender documentation and PC-I Proforma of this Rs. 29 billion project.

WAPDA has entrusted a NESPAK-led Joint Venture with the preparation of feasibility study for Thar Canal Project in Sindh. The Thar Canal is proposed to off-take from Raineer Canal in Sindh's Nara Region. The proposed canal will irrigate the vast lands in the Thar area that are deprived of drinking and irrigation supplies. The scope of work includes surveys, investigations, hydrological studies, socio-economic & environmental studies, agricultural studies and engineering designs for the proposed water supplies for the Thar Canal. The joint venture comprises Barqaab (Pvt.) Ltd. Turpak International (Pvt.) Ltd. and Rehman Habib Consultants (RHC) (Pvt.) Ltd. for this Rs. 23 billion project.

During the year, NESPAK was engaged for the Remodelling of Bambanwala-Ravi-Bedian-Depalpur (BRBD) Link Canal Project by the Punjab Irrigation Department. The groundwater in Lahore has been depleting day by day due to increased tubewell extraction. The canal systems in Lahore and Kasur Irrigation Divisions have also been suffering water shortage for long due to reduction in capacity of Ravi Syphon. The Punjab Irrigation Department, therefore, decided to commission a feasibility study for finding a solution to these problems. The project has been planned to meet the shortage of canal supplies i.e., 900 cusecs for Lahore and Kasur Divisions and drinking water for the Lahore City. NESPAK scope of work includes feasibility study, detailed design, construction drawings, engineer's estimates, PC-I and tender documents for this Rs. 12 billion project.

A watercourse lined under National Program for Watercourses' Improvement in Pakistan, Phase-II



NESPAK has been hired as Project Implementation Support and Monitoring Consultants for the project, "Promotion of Mechanised Agriculture for Increasing Crop Productivity" being implemented by the Punjab Agriculture Department. The scope of this Rs. 10 billion project is to provide assistance to the Client in farm machinery procurement, ensure compliance with standards and specifications and overall monitoring & impact evaluations of project activities besides providing overall project management support. The first-of-its-kind project will boost the NESPAK portfolio and open ways for opportunities in the agriculture sector.

Among the ongoing projects, work for the National Program for Improvement of Watercourses in Pakistan, Phase-II (NPIWC-II) continued at a good speed during the fiscal year. The NESPAK-led Joint Venture of Associated Consulting Engineers—ACE (Pvt.) Ltd. and RHC (Pvt.) Ltd. in association with Kasib Associates (Pvt.) Ltd. is rendering services for design review implementation assistance, execution supervision and third-party validation for this Rs. 155 billion project. The quantitative objectives of the project are mobilisation through capacity building of 62,210 water user associations/farmer organisations, reconstruction/ renovation & remodelling of 47,278 watercourses and provision of 11,610 Laser land levellers. The project activities are in progress in the Punjab, Khyber Pakhtunkhwa, Balochistan, Azad Jammu & Kashmir, Gilgit-Baltistan and Islamabad Capital Territory. To date, 7,983 watercourses and 2,844 water storage tanks' civil works completed and 3,645 Laser land levellers delivered under the NPIWC-II Project.

Outstanding and remedial works of two new contracts of Phase-I of Kachhi Canal Project progressed under the construction supervision of a NESPAK Joint Venture. The NESPAK JV, Kachhi Canal Consultants (KCC), comprises National Development Consultants (Pvt.) Ltd., Associated Consulting Engineers (Pvt.) Ltd., Barqaab (Pvt.) Ltd. and the Engineering General Consultants (EGC) (Pvt.) Ltd. The KCC

A view of Pandori Dam in Jhelum District under ADP Irrigation Projects



A bridge constructed at Chak Baqar Shah for Arrar Mughlan Dam under Annual Development Programme (ADP) Irrigation Projects



A view of under-construction Mohatta Dam in District Rawalpindi for ADP Irrigation Projects



has been rendering services under the Amendment No. 12 to the original consultancy agreement. The Kachhi Canal Project is being executed under WAPDA's Vision 2025 Program. The mega project aims to develop a new fertile area in the Kachhi Plains of Balochistan through the supply of 6,000 cusecs from the Indus waters. The NESPAK Joint Venture is also involved in the design and tender documentation for this massive project with a total cost of Rs. 152 billion.

NESPAK has been providing design review, monitoring and construction supervision services to projects/programmes



Construction work for Ahmad Zai Weir Structure for the Balochistan Water Sector Development Project

initiated by the Punjab Irrigation Department under the Annual Development Programme (ADP), Public Sector Development Programme (PSDP) and Deposit Development Works of various provincial departments since 2009. Lately in July 2020, NESPAK in a joint venture with the RHC and in association with the Turpkak International (Pvt.) Ltd. has again won a three-year consultancy contract under the ADP/PSDP. The services cover various important ADP/PSDP projects spread throughout the Punjab Province with a total outlay of Rs. 100 billion. Major works comprise the lining of canals, rehabilitation of canal systems, construction of small/mini dams, remodelling/reconstruction of hydraulic structures, flood protection & river training works and hill torrent management. A significant number of projects have been completed while work on rest of the jobs is in progress under the supervision of NESPAK.

Work on the contracts under the Balochistan Water Resources Development Sector Project has moved forward. A NESPAK-led Joint Venture is rendering design review and construction supervision for this Rs. 21 billion project comprising 11 subprojects. During the year 2021-22, Siri Toi Dam Subproject was awarded for construction and pre-construction joint survey work is in progress at the dam site. Construction activities are in progress on the Water Resources Building in Quetta under this ADB-funded project.

Construction activities are progressing at a fast speed for Trimmu and Panjnad Barrages Improvement Project (TPBIP) under the supervision of a NESPAK-led Joint venture with the SMEC and the EGC (Pvt.) Limited. The joint venture known as TPBIP Consultants is also involved in the design review of this Rs. 18 billion project. The ADB-funded venture aims to rehabilitate and upgrade the Trimmu and Panjnad Barrages on River Chenab in Pakistan.

During the year, two more contract packages—RWCS I, tunnel & allied works and RWCS-13, outlets & miscellaneous works of Warsak Gravity & Lift Canal—were awarded for construction under the Remodelling of Warsak Canal System Project. Progress of construction works for four packages of Warsak Lift Canal is in progress. Another package RWCS-3 (Phase-II) is ready for tendering after approval. During the year, the second revised PC-I, was okayed for project having an overall cost of Rs. 17 billion. The NESPAK Joint Venture of Integrated Consultancy Services (ICS) and Electra (Pvt.) Ltd. is involved in designing, tender documentation and construction supervision for this 17-package project in the Khyber Pakhtunkhwa Province.

Consultancy work for Promotion of High Value Agriculture through Solarisation of Drip and Sprinkler Irrigation Systems moved ahead, showing a considerable progress. During the year, NESPAK approved the design/plan for farm layout planning and Laser land levelling of 613 sites comprising 9,837 acres of land. The final verification of completed work of farm layout planning and Laser land levelling of 121 sites having 1,873 acres were also okayed. Likewise, designs and cost estimates of High Efficiency Irrigation System (HEIS) for 57 sites were approved while material verification of HEIS system for 27 sites was completed. Commissioning verification of HEIS schemes of 13 sites were verified by the consultants. As many as 175 demonstration plots were verified and approved as per selection criteria of PC-I for payment of subsidy under this Rs. 4 billion project being implemented by the Punjab Agriculture Department.

The Gomal Zam Dam Command Area Development and On-Farm Water Management (OFWM) for High Value and High Efficiency Agriculture Project has been further extended up to the year 2024. The extension is intended to complete the remaining targets, The PC-I has been revised and approved by the Khyber Pakhtunkhwa Government with enhanced scope of work for this Rs. 3 billion project. Construction works are continuing at a good speed under the supervision of NESPAK which is also involved in design



Work in progress for drip Irrigation system coupled with solar system under Promotion of High Value Agriculture through Solarisation of Drip and Sprinkler Irrigation System

services for this project funded by the United States Agency for International Development.

Feasibility report and tender documents for Sora Dam Project have been prepared for procurement process for Harnessing of Hill Torrents in Dera Ghazi Khan and Rajanpur Districts. A NESPAK-led joint venture is providing consultancy services for Rs. 56 billion project. Main components include review of data and studies of 13 hill torrents, recommendations for selecting, 7 to 8 hill torrents for improving, upgrading or conducting feasibility studies and detailed design of dams for 4 to 5 shortlisted hill torrents under this ADB-funded project awarded by the Punjab Irrigation Department.



Construction of an aqueduct across Bara River for the Warsak Gravity and Lift Canal Project



A watercourse lined under Gomal Zam Dam Command Area Development and On-farm Water Management for High Value and High Efficiency Agriculture Project, Khyber Pakhtunkhwa



NESPAK demonstrated brilliant performance in the Dam Engineering Sector by attaining five (5) new projects during the fiscal year. NESPAK continued its state-of-the-art services for 10 ongoing ventures including the Diamer Basha Dam and Mohmand Dam Hydropower Projects mentioned earlier in the Energy Sector.

Among the fresh projects during the year, NESPAK and the Water and Power Development Authority (WAPDA) signed a contract for the Chiniot Dam Project. NESPAK scope of services comprises project planning, detailed engineering design, preparation of bidding documents and PC-I for this 80MW project. The project aims to construct a 17 m high dam and barrage which will cater to the peak discharge of about 34,000 cumecs five kilometres from the Chiniot City. The proposed project will help meet the irrigation water requirements of the downstream cultivable area and the power generation of 80MW will be a by-product.

NESPAK has been hired by WAPDA for the Attabad Lake Hydropower Project. NESPAK scope of work includes review of feasibility study, procurement of EPC contractor and contract management & administration and assistance to WAPDA in fulfilling employer's obligations as per the contract with the contractor. The proposed project is planned to utilise the flows of the Hunza River by the construction of 2 km long power tunnel. Flows will be released to generate 54 megawatts to cover the Hunza, Gilgit and Ghizer districts.

NESPAK has been engaged by the Khyber Pakhtunkhwa Irrigation Department for Bara Dam Multipurpose Project, District Khyber. NESPAK scope of services comprises review and updating of feasibility study, detailed engineering design, tender documentation and preparation of PC-I. The main objective of the project is the irrigated agriculture

development of the under-developed Khyber Region to increase production.

NESPAK was engaged by the Khyber Pakhtunkhwa Irrigation Department for the Tank Zam Multipurpose Dam Project in District Tank. NESPAK's scope of services includes updating of feasibility study, engineering design, tender documentation and preparation of PC-I of the project. The proposed project aims to create a water reservoir to store flood discharge and to irrigate about 70,000 acres of land. Power generation of 26 megawatts will be a by-product of this project.

The Gilgit-Baltistan Water and Power Department has selected NESPAK for Development of 4MW Hydel Power Project at Rattu River, Astore. The project entails development of a hydropower project in District Astore along Rattu River region to tap its available potential. Consultants shall carry out all studies including topographic surveys, geological & geotechnical investigations and environmental impact assessment for feasibility and detailed engineering design of the project.

During the year, WAPDA engaged NESPAK for 7th Periodic Inspection of Mangla Dam Project. The Consultants shall provide definite opinion on project performance, advise remedial works where required and prepare comprehensive recommendations. The Consultants shall also provide opinion on project performance and inspection of dam & ancillary structures in the wake of

2019 Earthquake and give suggestions/advice regarding safety of structures in case of a similar future incident.

Among the ongoing projects, NESPAK submitted draft feasibility report for the Murunj Dam Project to WAPDA for review and comments during the year. NESPAK as a lead firm is also involved in detailed engineering design, tender documentation and PC-I of the Murunj Dam Project. The Murunj Dam Project is planned to store flows of Kaha Nullah located in Punjab's Rajanpur District by the construction of a dam. The stored water will be released to meet the irrigation water requirements of the downstream cultivable area.

NESPAK started consultancy work for the Feasibility Study and Proposing Solutions of Problematic Small Dams in Development Zone. The contract was awarded to NESPAK by the Punjab irrigation Department. The scope of the project includes identification of problematic areas of dams, review of design and drawings, finalisation of the solutions of all problematic dams, feasibility reports, detailed engineering design and command area assessments.



Geotechnical investigations under way for Murunj Dam Project, District Rajanpur

Construction of intake tower and stilling basin in progress for main Al-Jufainah Dam, Sultanate of Oman



A view of Wala Dam, Kingdom of Jordan, after raising

Overseas, NESPAK continued to supervise the construction of dam projects in the Southern part of the Kingdom of Saudi Arabia under two separate job contracts. The scope of work also includes the construction of gabion structures on upstream of already built dams to restrict sedimentation, installation of flood warning system downstream of large dam projects and installation of additional instrumentation and security/vigilance cameras at the selected dam sites. The total construction cost of these projects is US\$ 155 million. The consultancy services are being provided to the Client, Ministry of Environment, Water and Agriculture, under two contracts i.e., "Construction Supervision of Dam Projects in Southern Region" and "Qanunah & Yabah Dam Projects." The projects are located in Aseer, Jizan, Najran and Makkah Regions of the Kingdom. The dam types are concrete gravity, earth-fill and roller-compacted concrete gravity dams.

