MANAGING DIRECTOR'S REPORT

2024

NESPAK

National Engineering Services Pakistan (Pvt.) Limited

Contents

Services

Appraisals, Pre-feasibility and Feasibility Studies

- Reconnaissance Studies
- Preliminary Investigations
- Development of Alternative Proposals
- Outline Designs and Cost Estimates
- Front-end Engineering Design
- Technical and Economic Feasibility Studies
- Site Selection Studies
- Doability Studies

Surveys and Investigations

- 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
- Computer Simulations
- Detailed Designs and Specifications
- Construction Drawings
- PC-1 & PC-2

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, Geophysic 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

My Word

It is a privilege to serve as the Managing Director of NESPAK, a distinguished leader among public sector organizations. Over the years, NESPAK has proven itself to be a strategic asset for Pakistan, with a legacy built on hard work, commitment, and resilience in overcoming challenges. It is gratifying to see NESPAK progressing steadily toward self-reliance and excellence in engineering consultancy.

The company's financial performance for the fiscal year 2023-24 reflects this success, with record-breaking profits and unprecedented business acquisitions. During this period, NESPAK secured 156 new engineering projects worth Rs. 23 billion, both domestically and internationally. It is a remarkable 25 percent increase from the previous year.

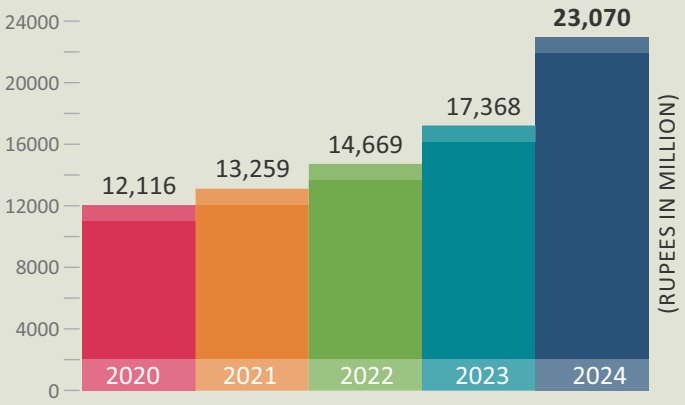
A key highlight of the year was NESPAK's exceptional performance in the international market, where it secured 16 overseas projects worth Rs. 10.8 billion—over 50% of its total business acquisition. Our overseas offices in Riyadh and Muscat acquired business worth Rs. 9.2 billion and over Rs. one billion respectively. Overall, four Divisions of NESPAK crossed over Rs. 2 billion business acquisition target while the Construction Management Division achieved Rs. 3.5 billion business acquisition.

Notable international projects include Consultancy Services for the Study and Evaluation of Dam Safety in various regions of Saudi Arabia, NEOM Project, Saudi Arabia, Completion of Al-Batinah Expressway (Package-III), Oman and Daru Island Infrastructure Mapping, UNOPS, Papua New Guinea.

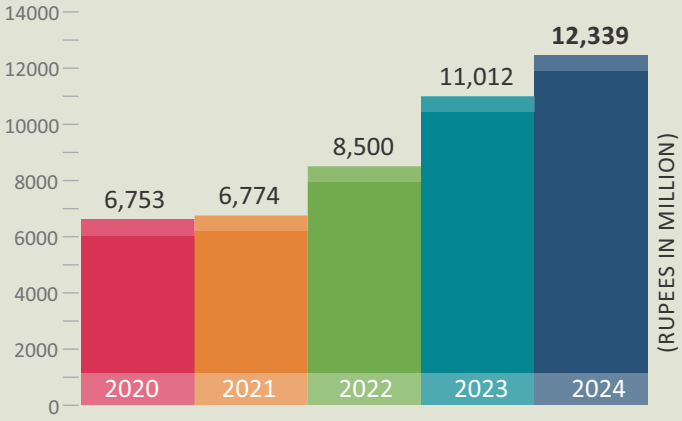
On the domestic front, NESPAK secured 140 projects with a total fee of Rs. 12.2 billion. Key local projects include Expansion of the Wagah Check Post, Lahore, Establishment of the National University of Pakistan, Islamabad, Master Planning and Detailed Engineering Services for Nawaz Sharif IT City, Punjab, Water Resources Development in Cholistan, Internal Infrastructure Development for CBD Walton (Phases 2 & 3), Flyover Connecting Bab-e-Pakistan to Walton, Lahore, Infrastructure Design for Chahar Bagh (Phase-II) of the Ravi Riverfront Urban Development Project and Lahore-Sahiwal-Bahawalnagar Motorway (295 km).