In the Sultanate of Oman, construction work on the Flood Protection Dam in Al-Jufainah at Amerat is going well under the supervision of NESPAK. Construction activities for this dam project have been expanded and all work fronts are open now. Work is continuing at a good pace on various structures including lateral dam, main dam, saddle dams and spillways. Excavation work on lateral dam has been almost completed and main dam is nearing completion. NESPAK has reviewed the design of this US\$ 130 million project awarded by Oman's Ministry of Agriculture and Fisheries.

In the Kingdom of Jordan, construction for the Wala Dam Raising Project has been substantially completed under the supervision of NESPAK as a lead firm with its Jordanian partner, the Consolidated Consultants Group. The project is undergoing the defects' liability period. The Wala Dam has been raised to 67 m from the original height of 52 m. NESPAK has also reviewed the design of this US\$ 35 million project awarded by the Jordan Valley Authority, Ministry of Water and Irrigation.



NESPAK performed exceptionally well in the Communication Sector by acquiring 45 new projects worth Rs. 375 billion during the Financial Year 2021-22. The Company continued to render its up-to-date services for 63 ventures worth Rs. 1,842 billion. NESPAK completed services for 31 jobs worth Rs. 608 billion during the fiscal year.

ROADWAYS

Among the new projects during the year, the Punjab Communication and Works Department engaged NESPAK for two mega road projects in the North and South Punjab under two separate contracts. NESPAK services include design and construction supervision for these projects funded by the Federal Government of Pakistan under the Public Sector Development Programme (PSDP). The projects are expected to be completed in two years on a fast-track basis at the cumulative cost of Rs. 81 billion. The project roads in North Zone include Salam-Sargodha Dual Carriageway, Lower Topa-Chowk Pandori Toursim Highway, Dualisation of Lilla Interchange (M-2), Dualisation of Mandi Bahauddin-Sarai Alamgir Road, Dualisation of Sargodha-Khushab-Mianwali Road, Dualisation of Gujranwala Road to M-2 Interchange at Kot Sarwar and Upgradation of



*Karachi Circular
Railway Project*



*Multan Ring
Road Project site*

Kalabagh-Shakardara Road. The six project roads in South Zone include approaches on the Sheikh Khalifa Bridge over River Indus, Bahawalpur-Jhangra Sharqi Interchange, Dualisation of Mian Channu-Abdul Hakeem Interchange (M-4), Dualisation of Karam Dad Qureshi-Qasba Gujrat Road, District Muzaffargarh, Widening/Improvement/Rehabilitation of Chowkiwala Road in Tehsil Taunsa to Chappar in Balochistan and Widening/Improvement of Haroonabad-Fort Abbas Road.

Pakistan Railways has selected NESPAK for providing services for the construction of underpasses and flyovers



Work under way for Jhaljao-Bela Road Project in Balochistan



Kalat-Pindran Road Project, Balochistan

Widening and strengthening of Rakhi Gaj-Bewata Package, Punjab



for elimination of level crossings from loop section of the Karachi Circular Railway (KCR) to ensure smooth movement of traffic during the functioning of the KCR. The main objective of the project is to cater for the basic infrastructure facilities for the huge population of Karachi. NESPAK services include procurement support, design vetting and construction supervision for this Rs. 20 billion project.

The National Highway Authority (NHA) awarded NESPAK the Rehabilitation and Upgradation of 135 km Awaran-Jhaljao-Bela Road in Balochistan under two separate contracts. The road starts from Awaran and terminates at Bela, passing near the famous Shirin-Farhad Shrine. NESPAK scope of work comprises design/review and construction supervision for the two road sections which will be constructed at a cumulative cost of Rs. 24 billion.

The Port Qasim Authority (PQA) has appointed NESPAK to provide services for Rehabilitation/Upgradation/Dualisation of 26 km PQA Main Access Road including construction of bridges, flyovers, interchanges and toll plazas from T-Junction National Highway to Ghaghar Phatak. NESPAK services comprise topographical survey, geotechnical investigations, traffic count & technical studies, detailed design, assistance in bidding phase and construction supervision for this Rs. 10 billion project.

During the year, NESPAK was selected for Dualisation of Samma-Dinga Road including a 31 km Flyover in the Gujrat District. The proposed road off-takes from the G.T. Road near the Chenab Toll Plaza and terminates at the Gujrat-Dinga Road near Village Dhal Bangash. NESPAK will carry out design and construction supervision for this Rs. 10 billion project awarded by the Punjab Government.

NESPAK won a consultancy services contract for the construction of Two Flyovers in Dera Ismail Khan awarded

by the Khyber Pakhtunkhwa Communication and Works Department. The flyovers shall be constructed at the Tank Adda Chowk and Sabzimandi Chowk in the Dera Ismail Khan City. NESPAK

has carried out feasibility studies and detailed design for this project and now it is tasked with the construction supervision of this Rs. 3 billion job.

The Balochistan Communication and Works Department engaged NESPAK to render services for the construction of Kalat-Pindran Road via Kapoto. NESPAK services include detailed design and construction supervision of this 65 km project which majorly passes through the hilly terrain. This Rs. 1 billion project will serve as a communication link for the population of orchard area comprising villages of Kapoto, Pindran, Natchara etc.

The NHA has entrusted NESPAK with the design review and construction supervision of Widening and Strengthening of Rakhi Gaj-Bewata Package-II of N-70, Punjab. The National Highway N-70 runs in the centre of Pakistan between Multan in South Punjab and Quetta in Balochistan. The project envisages widening, strengthening and improvement of two-lane single carriageway from Rakhi Gaj to Bewata in the districts of Dera Gazi Khan and Loralai. The project will be constructed at an estimated cost of Rs. 1 billion with the funding by the Punjab Government.

The Pakhtunkhwa Highways Authority (PKHA) has hired NESPAK for commercial-cum-financial feasibility study and detailed engineering design for Khawazakhela-Besham and Motorway Link from Charsadda Interchange on the Public-Private Partnership (PPP) Mode. The two projects will be constructed under the Annual Development Programme.

The Rawalpindi Development Authority has appointed NESPAK to prepare detailed design, tender documents and

Survey in progress for feasibility study and preliminary design of Roads, Quetta Zone/Quetta Cluster, Balochistan



A conceptual view of Sialkot Ring Road



3D rendering of At-Grade Station along Yellow Line Corridor, Karachi



Construction activities under way for Dualisation and Improvement of Pindigheb-Kohat Road

bid evaluation for the Rawalpindi Ring Road. This Rs. 28 billion project shall be funded by the Punjab Government.

NESPAK has been selected by the Balochistan Communication and Works Department to prepare feasibility study and preliminary design of Roads, Quetta Zone/Quetta Cluster, Balochistan. This Rs. 42 billion project includes construction of roads in Duki, Loralai, Qila Abdullah, Quetta, Sherani, Zhob, Musa Khel and Pishin Districts of Balochistan.

The Punjab Ring Road Authority has entrusted NESPAK with the feasibility study and detailed design for the construction of Ring Roads in the cities of Multan and Sialkot. The Multan Ring Road project will be constructed on Private-Public Partnership (PPP) basis at an estimated cost of Rs. 45 billion. The Sialkot Ring Road project cost is envisaged to be Rs.18 billion.

The NHA hired NESPAK for feasibility study and detailed design for the Peshawar (Chamkani)-Nowshera Road. The 32 km project will be constructed at an estimated cost of Rs. 10 billion.

NESPAK was selected by the NHA through open competition for feasibility study and detailed design for the construction of a bypass road from Taxila to Wah at an estimated cost of Rs. 10 billion. The project alignment passes through hilly terrain of Taxila, traversing through the vicinity of the Heavy Industry Taxila.

Among the ongoing projects, NESPAK continued to work on the Sindh Government's marquee project, the BRT Yellow Line Corridor under the Karachi Mobility Project, in

association with Dar Al-Handasah during the year. NESPAK has been providing consultancy services for this project awarded by the Sindh Mass Transit Authority and funded by the World Bank. NESPAK services on this Rs. 70 billion mega project include project planning, detailed design, tender documentation and construction supervision of 22km corridor in Karachi with a complementary feeder network of 88 kilometres.

NESPAK continued to provide consultancy services for seven roads under the 152 km Shigar-Paiju Road Project awarded by the Gilgit-Baltistan Public Works Department. NESPAK is involved in the preparation of feasibility study, design and construction supervision for this Rs. 25 billion project. The Phase-I of Kachura-Shigar (36 km) and Part-I of Shigar-Askole (14 km) have been completed. The feasibility, design and PC-I for the remaining works have been submitted for approval.

Rapid progress was registered on the Dualisation and Improvement of the Pindigheb-Jand-Kohat under the supervision of NESPAK. NESPAK has also reviewed the design of this four-lane road facility worth Rs.21 billion. Assigned by the NHA, the two-phase project has entered the final stages of construction.

Construction work is continuing at a fast pace for various sections of the Old Bannu Road Project under the supervision of NESPAK. The Company is also involved in the design review of this project awarded by the NHA. Under this Rs. 18 billion project, the Gandhi Chowk-Sarai Naurang Section has been completed while the remaining two sections from Domail to Krappa to Khurram are expected to be completed as scheduled.

NESPAK continued to render consultancy services for Reconstruction, Rehabilitation and Development Works in Merged Areas of Khyber Pakhtunkhwa formerly known as Federally Administered Tribal Areas (FATA). The development interventions are in progress in seven Merged Districts and six Frontier Regions of Khyber Pakhtunkhwa. Construction work on various transportation projects including Parachinar-Tari Mangal Road, District Kurram, Mastak Bridge in Tribal District Khyber and Dewgar-Sadgai Road in North Waziristan remained in progress under NESPAK supervision for this Rs. 15 billion project awarded by the Khyber Pakhtunkhwa Communication and Works Department.

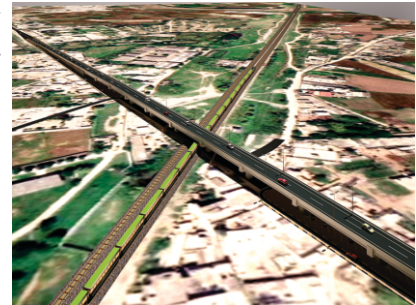
NESPAK has completed design for a flyover the Sihala Railway Line and the project is ready for construction. NESPAK is also involved in the construction supervision of this Rs. 15 billion project awarded by the Capital Development Authority, Islamabad.

Construction work is moving at a fast pace for dualisation of the Indus Highway from Sarai Gambila to Kohat Road under the supervision of NESPAK. NESPAK has also reviewed the design of this Rs. 11 billion project awarded by the NHA.

Excellent progress has been recorded on the Construction of Shatial-Thor Nullah Bypass under the supervision of NESPAK. The 35 km project has entered the final stage of completion. The project costing Rs. 6 billion was awarded by the NHA.

NESPAK continued to supervise the construction of two flyovers on the Mingora-Kanju Road and Kanju Chowk

A conceptual view of Sihala Flyover, Rawalpindi



Bypass Road from Aligrama to Bara Bandali in District Swat, Khyber Pakhtunkhwa. The project costing Rs. 2 billion was awarded by the PKHA.

NESPAK continued the supervision construction of the Flyover and At-Grade Improvement of Shahkam Chowk, Lahore as the project is fast nearing completion. The Lahore Development Authority (LDA) had planned this Rs. 3 billion project to act as a pivot point to connect various housing societies to Thokar Niaz Beg, Multan Road and Bhubtian.

During the year, construction work at the Gulab Devi Hospital underpass was completed under the supervision of NESPAK and work on the additional lanes on the Lahore Bridge is in progress. NESPAK has also designed this Rs. 2 billion project awarded by the LDA.

Design work for the roads and bridge in less developed areas in Balochistan continued during the year. This Rs. 40 billion project has been awarded by the Balochistan Communication and Works Department and jointly funded by the Federal and Provincial Governments.

Overseas, NESPAK continued to provide construction supervision for dualisation of Sultan Said bin Taimur Road in Duqm Sultanate of Oman. NESPAK also carried out

Construction of Underpass at Gulab Devi Hospital and additional lanes on Lahore Bridge



Launching and pouring of deck slab over flyover at Shahkam Chowk, Lahore



Map for Sierra Leone Road Design Project



Construction completed for Infrastructure including Allied Works for Islamabad Metro Bus from Peshawar Morr to New Islamabad Airport

*Sheranwala Flyover,
Lahore*



BRT Orange Line Project, Karachi

*Construction
works in progress
for Shatial-Thor
Nullah Bypass*



Khyber Pakhtunkhwa Communication and Works Department.

The BRT Orange Line Karachi Project was completed during the year. The 4 km of BRT route connecting the densely populated areas of Orangi with Nazimabad was designed and supervised by NESPAK. The Rs. 2 billion project is meant to serve 45,000 passengers daily.

AIRPORTS

Among the fresh projects during the year, the Pakistan Civil Aviation Authority (PCAA) and NESPAK has signed the Amendment No. 2 to the consultancy contract for New Gwadar International Airport Project, incorporating additional scope of work. NESPAK will provide design, field design support services, tender documentation and construction supervision under the amended contract. The estimated cost of the additional works is around Rs. 10 billion. The New Gwadar International Airport Project is being constructed jointly by the Governments of Pakistan and China and is an important component of the China Pakistan Economic Corridor (CPEC) Programme. The modern greenfield airport complex, spread over an area of 4300 acres, is expected to be operational in a year. As PCAA's Project Management Consultants, NESPAK will be monitoring the works being carried out by the Chinese contractors for the construction of runway, taxiway, airfield lighting system, terminal building, Air Traffic Control Tower and allied facilities.



An artistic view of Allama Iqbal International Airport, Lahore

design of this US\$ 63 million project awarded by the Ministry of Transport, Communication and Information & Technology.

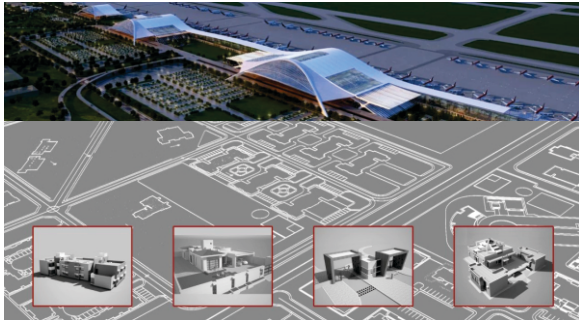
NESPAK continued working on the detailed design of Roads and Intersections in Freetown, Sierra Leone under the Sierra Leone Integrated Resilient Urban Mobility Project funded by the World Bank.

Among the projects wrapped up during the year, NESPAK successfully completed design review and construction supervision of Kot Belian Road to Tarap, Package-3 (52 km), Section of Hakla (M-I)–Yarak (Dera Ismail Khan) Motorway under the China-Pakistan Economic corridor (CPEC). The project was carried out at the construction cost of Rs. 28 billion

NESPAK completed design and construction supervision of Infrastructure including Allied Works for Islamabad Metro Bus from Peshawar Morr to New Islamabad Airport (26 km). Awarded by the NHA, the Rs.18 billion project was inaugurated by the Prime Minister of Pakistan, Mr. Muhammad Shehbaz Sharif, during the year.

NESPAK carried out consultancy services for the flyover at Sheranwala, Lahore, awarded by the LDA. NESPAK services included detailed design and construction supervision for this four-lane project worth Rs. 5 billion.

NESPAK provided feasibility study, detailed design and construction supervision services for 18 km long Abbottabad Bypass Road including three bridges and 36 culverts. The Rs. 3 billion project was awarded by the



New Gwadar International Airport, Balochistan

Among the ongoing projects, final design and draft bidding documents have been approved by the PCAA for the Extension of Passenger Terminal Building at the Allama Iqbal International Airport, Lahore. NESPAK has prepared design, bidding documents and PC-1 for this Rs. 18 billion project. The project is now ready for construction. The terminal building will be extended on the southern side by constructing a new domestic terminal facility equipped with three dedicated passenger boarding bridges. The present terminal building will be converted into an international terminal with requisite changes in the existing layout by providing seven passenger boarding bridges, increased number of check-in counters, larger immigration areas and expanded baggage claim facilities. Expansion of the apron will be provided for increased gates and remote parking bays for Code 'E' aircraft. The project will enhance traffic handling capacity of the airport and improve the level of service for customers. The construction of the project is scheduled for two and a half years

PORTS & HARBOURS

Among the fresh projects during the year, NESPAK and the Korangi Fisheries Harbour Authority (KFHA) signed a consultancy agreement for the establishment of a business park, modification of an auction hall and establishment of cold storage and freezing tunnels for the KFHA. NESPAK scope of services includes planning, designing and construction supervision of these components of the project. The scope of project aims to improve infrastructure and allied services especially seafood, handling and processing as per international standards. The project is expected to be completed in three and a half years.

NESPAK was awarded a project titled Refurbishment of Dry Docks at Karachi Shipyard during the year. The Karachi Shipyard is the only shipyard in Pakistan having two dry docks for repair of ships and submarines up to 26,000 DWT. These dry docks are over 60 years old and now required a major rehabilitation and upgradation. NESPAK will provide construction supervision services for the refurbishment of these dry docks which mainly comprise concrete rehabilitation of the docks and installation of

additional ground anchors. The project is likely to be completed in three years.

Among the ongoing projects, NESPAK has been providing services for the new Container Terminal Project at South Wharf, Karachi Port. The terminal comprises 10 berths at 18m dredged depth, with 5 km of quay wall and railway yard making it the country's largest container terminal. The development of container terminal is to be implemented in phases. Out of four phases, two phases have been put into commercial operation since December 2016. The other two phases are in progress for which NESPAK along with the sub-consultant, Lex Firma (Legal associate), has been awarded the work by the Karachi Port Trust (KPT) for managing and administrating the concession agreements. NESPAK has been providing specialised services in overseeing works of commissioning of container terminals.

NESPAK has been carrying out a feasibility study for Port Connectivity Project under Public-Private Partnership (PPP) arrangement of the Karachi Port Trust (KPT). The prime objective of feasibility study is to review traffic situation keeping in view the forecasted cargo handling at the Karachi Port. Under the umbrella of this project, additional work, i.e., the designing and tendering of Connectivity Bridge between East & West Wharf at Karachi Port, NESPAK has completed design and bid documentation and the project has been awarded to the successful bidder for construction.

Among the projects wrapped up during the year, NESPAK provided services for the establishment of a Multipurpose Dry Bulk Clean Cargo Terminal at East Wharf, Karachi Port. The terminal is the part of the Karachi Port Improvement Project which is being planned to handle various dry bulk clean commodities in an environment-friendly manner through the PPP Mode. NESPAK scope of services included inception & site location study, terminal planning & environmental scoping, financial & economic feasibility study, project implementation framework study, preparation of PPP procurement documents with concession agreement, evaluation of technical & financial proposals, assistance in negotiations, award of PPP contract and achievement of financial close.



Dry Bulk Clean Cargo Terminal, East Wharf, Karachi Port



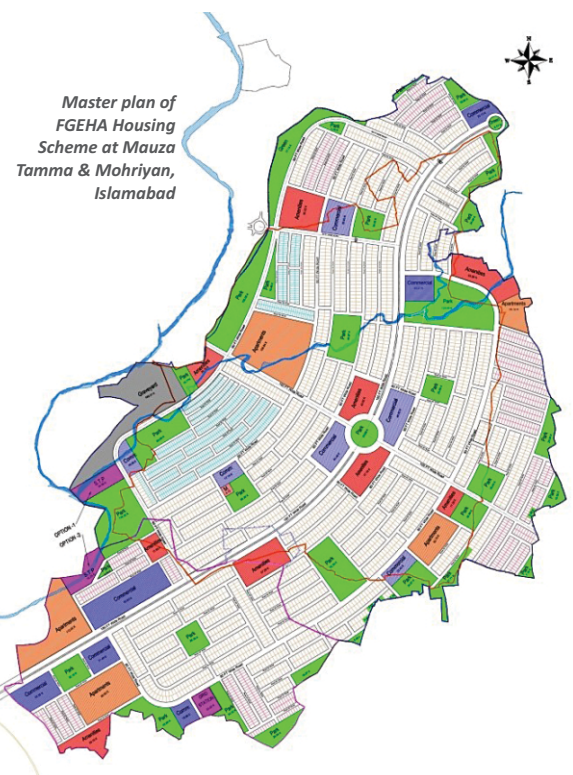
NESPAK took the lead in the Architecture and Planning Sector by securing maximum number of projects during the fiscal year. The Company obtained 55 new jobs worth Rs. 191 billion in the spheres of housing, health, education, sports and institutional buildings . NESPAK continued to provide its up-to-the minute and modern services for 104 projects worth Rs. 589 billion and carried out 27 ventures worth Rs. 23 billion during the year.

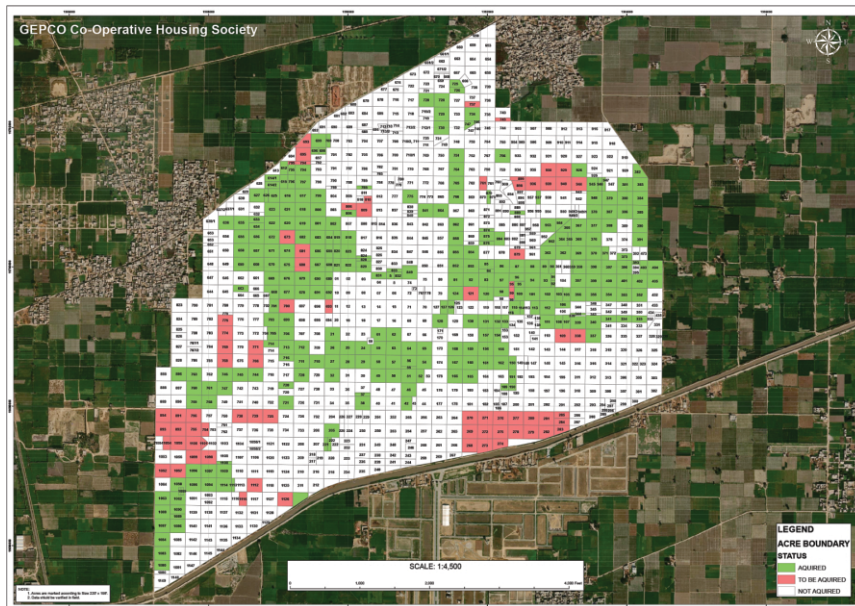
Among the fresh projects during the year, NESPAK signed an agreement with the Capital Development Authority (CDA), Islamabad for design review and construction supervision of the Alipur Farash Low-cost Housing Scheme, Islamabad. The mega project comprises development of 4,276 low-cost apartments on 84 acres of land. The scheme is expected to be developed in two years at an estimated cost of Rs. 32 billion.

NESPAK has been engaged by the Federal Government Employees Housing Authority (FGEHA) for the Federal Government Employees Housing Authority Scheme at Mauza Tamma and Mohriyan, Zone-IV, Islamabad. The



3D view of proposed residential units for Alipur Farash Housing scheme, Islamabad

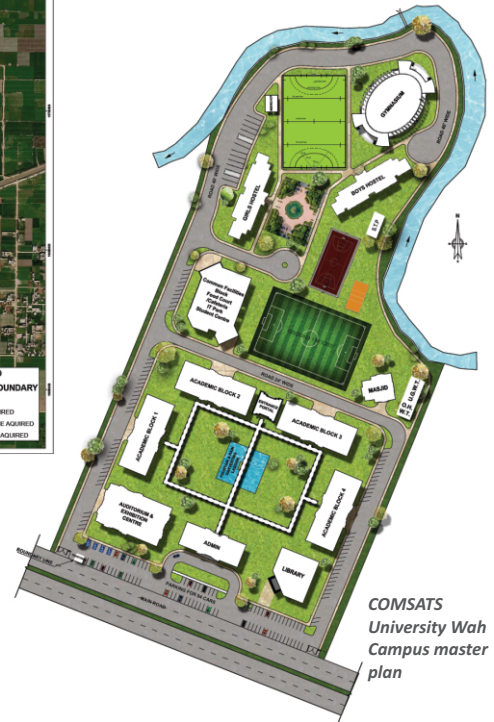




Map for GEPCO Cooperative Housing Society, Gujranwala



Master plan of Quban Lines Housing Scheme, Lahore



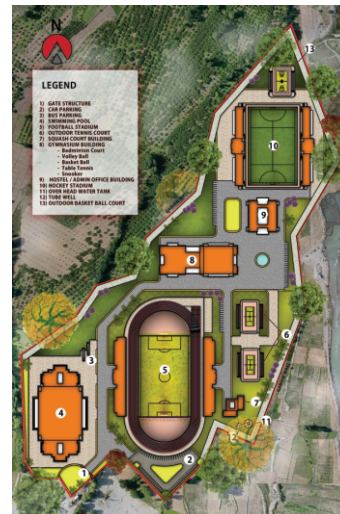
COMSATS University Wah Campus master plan

The Infrastructure Development Authority of the Punjab (IDAP), Lahore engaged NESPAK for Revamping of 32 Non-Teaching District Headquarters Hospitals in various districts of Khyber Pakhtunkhwa. NESPAK scope of work includes master planning, detailed design, tender documentation and construction supervision for this Rs. 11 billion project.

The Shaheed Zulfiqar Ali Bhutto Medical University (SZABMU) hired NESPAK for design and construction supervision of an Academic Block at SZABMU, Islamabad. The project is located adjacent to the Pakistan Institute of Medical Sciences (PIMS) Islamabad. The five-storey basement-plus-ground building will be constructed at an estimated cost of Rs. 2 billion in three years.