NESPAK stands out as one of the most successful and profitable public sector enterprises, earning a strong reputation for integrity and excellence both nationally and internationally. The company is

BUSINESS



INCOME

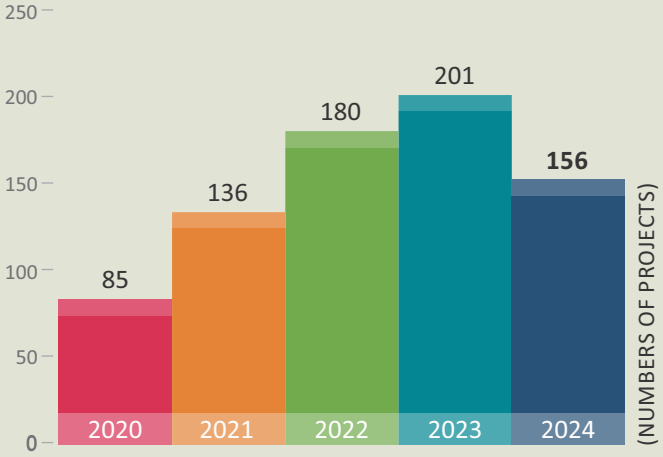


actively engaged in 520 local projects across various sectors, including dams, highways, motorways, high-rise buildings, irrigation, and public health engineering. Internationally, NESPAK is working on 28 projects in Oman, Saudi Arabia, and Papua New Guinea.

As one of the largest consultancy organizations in the developing world, NESPAK maintained an average workforce of 2,300 employees this year, including 1,800 professionals. To cope with the growing needs of the economy, NESPAK invests in continuously educating and training its employees. During the year, NESPAK has conducted more than 50 training sessions including soft skills, software-based, technical specialty-wise, and health & wellness-related sessions.

NESPAK has been implementing strict monitoring policies and high quality standards through yearly audits. An effective quality management system based on international standard ISO 9001:2015 is in place to set and achieve the performance goals. During the year, NESPAK's audit officials visited various Divisions and Offices to ensure compliance with Quality Management System.

PROJECTS



The External Audits were conducted in January 2024 by the Lead Auditor of TUV Austria Bureau of Inspection & Certification to ensure compliance to the requirements of ISO 9001:2015 (Quality Management System), ISO 14001:2015 (Environmental Management System) & 45001:2018 (Health and Safety Management System). No corrective action requests were raised and NESPAK's certifications for all the three management systems were recommended until February 11, 2027. 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 organization to be certified to all the three International Standards.

NESPAK's effective maintenance of ISO 9001, 14001, and 45001 certifications underscores its commitment to continuous improvement across quality management, environmental responsibility, and occupational health and safety; ensuring confidence in our services by the Clients and enabling us to obtain more projects locally and overseas.

Our ability to offer comprehensive consultancy services across all engineering disciplines under one roof sets NESPAK apart. Our greatest strength is our dedicated workforce, whose unwavering commitment has solidified NESPAK's reputation for excellence and contributed significantly to national development. Our success is driven by a strong management system, adherence to quality policies, and a highly skilled team. As Managing Director, my goal is to sustain this momentum and ensure NESPAK remains on a path of growth and innovation. I embrace the challenges ahead with enthusiasm and seek the Almighty's guidance to continue this journey of success.

MUHAMMAD ZARGHAM ESHAQ KHAN
Managing Director & President

Energy Sector

NESPAK demonstrated commendable performance in the energy sector during the financial year 2023-24, securing 16 new projects. The company continued to provide state-of-the-art services for 41 ongoing projects and successfully completed consultancy services for eight projects. These achievements encompassed the design and enhancement of thermal and hydel power plants, solar projects, and the improvement of NTDC's network and its interconnections with the national grid and power plants.