The COMSATS University Islamabad, Wah Campus has appointed NESPAK for upgradation of its existing campus and construction of new facilities at the Wah Campus, Taxila. NESPAK services include master planning, detailed design, tender documentation and construction supervision for this Rs. 1 billion job.

NESPAK signed an agreement with the Directorate General Sports Khyber Pakhtunkhwa for feasibility study, master



Master plan for Sports Complex, Swat

planning, detailed design and construction supervision for the development of the Swat Sports Complex. The project comprises all the sports facilities like cricket, football & hockey stadiums, gymnasium & indoor games, swimming pool and allied facilities.

The State Bank of Pakistan (SBP) has hired NESPAK for planning, design and construction supervision for a new SBP Office Building in Karachi. A basement-ground plus 15-



3D view of the State Bank of Pakistan building, Karachi

storey building at a covered area of 500,000 sq. ft shall be constructed at a cost of Rs. 5 billion.

NESPAK has been engaged for Expo Centre Quetta owned by M/s Pakistan Expo Centres (Pvt.) Limited. NESPAK is the project consultant with the mandate to design and develop a high-tech display centre to provide a world-class exhibition platform for the people of Balochistan.

NESPAK has secured Pakistan Cricket Board (PCB) as a client for another three years through a competitive bidding. Under this project, NESPAK will provide services for feasibility study, master planning, architectural & engineering design, third-party validation, marketing & construction supervision of upcoming PCB engineering projects and stadiums, hotel, shops etc. along with related structures and allied infrastructure.

The Pakistan Sports Board awarded NESPAK Sindh Development Plan Project comprising master plan and architectural & engineering design of sports facilities in nine districts of Sindh. The project will be executed at the cumulative cost of Rs. 3 billion.

Among the ongoing projects, fourteen (14) more sub-projects have been completed under the mega venture—Reconstruction and Rehabilitation of Earthquake Affected Areas—in the Khyber Pakhtunkhwa and Azad Jammu and Kashmir. The total number of completed jobs has been put at 2,297 with the accomplishment of these



subprojects in the health, education, governance and road sectors as well as Kuwait-Funded Colleges in the quake-hit areas. The Rs. 200 billion project was started in the wake of the massive October 2005 earthquake. NESPAK has been involved in planning, designing, tender documentation and construction supervision for this huge project. The Urban Development Programme comprising 113 building and infrastructure jobs has already been completed in Muzaffarabad, Bagh and Rawalakot Districts of the AJK with the Chinese Preferential Buyer's Credit under this assignment.

NESPAK is rendering design services for more than 20 sub-projects related to urban planning and infrastructure development under the multi-billion Ravi Riverfront Urban Development Project (RRUDP), Lahore. The cost of subprojects being designed is Rs. 500 billion. NESPAK will also provide project management for the Rs. 1,000 billion RRUDP venture awarded by the Ravi Urban Development Authority. The prime objective of this massive project is to rehabilitate and develop the dying River Ravi into a perennial fresh water body with high quality waterfront urban development on the reclaimed and adjoining lands to achieve the goals of economic growth, industrial success and superb urban living for the Lahore City.

NESPAK is providing detailed design/review and construction supervision for the Establishment of Infrastructure in LDA City (Phase-I) Project awarded by the Lahore Development Authority. Work is continuing at a good space for various packages of this Rs. 15 billion venture

Construction works for the Ziarat Development Package Phase-I were formally inaugurated during the year. NESPAK has earlier prepared master plan and design of this Rs. 3 billion project.



View of players' dressing lounge under Uplifting of Qadafi Stadium, Lahore for Pakistan Cricket Board Project

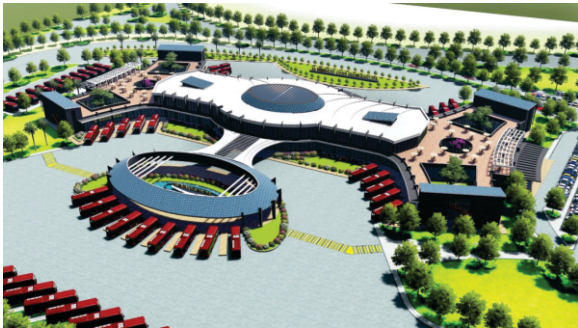
Master plan for Pakistan Sports Board Project, Karachi



A conceptual view of Industrial Zone for multi-billion Ravi Riverfront Urban Development Project, Lahore



A view of proposed Sindh Forensic Science Laboratory, Karachi



Master plan of proposed Peshawar Bus Terminal

The PC-I of FG Servants Colony Sariab Road, Quetta has been approved at an estimated construction cost of Rs. 7 billion by the Federal Government Employees Housing Authority (FGEHA), Islamabad during the year. NESPAK services include master planning and detailed design for this project.

Construction activities are in progress at the site of the Civil Services Cooperative Housing Society Hawksbay, Karachi under the supervision of NESPAK. NESPAK has prepared master plan and detailed engineering design for this Rs. 2 billion project.

Construction of boundary wall and allied facilities remained in progress at the site of the Sindh Forensic Science Laboratory, Karachi under NESPAK supervision. The PC-I of this project been approved with an estimated cost of Rs. 5 billion.



3D view of Pakistan Digital City, Haripur

Construction works for the Establishment of National Aerospace Science and Technology Park (NASTP) at Kamra are meeting the planned targets under the supervision of NESPAK. Awarded by the Pakistan Air Force, Rs. 4 billion NASTP project is being constructed on a fast-track basis.

Work is continuing for the Pakistan Digital City in Haripur at a rapid pace under the supervision of NESPAK. The Rs.1 billion project was awarded to NESPAK by the Khyber Pakhtunkhwa Information Technology Board for master planning, detailed architectural & engineering design and construction supervision.

Construction of Peshawar Bus Terminal Project was started under the supervision of NESPAK during the year. The project will be completed at an estimated cost of Rs. 4 billion. It is part of various infrastructure projects launched by the Peshawar Development Authority (PDA). The cumulative cost of all PDA projects including the bus terminal stands at Rs. 13 billion. NESPAK is involved in engineering studies, design and construction supervision of the projects.



An artistic view of National Aerospace Science and Technology Park, Kamra



*Under-construction Balochistan
High Court Complex, Turbat*

Construction works for the Uplifting of academic and infrastructure facilities at the Hazara University, Mansehra have been started under the supervision of NESPAK. NESPAK has also been involved in master planning and design for this Rs. 1 billion job.

Site works for the development of academic infrastructure for the University of Kotli, AJK are going well. NESPAK has been providing services for master planning, design and construction supervision for this Rs. 1 billion project.

Construction activities at the Naval Research Development Institute Complex at PNS Jauhar, Karsaz, Karachi is in progress. The ground plus five-storey building is estimated to be completed at a cost of Rs. 1 billion.

Construction of the Balochistan High Court Complex at Turbat is in progress under NESPAK supervision after the completion of design.

NESPAK continued to provide construction supervision services for Sardar Fateh Muhammad Khan Buzdar Institute of Cardiology in Dera Ghazi Khan. The three-storey project costing Rs. 2 billion was awarded by the IDAP.



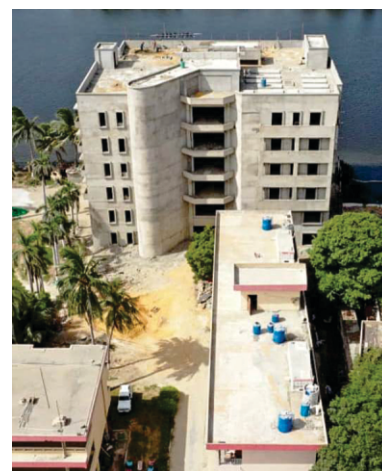
*A conceptual view of a building
under Five Al-Meera Malls Project,
State of Qatar*

In the State of Qatar, NESPAK is involved in the design, tender documentation and construction supervision of Five Al-Meera Malls Project worth US\$ 29 million. Owned by the Al-Meera Consumer Goods Company, the project is located in Al-Faroosh, Umm Al-Amad, Al-Muaither, Al-Luqta, and Al-Thumama areas of Qatar.

Among the projects wrapped up during the year, NESPAK completed services for New Surgical and OPD Complex at the Jinnah Post-graduate Medical College, Karachi. The six-storey medical complex worth Rs. 3 billion has been designed and supervised by NESPAK.

The construction of grey structure of PN Central Mess Building at NORE-I, Karachi was completed under the supervision of NESPAK which also carried out detailed design and external development of all components of this project. The construction of Chief of Naval Staff House and allied facilities at the PNS Karsaz, Karachi was also wrapped up under NESPAK supervision during the year. The cumulative cost of the two projects stands at Rs. 1 billion.

NESPAK completed the master plan and construction supervision of the New Bus/Truck Adda, Vegetable/Fruit Market Square at Chaman Balochistan. The project was completed at an estimated cost of Rs. 1 billion. The Phase-I of construction works of New Bus/Truck Adda at Zhob was also carried out under NESPAK supervision during the year.



*Pakistan Navy
Central Mess at
NORE-I, Karachi*



*Chief of Naval
Staff House at
PNS Karsaz,
Karachi*



NESPAK's Environmental and Public Health Engineering Sector performed reasonably well by securing 13 new projects worth Rs. 42 billion during the Financial Year 2021-22. The Company continued to render its state-of-the-art services for 26 ongoing projects worth Rs. 355 billion. The Company wrapped up services for six (6) projects worth Rs. 5 billion during the year.

Among the fresh projects during the year, NESPAK was hired for providing consultancy services for water supply and sewerage works under the Karachi Water & Sewerage Services Improvement Project (KWSSIP). This Project will be funded by the World Bank, Asian Infrastructure Investment Bank and the Government of Sindh.

NESPAK services include preparation of inception report, feasibility study, detailed design, tender documentation and construction supervision for this project titled Subprojects of SOP-I, KWSSIP. The Rs. 18 billion project has been launched by the Karachi Water & Sewerage Board following a World Bank-study namely Karachi City Diagnostics.



Construction works in progress for 12 Annual Development Programme (ADP) Schemes by WASA, Multan



Laying of force main under way in Sialkot under Punjab Intermediate Cities Improvement Investment Program (PICIIP), Package-2

The Punjab Municipal Development Fund Company has entrusted a NESPAK-led Joint venture with consultancy services for Infrastructure Subprojects in 16 Cities of Punjab (Package-2). The joint venture comprises Mott MacDonald Pakistan (Pvt.) Ltd. and Associated Consulting Engineers (Pvt.) Ltd. The scope of work for this Rs. 8 billion project includes sectoral planning, detailed design and construction supervision of water supply & sewerage system and roads & parks in Hafizabad, Kamonke and Muridke under Package-2 of this project.

During the year, the Water and Sanitation Agency (WASA) Multan engaged NESPAK for 12 Sewerage and Water Supply Schemes under two projects through a single agreement. NESPAK will supervise the construction of these Rs. 3 billion schemes to be funded by the Annual Development Programme (ADP) and departmental development sub-committees of the Punjab Government.

The Special Technology Zones Authority of the Cabinet Division has hired NESPAK for master planning, infrastructure design, Environment Impact Assessment and construction supervision of Islamabad Technopolis near Chak Shahzad. The scope of work includes master planning, detailed design and construction supervision of infrastructure works of this project of prime importance. The overall objective of development of Islamabad Technopolis is to act as a catalyst for enhancing the technology exports of Pakistan. The Islamabad Technopolis is expected to attract Foreign Direct Investment and job opportunities in the technology sector.



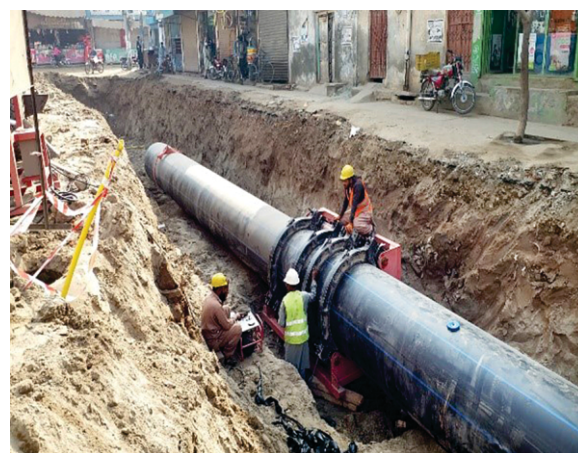
Lake coating at Gulshan-e-Iqbal Park in progress in Sialkot under PICIIP, Package-2

The National Transmission and Despatch Company Limited has engaged NESPAK in a joint venture with M/s GOPA Intec and M/s EnMasse for EPC (Engineer-Procure-Construct) engineering and construction supervision of the 220/132 kV GIS substation project at Ghara, Sindh. The venture is being funded by the KfW Development Bank. NESPAK services include the review and update of environmental & social reports and supervision of the environmental & social management plan and stakeholder engagement plan to fulfil the environmental and social safeguard requirements of the KfW Bank.

Laying of precast conduits in progress for Haji Camp-River Ravi Stormwater Drainage System, Lahore



Laying of 1200 mm dia HDPE force main in progress for Upgradation of Chungi No. 9 Disposal Station, Multan



The Punjab Aab-e-Pak Authority has appointed NESPAK for providing consultancy services for "Provision of Safe Drinking Water in Six Districts of Punjab by utilising 111 existing boreholes (South Zone). The subject districts include Dera Ghazi Khan, Rajanpur, Muzaffargarh, Lodhran, Bahawalpur and Rahim Yar Khan. The scope of services comprises preparation of feasibility study, detailed design, tender documentation and bids evaluation report of the project.

NESPAK has been engaged by the Gilgit-Baltistan Public Works Department for the Flood Mitigation and Protection Works in all 10 Districts of Gilgit-Baltistan. The scope of work consists of recommendation of flood protection works for 95 schemes in all the 10 districts of the GB. Design review field surveys for the project have been completed during the reporting period.

Among the ongoing projects, construction works for the Punjab Intermediate Cities Improvement Investment Program (PICIIP), Package-2 (Sahiwal & Sialkot) continued to progress at a rapid pace during the year. NESPAK has been involved in the master planning, detailed design and construction supervision of this Rs. 28 billion project. The contracts for upgradation of parks in Sahiwal and Sialkot and procurement of solid waste management machinery/equipment have been completed and handed



Site activities under way for Replacement of Outlived Sewer in Multan, Phase-II

over to the municipal corporations of the two cities. The sewerage contacts in Sahiwal & Sialkot have been awarded and the work is moving forward under NESPAK supervision. Under the PICIIP, the construction of the Punjab Local Government Academy building, Lahore has demonstrated excellent progress. The PICIIP venture was assigned to NESPAK by the Punjab Local Government and Community Development Department.

Superb progress has been demonstrated on the Stormwater Drainage System from Haji Camp to River Ravi via Lakshmi Chowk, McLeod Road, Nabha Road, Chauburji and Sham Nagar, Lahore under NESPAK supervision. The total length of drain to be constructed under this Rs. 3 billion project is 9 km and 7 km has been completed so far. NESPAK has also prepared design for this project awarded by the WASA, Lahore. Precast conduit and cast in-situ reinforced cement concrete (RCC) have been adopted as

construction methodology for this stormwater drainage project.

Construction works for the Upgradation of Chungi No. 9 Disposal Station, Multan Project and Replacement of Outlived Sewer in Multan, Phase-II continued on a satisfactory pace under NESPAK supervision during the year. Awarded by WASA Multan, the two projects shall be completed at a cumulative cost of Rs. 5 billion.

Construction activities for the Five ADP Schemes of WASA Multan for Financial Year 2017-2018 are fast nearing completion under NESPAK supervision. The scope of this Rs. 1 billion project includes installation of three tube wells, 51 water purification plants and three overhead reservoirs along with 210,000 ft. water supply lines.

Good progress was reported on Mitigation Sub-Schemes in All Four Provinces and Gilgit-Baltistan, Pakistan during the year. NESPAK is involved in geohazard studies, rapid geotechnical and hydrologic assessments, detailed design/review and construction supervision of this Rs. 1 billion project awarded by the Pakistan Poverty Alleviation Fund.

Construction works for 47 Mitigation Infrastructures on Khyber Pakhtunkhwa & Gilgit-Baltistan have entered the final stages of completion under NESPAK supervision. NESPAK has also prepared design of these projects based on rapid geotechnical and hydrological assessment.

Work for the Mitigation Structures at Neelum, Hattian, Sudhnothi and Bagh Districts of Azad Jammu and Kashmir is rapidly nearing completion under NESPAK supervision. The services also include design review of this project awarded by the Pakistan Red Crescent Society.

NESPAK has submitted draft feasibility report for the Sewerage System along with Development of Additional Water Source for Muzaffarabad Water Supply Project awarded by the Central Design Office, Muzaffarabad, AJK. NESPAK shall also prepare the design of the project. NESPAK is fast working on the review of feasibility study

and detailed design for construction of Gravity Flow Water Supply Scheme, Mansehra. The Khyber Pakhtunkhwa Public Health Engineering Department has awarded this project to NESPAK.

Among the projects wrapped up during the year, NESPAK successfully completed the Prime Minister's Package (Part-I) for improvement of water and sewerage systems in Multan. The Rs. 3 billion project was awarded to NESPAK by WASA Multan.

NESPAK completed detailed design and construction supervision of Augmentation/Improvement of Disposal Station, Phase-I by WASA Multan, costing Rs. 600 million.

NESPAK carried out feasibility and engineering assessments for Construction and Rehabilitation of WASH Services in Communities and Institutions in Karachi, Lahore, Quetta, Lasbela, Pishin and Qila Abdullah during the year.



Work under way for Five ADP Schemes (2017-18) of WASA, Multan



Finishing works of pump house in progress for Augmentation of Disposal Station, Multan



NESPAK came up with a moderate performance in the Oil, Gas and Industrial Sector as it secured three (3) projects during the Financial Year 2021-22. The Company continued to impart its up-to-date services for 10 ongoing projects worth Rs. 23 billion during the year.

Among the fresh projects during the year, the Pak Arab Refinery Limited (PARCO) engaged NESPAK for master planning, renovation, interior design and architectural & engineering design of their several buildings such as corporate office, new CHQ building, recreational/transit building, transport/warehouse/pipeline workshop and cafeteria at the PARCO Corporate Headquarters, Korangi. In addition to the above, PARCO awarded NESPAK the interior design of the PARCO office at the PTET Building, Islamabad. PARCO also hired NESPAK for updating of master plan architectural & engineering design and feasibility study of the building the projects of Mid Country Refinery (MCR) Housing Colony, Memhood Kot, Muzaffargarh.

The Punjab Industrial Estate Development and Management Company (PIEDMC) has hired NESPAK for Transaction Advisory Services for Establishment of 400-acre Muzaffargarh Industrial Estate on the Public-Private Partnership mode. The scope of work includes technical, legal and financial feasibility for this project.

The Oil and Gas Development Company Ltd. (OGDCL) selected NESPAK for design of two new emergency exit (Egress) steel staircases of the OGDCL Head Office, Islamabad during the year. The OGDCL Head Office is a 16-storey building with three basement levels and has an iconic presence on the main boulevard of Islamabad near the Presidential Zone. The building was constructed with



Interior design of Pak Arab Refinery Limited Office, Islamabad



Front view of Oil and Gas Development Company Ltd. Head Office, Islamabad



Construction of overhead reservoir in progress at Quaid-e-Azam Business Park site, Sheikhupura



Cold-leg hot-leg refractory equipment structure being strengthened for structural capacity enhancement requirements at Fatima Fertilizer Company Ltd., Rahim Yar Khan

design codes at the prevailing time and lacked the provision of emergency exit staircases which are mandatory in case of a fire or seismic event. M/s OGDCL hired the services of NESPAK through an open bidding to undertake the task of localised building assessment structurally and architecturally for the appropriate designing of a new steel Egress Staircase with the existing RC structure. The constraints and challenges are that the design should fulfil the current codal provisions of the Building Code of Pakistan with minimum modification to the RC structure.

Among the ongoing projects, construction of civil infrastructure works for the Development of Quaid-e-Azam Business Park (QABP) on Motorway M-2, District Sheikhupura kicked off under NESPAK supervision during the year. NESPAK has completed detailed design as well as external electrical works for the Rs. 16 billion QABP venture. Launched by the PIEDMC, the QABP having footprint of 1,860 acres is a business destination of the future which is expected to generate about 500,000 skilled and unskilled labour employment upon its completion.

Excellent progress was demonstrated on the design work for the extension of the main industrial plant structures of the Fatima Fertilizer Company Limited (FFCL), Rahim Yar Khan during the year. The structural design project encapsulates the evaluation and capacity enhancement of the existing industrial plant buildings. The scope of work includes structural design modifications in various buildings i.e., CAN plant, Nitro Phosphate plant, substations, prilling towers, blast-proof DCS building and township buildings. These multistorey buildings house a number of heavy vessels, machines, motors, grinders, electrical cabinets and various heavy industry equipment.

Among the projects wrapped up during the year, NESPAK completed supervision of for the rehabilitation of Cooler Tower building for the 450MW Combined Cycle Power Plant, Abdul Hakim, Khanewal. The intricate and lengthy work of rehabilitation was completed and the plant is fully operational. The Cooling Tower structure had started deteriorating gradually due to continuous water exposure, temperature effects and Alkali-Silica gel formation in concrete. Consequently, a significant number of cracks were observed in the main structural components, particularly the beams and columns. NESPAK was engaged by the Rousch (Pakistan) Power Limited, an independent power producer, for this evaluation and rehabilitation assignment. NESPAK has earlier completed a comprehensive design for this project.



Preparation of RC column jacket at site for the Cooling Tower Rehabilitation Works, Khanewal



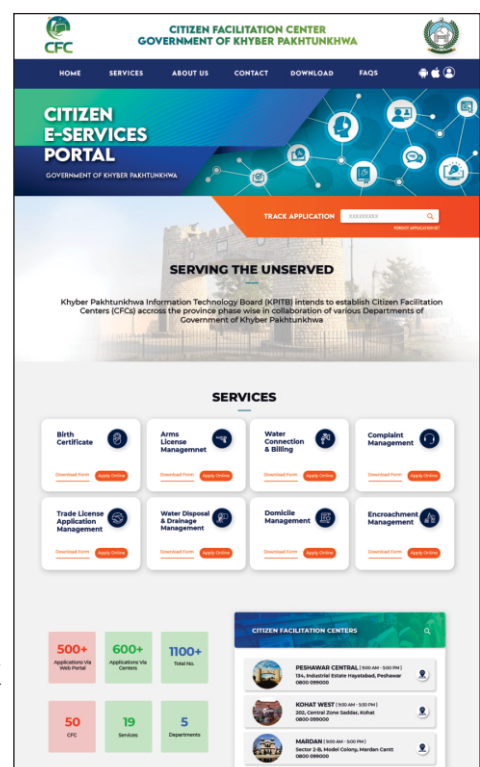
NESPAK is treading forward in the Information Technology and Geographic Information System Sector as it obtained six (6) new projects during the Financial Year 2021-22. The Company continued to render its cutting edge services for 10 ongoing projects and completed two (2) assignments during the fiscal year.

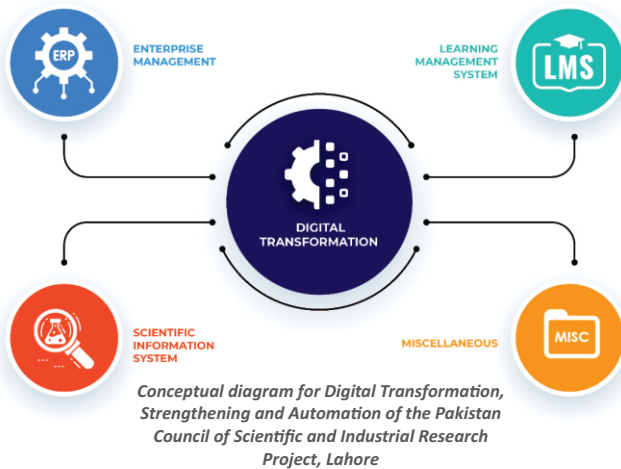
INFORMATION TECHNOLOGY (IT)

Among the fresh projects during the year, NESPAK won a software development consultancy services contract for the establishment of Pilot Citizen Facilitation Centre in Peshawar through a competitive bidding. The project was awarded by the Khyber Pakhtunkhwa Information Technology Board. The assignment comprises business requirement gathering, business process re-engineering, software requirement specification/function requirement specification & design, development & implementation of the centralised and integrated software solution for the 19 selected services of five Khyber Pakhtunkhwa Government Departments. The Citizen Facilitation Centres are one-stop service points to be established for easing citizens to access public services. The focus is to provide consolidated access to various services such as issuance of domicile certificates, arms licences, death certificates, birth certificates, divorce/ marriage certificates, provision of Fard, mutation, vehicles verifications, delivery of registration books and number plates, grant of water connections and billing, building plan approvals, trade licence etc.