Among the notable new projects, K-Electric engaged NESPAK for consultancy services for the Single Circuit Loop-In/Loop-Out of the Existing 500kV K2/K3 Port Qasim Transmission Line at the New 500kV KKI Grid Station and the 220kV Double Circuit Transmission Line (LILO Portion Overhead and Underground) for KE Dhabeji–NTDC Interconnection. NESPAK's responsibilities include design review, construction supervision, and allied activities such as testing and commissioning. NESPAK also secured a project for the solarization of Pakistan Railways buildings under the BOOT (Build Own Operate Transfer) model. The consultancy involves feasibility studies, detailed design, bid preparation, and contract awards for solarization in the Peshawar, Rawalpindi, Lahore, Multan, Sukkur, Karachi, and Quetta divisions.

Internationally, in a momentous achievement, NESPAK secured a landmark NEOM project in Saudi Arabia in September 2023, becoming the first Pakistani firm to do so. The project focuses on the energy sector and has been awarded by the Saudi Electric Company (SEC). NESPAK's scope of work involves providing construction management services for Extra High Voltage (EHV), High Voltage (HV), and HVDC projects within various zones encompassing NEOM Bay,

1. *110KV substation at West Operating Area NEOM, Saudi Arabia*
2. *GIS Hall at West Operating Area NEOM, Saudi Arabia*
3. *A computerized simulation of the solarization potential of Gaddafi Stadium Metro Bus Station, Lahore*

4. *747 MW CCPP Guddu*

5. *24 MW Sustainable Hydro Power Project in Kashkandarya Region, Uzbekistan*

6. *A panoramic view of the site and ongoing construction activities at Diamer Basha Dam*

Night view of Diamer Basha Dam

NEOM Mountain, and NEOM Phase II. The project carries a budget of 46.5 million Saudi Riyals, equivalent to 3.794 billion Pak Rupees, and is scheduled for completion within three years.

NESPAK also partnered with DOLSAR Engineering, Turkey, for the rehabilitation of the Tashkent Thermal Power Plant in Uzbekistan. The USD 0.5 million project involves technical inspections of 12 power-generating units and developing a feasibility study to improve efficiency and reliability.

In April 2024, NESPAK signed a consultancy agreement with Central Power Generation Company Limited (CPGCL) for the rehabilitation of ST-16, HRSGs, and other equipment at the 747MW Guddu Combined Cycle Power Plant. NESPAK continued its partnership with the Punjab Mass Transit Authority (PMA), serving as a standing consultant for feasibility studies, planning public transport systems, and exploring renewable energy solutions. Projects included energy audits and feasibility analyses for solarization at Lahore, Multan, and Islamabad/Rawalpindi metro bus systems. Notably, a 2,915 kW solar PV system for the Orange Line Metro Rail Transit System (OLMRTS) in Lahore was designed, projected to save PKR 220 million annually.

Other notable renewable energy initiatives include feasibility studies for the solarization of OGDCL's remote oil fields and PARCO's terminal stations in Machike, Faisalabad, and Karachi. NESPAK conducted detailed site assessments, energy demand analyses, and environmental impact assessments, providing a sustainable roadmap for these organizations. Additionally, NESPAK, in a joint venture with BARQAAB, was engaged by NTDC for the design review and construction supervision of the 220/132/11kV GIS Dhabeji Substation in Sindh.

Through these endeavors, NESPAK continues to play a pivotal role in advancing energy infrastructure, promoting renewable energy solutions, and enhancing efficiency across Pakistan and beyond.

Among the ongoing projects during the year, NESPAK continued its services for 4500 MW Diamer Basha Dam Project. Currently construction activities across the fifteen sites that form part of the main dam contract (MW-1) are making steady progress under the supervision of the NESPAK-led Diamer Basha Consultants Group (DBCG). One of the most noteworthy achievements of the past year was the successful diversion of the Indus River, a critical step that allowed for further construction on the dam. This was made possible after the completion of the highly complex diversion scheme which involved the

careful planning and execution of river rerouting to ensure construction could proceed without disruption to the natural flow of the river.

NESPAK has also been providing services for Mohmand Dam Hydropower Project. Once completed, the Mohmand dam is expected to add 800 MW from the main powerhouse, 4 MW from the two powerhouses on the Left and Right Bank Irrigation Tunnels and 5.1 MW from the powerhouse on the tunnel leading to water treatment plant for municipal water supply to Peshawar city.

NESPAK was entrusted by NTDC to provide engineering consultancy services for the 220kV Double Circuit Twin Bundle Overhead Transmission Line from Sheikhupura Grid Station to Bund Road Grid Station, with a project length of about 28 km. The scope of work includes construction supervision, testing, and commissioning.