NESPAK has secured a consultancy agreement for the Digital Transformation, Strengthening and Automation of

*Citizens E-Services
Portal for
Establishment of
Pilot Citizen
Facilitation Centre,
Peshawar*





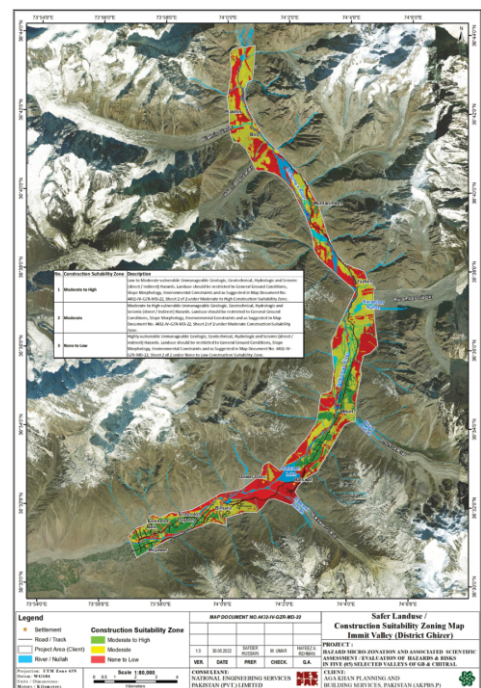
the Pakistan Council of Scientific and Industrial Research (PCSIR) Project through a competitive bidding. The project has been awarded by the Ministry of Science and Technology. The main objective of consultancy services is to analyse the business requirements of PCSIR with respect to software solutions. After completing the requirement analysis, NESPAK will prepare a document covering complete Software Requirements Specification to fully substantiate all processes for automation. Then, it will provide an end-to-end technical assistance from inception to completion of the project.

GEOGRAPHIC INFORMATION SYSTEM (GIS)

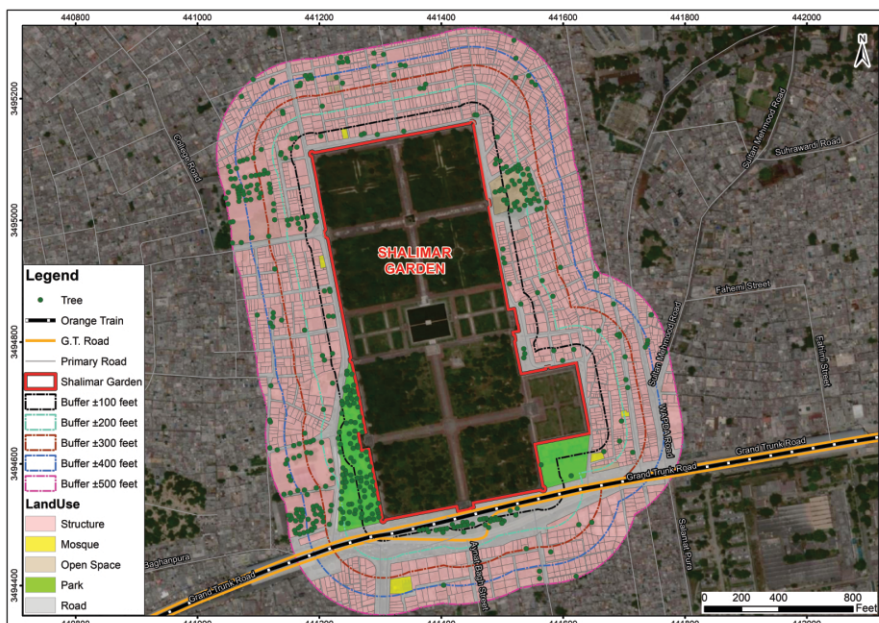
Among the fresh projects during the year, NESPAK signed a contract agreement with the Aga Khan Planning

and Building Services, Pakistan for hazard microzonation and associated scientific assessment/evaluation of hazards and risks in Five Selected Valleys of Gilgit-Baltistan (GB) and Chitral. These valleys include Immit-Ishkoman and Gulagmul Valley, District Ghizer, Shimshal Valley, District Hunza, Lower Yarkhoon Valley in GB and Safaid Arkari Valley in District Chitral. The project's scope also includes various types of geotechnical and geophysical investigations at the selected locations of the valleys.

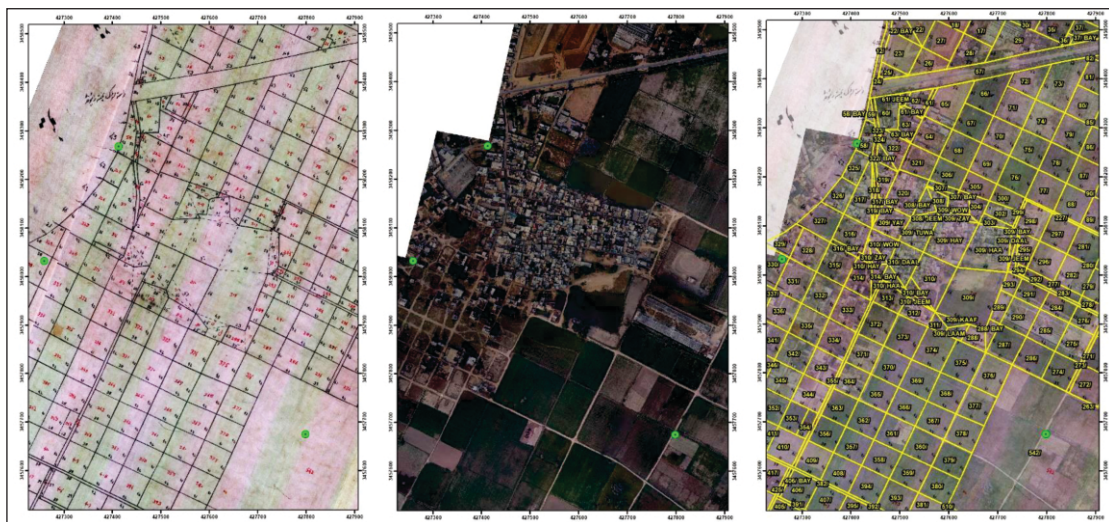
NESPAK has been engaged for rendering consultancy services to Implement the Recommendations of Reactive



Hazard microzonation in Five Selected Valleys of Gilgit-Baltistan and Chitral Project



Recommendations of Reactive Monitoring Mission of UNESCO/ICOMOS for Shalimar Gardens, Lahore



Cadastral Mapping Project for Lahore and Karachi

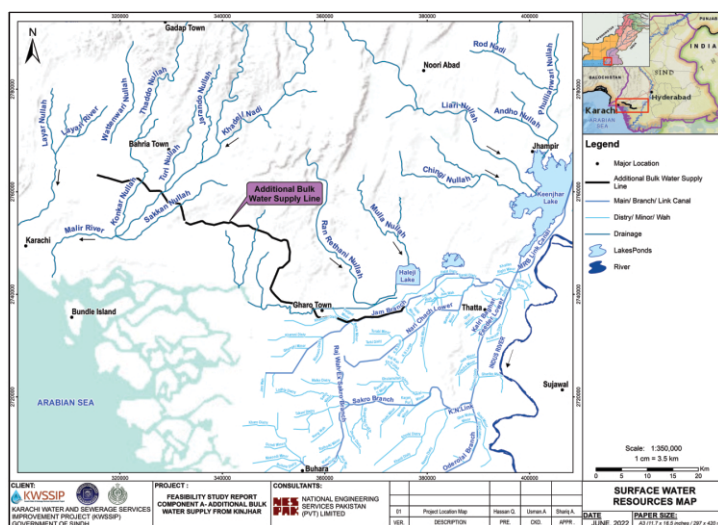
Monitoring Mission (RMM) of UNESCO/ICOMOS for Shalamar Gardens, Lahore at geographical coordinates of 31° 35' 9" N, 74° 22' 55" E, accessible through the G.T. Road. GIS has a cross-cutting role in the project and all major project tasks require GIS inputs to map and quantify all different aspects. GIS inputs are very important in achieving the project's overall objective i.e., sustainable conservation of Shalamar Gardens while meeting the obligations of its World Heritage status and to meet the targets and goals identified by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) and the International Council of Monuments and Sites (ICOMOS) in order to ensure that the property is not reinscribed on the List of World Heritage in danger in accordance with Article 11 (4) of the World Heritage Convention.

Among the ongoing projects, the Cadastral Mapping Project of Lahore and Karachi awarded by Survey of Pakistan (SOP) progressed well during the year. The project covers during an area of 757 km² of Lahore and 1,062 km² of Lahore and Karachi, respectively. Under this project, geospatial database of Lahore City has been developed in three categories i.e., areas with approved layout plans, densely populated slum areas and areas having only revenue record of mauzas and khasra with mutation data as the ownership and mapping information. Database of the first two categories was completed during the reporting period while the third category of mauzas/mutation data remained in progress. Information of land use, address and ownership has been attached as attribute data with each land parcel.

NESPAK has been providing various GIS key inputs to hydrology and environment domains for feasibility studies and design/review of Group-3 Sub-projects

for SOP-2 of Karachi Water Supply and Sewerage Improvement Project—Additional Bulk Water Supply from Kinjhar Gujjo Canal. The GIS scope of services includes, but not limited to, map of the footprint of the project area, ROW (Right of Way) and COI (Corridor of Impact) quantifications, determination of input parameters for hydrological analysis, mapping of sensitive receptors, impacts identification and quantification.

Among the projects wrapped up during the year, NESPAK completed GIS services for Wastewater Collection and Treatment of Baffa Khor Mohalla and Improvement of Stormwater Drainage in Faridabad, District Mansehra. The GIS-based UAV drone topographic survey was conducted to develop an ultra-high resolution-based map and topographic profile along with drainage network of the area. Critical GIS inputs were provided to for detailed hydrological studies for this project.



Sub-Projects for SOP-2 of KWSSIP – Additional Bulk Water Supply from Kinjhar Gujjo Canal map

Major New, Ongoing & Completed Projects

a) Feasibility Study
b) Project Planning
c) Detailed Design
d) Tender Documents
e) Construction Supervision
f) Design Review
g) Software Requirement Specification

h) Functional Specifications Document
i) System Study Design
j) Software Development
k) Testing, Debugging & Implementation
l) Documentation & Training
m) Satellite Imagery
n) Map Digitisation

o) Digital Terrain Model
p) Global Positioning System
q) GIS Database & Model
r) Map Analyses
s) Cadastral Mapping

PROJECT	LOCATION	CLIENT	SCOPE OF WORK	COST Rs. Million US\$ Million
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ENERGY SECTOR

New

Revival of 415MW Combined Cycle Power Plant at Guddu Thermal Power Station	Pakistan	Central Power Generation Company Limited	c d e f	100,000 549
500/132 kV Grid Station Allama Iqbal Industrial City, Faisalabad	Pakistan	National Transmission & Despatch Company	d e f	5,000 28
500 kV Double Circuit Quad Bundle Transmission Lines from SECL Power Plant Thar Block-I to Matiari Converter Station (200km)	Pakistan	National Transmission & Despatch Company	e Allied Activities	21,783 124
Energy Resource Centre, Johar Town, Lahore	Pakistan	Energy Department, Government of the Punjab	d e f Bid Evaluation	5,000 28

Heating, Ventilation & Air-conditioning System

Upgradation/Replacement of Fire Alarm/Fire Fighting System at Evacuee Trust Complex and Green Trust Tower, Islamabad	Pakistan	Evacuee Trust Property Board, Government of Pakistan	a b c d e	130 1
Replacement of HVAC Components at Faisalabad Institute of Cardiology	Pakistan	Faisalabad Institute of Cardiology, Faisalabad	c e	N.A. N.A.

Ongoing

4500MW Diamer Basha Dam	Pakistan	Diamer Basha Development Company (Private) Limited	b d e f	1,862,000 11,860
800MW Mohmand Dam Hydropower Project	Pakistan	Water and Power Development Authority	c e f	309,600 2,227
Upgradation & Refurbishment of Generating Units (1-6) of Mangla Power Station	Pakistan	Water & Power Development Authority	e f	52,224 497
1263MW Regasified Liquefied Natural Gas (RLNG)-based Combined Cycle Power Plant near Trimmu Barrage, Jhang District	Pakistan	Punjab Thermal Power (Pvt.) Limited	a d e f	52,000 495
500 kV Transmission Lines Interconnection Arrangement for Power Evacuation from Suki Kinari, Kohala & Mahl Hydropower Projects in Northern Areas	Pakistan	National Transmission & Despatch Company	b c d e f l p s	17,000 127
500kV Double Circuit Quad Bundle Transmission Line: Nokhar S/S–Lahore, North S/S–Lahore to HVDC, Converter Station (135km)	Pakistan	National Transmission & Despatch Company	e	8,000 50
900MW Bin Qasim Power Station (BQPS-III) Combined Cycle & Associated Transmission Projects	Pakistan	K-Electric Limited, Karachi	e f	100,219 638
220 kV Double Circuit Transmission Line from Dera Ismail Khan to Zhob (220km)	Pakistan	National Transmission & Despatch Company	e	7,000 4
500 kV Faisalabad West Grid Station, Extension & Associated 500 kV Transmission Lines (Phase-II)	Pakistan	National Transmission & Despatch Company	d e f	8,000 60
24MW Rabat Hydropower Project, Kashkandarya Region	Uzbekistan	Joint Stock Company Uzbekhydroenergo	e f	12,750 75

Completed

1180MW RLNG-based Combined Cycle Power Plant at Bhikki, District Sheikhupura	Pakistan	Quaid-e-Azam Thermal Power (Pvt.) Limited	a d e f	54,000 535
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PROJECT	LOCATION	CLIENT	SCOPE OF WORK	COST Rs. Million US\$ Million
Transmission Scheme for Dispersal of Power from Neelum-Jhelum Hydropower Project	Pakistan	National Transmission & Despatch Company	d e f	21,697 258

WATER & AGRICULTURAL DEVELOPMENT AND DAM ENGINEERING SECTOR

New

Attabad Lake Hydropower Project (54MW)	Pakistan	Water & Power Development Authority	d	N.A. N.A.
Project Readiness Financing for Punjab Water Resources Management, ADB-funded	Pakistan	Irrigation Department, Government of the Punjab	a c d	157,000 863
Preparation of Feasibility Study of Thar Canal Project	Pakistan	Water & Power Development Authority	a	23,000 113
Implementation Support & Monitoring of Promotion of Mechanised Agriculture for Increasing Crop Productivity, Punjab	Pakistan	Agriculture Department, Government of the Punjab	Monitoring	10,000 47
Bara Dam Multipurpose Project, District Khyber	Pakistan	Irrigation Department, Government of Khyber Pakhtunkhwa	c d PC-I	N.A. N.A.
Tank Zam Multipurpose Dam (26MW), Tank	Pakistan	Irrigation Department, Government of Khyber Pakhtunkhwa	a c d PC-I	N.A. N.A.
Chiniot Dam Project (80MW)	Pakistan	Water & Power Development Authority	c d PC-I	N.A. N.A.
Cement-concrete Lining of Odera Lal Branch, Sindh	Pakistan	Irrigation Department, Government of Sindh	e f	3,932 22
Remodelling of BRBD Link Canal to Canal Supply for Lahore and Kasur Divisions	Pakistan	Irrigation Department, Government of the Punjab	a c d	12,000 71
Development of Hydropower Project at Rattu Astore, Gilgit-Baltistan	Pakistan	Water & Power Department, Gilgit Baltistan	a c	N.A. N.A.
Flood Mitigation Structure & Flood Management Plan for Swat and Panjkora River	Pakistan	Irrigation Department, Government of Khyber Pakhtunkhwa	c e	3,000 13
Chashma Right Bank Canal (Lift cum gravity) Project, Punjab	Pakistan	Water & Power Development Authority	a b c d	29,000 184

Ongoing

Trimmu & Panjnad Barrages Improvement Project	Pakistan	Irrigation Department, Government of the Punjab	b c d e f	18,316 178
Rehabilitation & Upgradation of Balloki Barrage and Lower Bari Doab Canal System	Pakistan	Irrigation & Power Department, Government of the Punjab	c d e	30,000 381
Remodelling of Warsak Canal System in Peshawar & Nowshera	Pakistan	Irrigation Department, Government of Khyber Pakhtunkhwa	c d e	17,000 190
Projects under Annual Development Program	Pakistan	Irrigation & Power Department, Government of the Punjab	e f	100,000 1,203
National Program for Improvement of Watercourses in Pakistan, Phase-II	Pakistan	Ministry of National Food Security & Research	c e f	154,000 933
Kachhi Canal Project	Pakistan	Water & Power Development Authority	c d e	152,000 2,649
Balochistan Water Resources Development Sector Project	Pakistan	Irrigation Department, Government of Balochistan	a c d e	21,000 151
Gomal Zam Dam Command Area Development & On-Farm Water Management for High Value & Efficiency Agriculture	Pakistan	Gomal Zam Dam Command Area Development Project	c d e	3,370 32
Harnessing of Hill Torrents in Dera Ghazi Khan & Rajanpur	Pakistan	Irrigation Department, Government of the Punjab	a c d PC-I	47,400 296
Promotion of High Value Agriculture through Solarisation of Drip & Sprinkler Irrigation System	Pakistan	Agriculture Department, Government of the Punjab	e f	4,000 26
Murunj Dam Project	Pakistan	Water & Power Development Authority	a c d PC-I	8,300 50
Flood Protection Dam in Al-Jufainah, Muscat Governorate	Oman	Ministry of Agriculture & Fisheries	e f	13,393 130

PROJECT	LOCATION	CLIENT	SCOPE OF WORK	COST Rs. Million US\$ Million
Dams in Southern Region	Saudi Arabia	Ministry of Environment, Water & Agriculture	e f	19,198 155

COMMUNICATION SECTOR

Roadways

New

Underpasses and Flyovers for Elimination of Level Crossing from Loop Section of Karachi Circular Railway	Pakistan	Pakistan Railways	e f Procurement	20,000 110
Road Projects Quetta Zone/ Quetta Cluster, Balochistan	Pakistan	Physical Planning & Housing Department, Govt. of Balochistan	a c	42,000 231
Port Qasim Authority Main Access Road including Construction of Bridge, Flyovers, Interchanges & Toll Plazas from T-Junction National Highway to Ghaghar	Pakistan	Port Qasim Authority	b c e Survey	10,000 56
Chitral-Booni-Mastuj-Shandur Road (153km)	Pakistan	National Highway Authority	e f	16,745 99
Dualisation of Road from G.T. Road (Samma) to Gujrat Dinga Road. Flyover G.T. Road, Kathiala Railway Crossing and Gujrat-Sargodha Road	Pakistan	Communication & Works Department, Govt. of the Punjab	c e	3,518 19
Widening/Strengthening of Rakhi Gaj-Bewata Package-II East West Road Improvement Project	Pakistan	National Highway Authority	e	1,110 5
Two Flyovers in Dera Ismail Khan	Pakistan	Khyber Pakhtunkhwa Communication & Works Department	a c d	3,215 18
Khawazakhela-Besham Motorway	Pakistan	Pakhtunkhwa Highway Authority	a c	50,000 282
Roads Projects in North & South Punjab under Provincial Sector Development Project	Pakistan	Communication & Works Department, Govt. of the Punjab	c e	81,000 352
Construction of Road from Kalat to Pindran via Kapoto, Balochistan	Pakistan	Communication Department Circle Kalat, Balochistan	c e	1,050 6
Taxila to Wah Bypass Road	Pakistan	National Highway Authority	a c	1,050 6
Peshawar (Chamkani) to Nowshera Road Addition of Extra Lane on Each Side of N-5	Pakistan	National Highway Authority	a c	1,100 6
Ring Road Multan and Sialkot	Pakistan	Punjab Ring Road Authority	a c e	63,000 274
Rehabilitation & Upgradation of Awaran-Jhaljao-Bela Road (135km), Balochistan	Pakistan	National Highway Authority	e f	24,000 104

Ongoing

Shatial-Thor Nullah Bypass (35km)	Pakistan	National Highway Authority	c e	6,000 62
Permanent Reconstruction Works in Federally Administered Tribal Areas	Pakistan	Temporarily Dislocated Persons Support and Management	c e Solarization	11,450 110
Bus Rapid Transit Yellow Corridor under Karachi Mobility	Pakistan	Transport & Mass Transit Department, Government of Sindh	c d e	70,000 407
Strengthening of East-West Connectivity of Merged Areas (FATA) with Settled Districts and Improvement Links	Pakistan	Communication & Works Department, Government of Khyber Pakhtunkhwa	a c d e f	15,000 91
Khyber Pakhtunkhwa Integrated Tourism Development Project	Pakistan	Communication & Works Department, Government of Khyber Pakhtunkhwa	a c e EIA Study	20,000 120
Dualisation & Improvement of Sarai Gambila to Karak Section of Indus Highway (61km)	Pakistan	National Highway Authority	e f	11,000 79
Dualisation & Improvement of Old Bannu Road Project, Gandhi Chowk-Sarai Naurang, Domail-Khurram & Khurram-Krapa Sections	Pakistan	National Highway Authority	e f	18,000 158

PROJECT	LOCATION	CLIENT	SCOPE OF WORK	COST Rs. Million US\$ Million
Roads and Bridge in Less Developed Districts of South Balochistan	Pakistan	Provincial B&R Circle, Balochistan	c	64,857 424
Dualisation & Improvement of Pindigheb-Kohat Road N-80 (80km)	Pakistan	National Highway Authority	e f	20,000 144
Road from Shigar to Paiju, District Shigar (152km)	Pakistan	Public Works Department, Govt. of Gilgit-Baltistan	a d e	25,000 161
Rehabilitation of Flood Damaged Rural Roads, Khyber Pakhtunkhwa	Pakistan	Communication & Works Department, Khyber Pakhtunkhwa	c e	1,000 7
Flyovers on Mingora-Kanju Road & Kanju Chowk Bypass Road from Aligrama to Bara Bandai	Pakistan	Pakhtunkhwa Highway Authority	e	1,200 7
Construction of Flyover Shahkam Chowk and Underpass at Gulab Devi Hospital Lahore	Pakistan	Lahore Development Authority	e	5,000 22
Seirra Leone Integrated Resilient Urban Mobility Project	Sierra Leone	Integrated Transport Planning Limited, Sindh	c	N.A. N.A.

Completed

Infrastructure including Allied Works for Islamabad Metro Bus from Peshawar Morr to New Airport	Pakistan	National Highway Authority	c e	17,000 163
Bus Rapid Transit Orange Line, Karachi	Pakistan	Transport & Mass Transit Department, Government of Sindh	c d e	1,800 18
Kot Belian-Tarap Road Package-3 (52km), Section of Hakla (M-1)-Yarak (Dera Ismail Khan) Motorway	Pakistan	National Highway Authority	e f	28,000 269
Bypass Road from Ayub Bridge Havelian to Dhamtour, Abbottabad	Pakistan	Communication & Works Deptt., Govt. of Khyber Pakhtunkhwa	a e f	3,408 32

Airports

New

Project Management Consultancy Services for New Gwadar International Airport	Pakistan	Civil Aviation Authority	e Project Management	10,000 49
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Ongoing

Extension of Terminal Building at Allama Iqbal International Airport, Lahore	Pakistan	Civil Aviation Authority	c d PC-I	18,000 175
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Ports & Harbours

New

Refurbishment of Dry Docks and Purchase of Level Luffing Cranes	Pakistan	Karachi Shipyard & Engineering Works	e	N.A. N.A.
Establishment of Business Park, Modification of Auction Hall & Establishment of Cold Storage & Freezing Tunnels at Korangi Fisheries Harbour Authority, Karachi	Pakistan	Korangi Fisheries Harbour Authority, Karachi	a c e	N.A. N.A.

Ongoing

Upgradation of Shipyard for Project 313	Pakistan	Karachi Shipyard & Engineering Works	c d e f	20,000 176
Port Connectivity Project under Public-private Partnership (PPP) Arrangement of KPT	Pakistan	Karachi Port Trust	a b c d	N.A. N.A.
Development of the Container Terminal at Pakistan Deep Water Container Port Project	Pakistan	Karachi Port Trust	e	72,812 455

Completed

Multipurpose Dry Bulk Clean Cargo Terminal at East Wharf of Karachi Port on BOT Basis	Pakistan	Karachi Port Trust	a b d	50,000 480
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PROJECT	LOCATION	CLIENT	SCOPE OF WORK	COST Rs. Million US\$ Million
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ARCHITECTURE & PLANNING SECTOR

New

Low-cost Housing Scheme at Alipur Farash, Islamabad	Pakistan	Capital Development Authority	e f Vetting	32,000 182
Revamping of 32 Non-Teaching DHQ Hospitals in Khyber Pakhtunkhwa (4 Phases)	Pakistan	Infrastructure Development Authority Punjab	c d e	11,000 62
Federal Government Employees Housing Authority Scheme at Mauza Tamma & Mohriyan, Zone-IV, Islamabad	Pakistan	Federal Government Employees Housing Authority, Islamabad	a c d e	14,000 64
Development of Apartments Scheme at Minawar, Gilgit	Pakistan	Pakistan Housing Authority	a b c e	7,000 38
Existing and New Campus Facilities of Comsat University Wah Campus	Pakistan	COMSATS University Islamabad	c d e	700 4
Supreme Court Employees Cooperative Housing Scheme, Islamabad	Pakistan	Supreme Court Employees Cooperative Housing Society	d e	3,000 15
New SBP Office Building at Karachi	Pakistan	State Bank of Pakistan	c e	5,000 28
Infrastructure Development of Gwadar Cantonment, Gwadar City	Pakistan	Engineer-in-Chief (E-in-C) Branch, Pakistan Army	e f	4,006 24
Housing Scheme at Dangram, Swat	Pakistan	Provincial Housing Authority, Govt. of Khyber Pakhtunkhwa	a c e	2,000 10
Expo Centre, Quetta	Pakistan	Pakistan Expo Centres (Pvt.) Limited	c f	N.A. N.A.
Establishment of Sports Complex in Swat	Pakistan	Director General of Sports, Khyber Pakhtunkhwa	c d e	955 5
Sindh Development Plan	Pakistan	Pakistan Sports Board	a b c d	3,000 17
Peshawar Uplift Programme (Phase-II)	Pakistan	Government of Khyber Pakhtunkhwa	c e	1,000 5
Urban Regeneration of Walton Central Business District, Phase-I (Civil Works), Punjab	Pakistan	Lahore Central Business District Development Authority	e	3,000 17
Provision of Cricket High Performance Centres at Divisional Headquarters, Faisalabad & Sialkot	Pakistan	Punjab Sports Board	d e	1,400 8
Academic Block at Shaheed Zulfiqar Ali Bhutto Medical University, Islamabad	Pakistan	Shaheed Zulfiqar Ali Bhutto Medical University, Islamabad	c d e	2,000 11
GEPCO Employees Housing Foundation Phase-II, Gujranwala	Pakistan	GEPCO Employees Housing Foundation, Gujranwala	b c d	N.A. N.A.
Rawal Palm City, Adyala Road, Rawalpindi	Pakistan	Rawal Palm City (Pvt.) Limited	c d	N.A. N.A.
Master Planning of 1000 acres of land at DHA City, Karachi	Pakistan	Pakistan Defence Officers Housing Authority, Karachi	b	N.A. N.A.
Rehabilitation/Renovation & Construction Works for Establishment of Government College University, Hyderabad	Pakistan	Government College University, Hyderabad	c e	472 3
Strategic Grain Reserve—Food Department Khyber Pakhtunkhwa	Pakistan	World Food Programme	c d e	111 1
Purpose-built Consular Services Building at the Pakistan Mission in Kabul	Afghanistan	Ministry of Foreign Affairs, Government of Pakistan	c e	500 3

Ongoing

Reconstruction & Rehabilitation of Earthquake Affected Areas	Pakistan	Earthquake Reconstruction & Rehabilitation Authority	b c d e f	200,000 3,324
Pakistan Kidney & Liver Institute and Research Center (Package-C1)	Pakistan	Infrastructure Development Authority Punjab	c d e	3,240 3

PROJECT	LOCATION	CLIENT	SCOPE OF WORK	COST Rs. Million US\$ Million
Ravi Riverfront Urban Development Project, Punjab	Pakistan	Ravi Urban Development Authority	b	100,000 599
Various Projects of Peshawar Development Authority	Pakistan	Peshawar Development Authority	a b c d e	13,000 127
Establishment of Infrastructure in LDA City (Phase-I) Lahore	Pakistan	Lahore Development Authority	e f	15,000 108
Standardisation of Higher Secondary Schools in Khyber Pakhtunkhwa	Pakistan	Elementary & Secondary Education Department, Peshawar	e f	4,469 28
Infrastructure Work under FATA Infrastructure Program	Pakistan	Planning & Development Deptt., Govt. of Khyber Pakhtunkhwa	c e	4,015 25
UNHCR Offices in Pakistan	Pakistan	United Nations High Commissioner for Refugees	c e	N.A. N.A.
Master Plan for National Aerospace Science & Technology Park Aviation City, Kamra	Pakistan	Aviation City, Pakistan (Pvt.) Limited	a b c d e	4,318 35
Establishment of Agriculture University at Swat	Pakistan	Communication & Works Deptt., Govt. of Khyber Pakhtunkhwa	c e	5,563 35
Urban Regeneration of Federal Government Servants Colony, Sariab Road, Quetta	Pakistan	Federal Government Employees Housing Authority, Islamabad	a b c d e	7,500 47
Development of Ziarat Town	Pakistan	Ziarat Development Package, Government of Balochistan	b c d e	3,000 19
Sindh Forensic Science Laboratory, Karachi	Pakistan	Home Department, Government of Sindh	a b c d e	3,000 19
University of Buner, Swari	Pakistan	University of Buner, Swari, Buner	b c d e	1,516 12
AJK Legislative Assembly Complex Project, Muzaffarabad	Pakistan	Ministry of Kashmir Affairs & Gilgit-Baltistan, Pakistan	e f	2,499 16
Reconstruction/Rehabilitation of Fully Damaged Schools in Bara, District Khyber, Khyber Pakhtunkhwa (Package I, II & III)	Pakistan	Works & Services Department, Government of Khyber Pakhtunkhwa	c e	1,348 8
Sardar Fateh Muhammad Khan Buzdar Institute of Cardiology Dera Ghazi Khan	Pakistan	Infrastructure Development Authority Punjab	e	1,916 11
Pakistan Digital City, Haripur	Pakistan	Khyber Pakhtunkhwa Information Technology Board	c e	1,450 7
Uplifting of Academic & Infrastructure Facilities at Hazara University, Mansehra	Pakistan	Hazara University, Mansehra	c d e Master Planning	1,096 7
Academic & Research Facilities at University of Kotli, AJK	Pakistan	University of Kotli, AJK	c d e	1,000 8
Civil Services Cooperative Housing Society at Hawksbay, Karachi	Pakistan	Civil Services Cooperative Housing Society (Pvt.) Limited	b c d e	2,000 22
Establishment of Girl's Cadet College, Mardan	Pakistan	Communication & Works Department, Government of Khyber Pakhtunkhwa	e f	2,395 21
Al-Meera Five Malls (Al-Froosh, Umm Al-Amad, Al-Luqta, Al-Thumama & Al-Muaither)	Qatar	Al-Meera Consumer Goods Company	c d e	4,620 29

Completed

Naval Housing Scheme at Karsaz Phase-II, Phase-III and Phase-IV, Karachi	Pakistan	Pakistan Navy	b c d e	5,000 58
New OPD & Surgical Complex at JPMC, Karachi	Pakistan	Patients' Aid Foundation	b c d e	2,250 22
New Bus/Truck Adda, Vegetable/Fruit Market Square & Police Station, Zhob	Pakistan	Communication & Works Department, Govt. of Balochistan	b c d e	373 4
Supervision of PN Central Mess at Nore-1, Karachi (Phase-I)	Pakistan	Commander Military Engineering Services (Navy), COMKAR, Karachi	b c d e	360 2
Chief of Naval Staff Camp House & Allied Facilities at Greater Karsaz, Karachi	Pakistan	Pakistan Navy	c d e	300 2

PROJECT	LOCATION	CLIENT	SCOPE OF WORK	COST Rs. Million US\$ Million
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ENVIRONMENTAL & PUBLIC HEALTH ENGINEERING SECTOR

New

Subprojects of SOP-I, Karachi Water & Sewerage Services Improvement Project	Pakistan	Karachi Water & Sewerage Board	a b c d e	17,600 100
Infrastructure Subproject, in 16 Punjab Cities (Package No. 2)	Pakistan	Punjab Municipal Development Fund Company, Lahore	b c e	8,000 44
Infrastructure Design of Islamabad Special Technology Zone	Pakistan	Special Technology Zone Authority	c e	N.A. N.A.
Safe Drinking Water in Six Districts of Punjab by utilising 111 Existing Boreholes	Pakistan	Punjab Aab-e-Pak Authority	a c d	5,830 33
12 Sewerage & Water Supply & Sewerage Schemes of WASA, Multan	Pakistan	Multan Development Authority Water & Sanitation Agency, Multan	e	2,626 15
Flood Mitigation Works, Gilgit-Baltistan	Pakistan	Gilgit-Baltistan Public Works Department	e f	685 4
EPC Engineering of 220/132 kV Gas Insulated Substation Ghara, Sindh	Pakistan	National Transmission & Despatch Company	e f	N.A. N.A.

Ongoing

Punjab Intermediate Cities Improvement Investment Program	Pakistan	Punjab Intermediate Cities Improvement Investment Program Local Government & Community Development Department, Punjab	b c d e g h i j k l	28,000 246
Ravi Riverfront Urban Development Project	Pakistan	Ravi Urban Development Authority	c e	N.A. N.A.
Stormwater Drainage System from Haji Camp to River Ravi via Lakshmi Chowk, McLeod Road, Nabha Road, Chauburji & Sham Nagar, Lahore	Pakistan	Lahore Development Authority Water & Sanitation Agency, Lahore	b c	3,000 29
Combined Effluent Treatment Plant in NWIZ and Upgrading/Enhancement of Existing Sewage Treatment Plant, Karachi	Pakistan	Port Qasim Authority	c d e f Investigations	N.A. N.A.
Gravity Flow Water Supply Scheme, Mansehra	Pakistan	Public Health Engineering Division Mansehra, Government of Khyber Pakhtunkhwa	a c d e	N.A. N.A.
Mitigation Sub-Schemes in All Four Provinces of Pakistan & Gilgit-Baltistan	Pakistan	Pakistan Poverty Alleviation Fund	d e f	1,000 6
Sewerage System along with Development of Additional Water Sources for Muzaffarabad Water Supply	Pakistan	Government of Azad Jammu & Kashmir	a b c d GIS	N.A. N.A.
Wastewater Treatment Plants for Mehmood Booti, Shadbagh, Shahdara & Babu Sabu, Lahore	Pakistan	Water & Sanitation Agency, Lahore	c d PC-I	40,000 288
Upgradation & Environmental Improvement of Chungi No. 9 Disposal Station, Multan	Pakistan	Multan Development Authority Water & Sanitation Agency, Multan	c e	3,157 20

Completed

Prime Minister's Southern Punjab Development Package for Water Supply and Sewerage Schemes, Multan City (Part-I)	Pakistan	Water & Sanitation Agency, Multan	e	2,817 34
Augmentation/Improvement of Disposal Stations Multan Phase-I	Pakistan	Multan Development Authority Water & Sanitation Agency, Multan	c e	635 6

OIL, GAS & INDUSTRIAL SECTOR

New

Investigation & Remedial Measures for the Prevention of Water Ingress in the Basement of SNGPL Head Office, Lahore	Pakistan	Sui Northern Gas Pipelines Limited	Structural Stability	N.A. N.A.
Transaction Advisory Services for Establishment of Muzaffargarh Industrial Estate on PPP Mode	Pakistan	Punjab Industrial Estates Development & Management Company	a	N.A. N.A.

PROJECT	LOCATION	CLIENT	SCOPE OF WORK	COST Rs. Million US\$ Million
Ongoing				
Quaid-e-Azam Business Park on Motorway M-2, Sheikhpura	Pakistan	Punjab Industrial Estates Development & Management Company	c e	16,000 96
Evaluation & Rehabilitation of CF Silos and Topographic Survey at Grey Cement Plant	Pakistan	Maple Leaf Cement Factory Limited	c d e f	350 3
Master Planning of New Packages Plant near Kasur	Pakistan	Packages Limited, Lahore	b c	N.A. N.A.
Extension of Fatima Fertilizer Company Main Industrial Plant	Pakistan	Fatima Fertilizer Company Limited, Multan	c	N.A. N.A.

Completed

NDT of Cooling Tower and Technical Assessment of Foundation Cracks & Remedial Measures of CT	Pakistan	Rousch (Pakistan) Power Limited	e k	N.A. N.A.
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INFORMATION TECHNOLOGY & GEOGRAPHIC INFORMATION SYSTEM SECTOR**Information Technology****New**

Software Development for Establishment of Pilot Citizen Facilitation Centre in Peshawar	Pakistan	Khyber Pakhtunkhwa Information Technology Board	i j k	N.A. N.A.
Digital Transformation, Strengthening & Automation of PCSIR, Lahore	Pakistan	Pakistan Council of Science & Industrial Research, Lahore	c d f g l	N.A. N.A.

Ongoing

Quetta Safe City Project	Pakistan	Science & IT Department, Government of Balochistan	d f PC-I	1,500 14
Development of Project Progress Monitoring Management Information System under the Punjab Intermediate Cities Improvement Investment Program	Pakistan	Punjab Intermediate Cities Improvement Investment Program	g h i j k l	N.A. N.A.

Completed

President's Initiative for Cyber Efficient Parliament	Pakistan	National Information Technology Board, Islamabad	a g l PC-I	10 0
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Geographic Information System**New**

Hazard Microzonation and Associated Scientific Assessment/Evaluation of Hazards and Risks in Five (05) Valleys of Gilgit-Baltistan & Chitral	Pakistan	Agha Khan Planning and Building Services	a c m n o q	N.A. N.A.
Studies for Recommendations of Reactive Monitoring Mission of UNESCO & ICOMOS for Shalamar Gardens, Lahore	Pakistan	Tourism Department, Government of the Punjab	n	N.A. N.A.
Mapping of High Intensity Winds and Strengthening of Towers in South Region	Pakistan	National Transmission & Despatch Company	h i n GIS	N.A. N.A.

Ongoing

Grey Cement Plant Line III, Maple Leaf Cement Factory, Iskandarabad	Pakistan	Maple Leaf Cement Factory Limited	a b c m n o p q r	N.A. N.A.
Cadastral Mapping Project of Lahore & Karachi	Pakistan	Government of Pakistan	m q s	600 4
Consultancy Services for Group 3 Sub-Projects of SOP-II, Karachi Water & Sewerage Services Improvement Project	Pakistan	Karachi Water & Sewerage Board	n GIS	N.A. N.A.

Completed

Wastewater Collection & Treatment of Baffa Khor Mohalla and Improvement of Stormwater Drainage Faridabad Area, Mansehra	Pakistan	Earthquake Reconstruction & Rehabilitation Authority	1. GIS 2. Topo Survey	N.A. N.A.
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