NESPAK has also been providing consultancy services for the 500kV Transmission Line Interconnection arrangement for power evacuation from Suki Kinari, Kohala, and Mahl Hydro Power Projects in Northern Pakistan. A significant milestone was achieved with the successful Hi-Pot testing of the 500kV Transmission Line from Suki Kinari Hydro Power Plant to the existing 500kV Neelum Jhelum Transmission Line.

NESPAK, as part of a joint venture with NEWJEC-NESPAK (JV), has been providing consultancy services for the 220kV Tarbela-Burhan Double Circuit Twin Bundle Transmission Line since July 2019. NESPAK is also providing consultancy services for the 500kV Double Circuit Quad Bundle Transmission Line to evacuate power from the K-2/K-3 Nuclear Power Plants to the 500kV Port Qasim-Matiari Transmission Line.

In addition, NESPAK continued its engineering consultancy services for NTMP-I World Bank Group Projects, aimed at increasing the capacity and reliability of the national transmission system.

Further, NESPAK is providing design review and construction supervision services for the extension and augmentation of seven 220kV and 500kV grid stations in Northern Pakistan, financed by the World Bank.

NESPAK, in partnership with BARQAAB, is providing consultancy services for the construction supervision of two new substations (220/132kV Mirpurkhas SS & 220/132kV Zhob SS) and the extension of two existing substations (220/132kV Hala Road and 220/132kV D. I. Khan).

NESPAK-BARQAAB (JV) has also been providing comprehensive engineering consultancy services for the 500/132kV Grid Station at Allama Iqbal Industrial City, Faisalabad. The project, worth Rs. 245 million, was awarded in January 2022 and is expected to be completed by October 5, 2025. For the 884 MW Suki Kinari Hydropower Project (Phase-I), NESPAK was entrusted to provide consultancy services for the installation of two banks of 3x22 MVAR Shunt Reactors.

NESPAK signed a consultancy agreement with CPGCL in November 2023 to provide services for the outsourcing of operations and maintenance (O&M) for the 747 MW CCPP Guddu. The consultancy includes preparation of prequalification documents, evaluation of bids, and awarding of contracts. NESPAK is also assisting NPPMCL with the closure of the 1230 MW RLNG-Based Combined Cycle Power Plants at Haveli Bahadur Shah and Balloki. The plants have achieved 99.7% overall progress.

1. *Concrete progress at Spillway Upper Stilling Basin, Mohmand Dam Hydropower Project*
2. *1263 MW RLNG Based Combined Cycle Power Plant at Haveli Bahadur Shah*
3. *500kV Transmission Line from Suki Kinari and Karot Hydro Power Project*
4. *Transformer activities at Mirpurkhas Substation in progress*


5


6

NESPAK provides engineering consultancy services for the 1263 MW RLNG-Based Combined Cycle Power Plant near Trimmu Barrage. The project, valued at USD 520 million, has reached significant milestones, including the completion of hot commissioning and performance testing of the complex.

For the 900 MW Bin Qasim Power Station (BQPS-III) Combined Cycle Project, NESPAK, as part of the consortium, is providing Owner's Engineer services. The project, under K-Electric Ltd., reached a performance test milestone in May 2023, with overall progress at 95%.

NESPAK is administering the Mangla Power Station Refurbishment & Upgradation Project with its JV partners. The project is progressing well, with 66% completion as of June 2024, covering the design review and supervision of various package works.

NESPAK-DOLSAR JV is providing services for project management, performance monitoring, design review, and construction supervision for three hydro power plants in the Aksu River, Uzbekistan, with a total capacity of 24 MW. As of June 2024, the project progress stands at 20%.

For the 84 MW New Bong Escape Hydropower Project, NESPAK is the general consultant for modifications and improvements. The consultancy agreement has been extended until March 12, 2026. NESPAK is engaged in the design and construction supervision of over 350 public sector buildings in various cities across Pakistan, with ongoing construction activities for the solarization of the Prime Minister House and Office.

Among the projects completed during the year, the construction of three (03) 220kV Double Circuit Transmission Lines on a Twin Bundle configuration with Rail Conductor from Lahore North Substation to Kala Shah Kaku, Ghazi, and Ravi Substations was finalized. This also included the looping arrangement for interim energization of the transmission line during the fiscal year 2023-2024, under the supervision of the NESPAK-led Joint Venture with NESPAK & BARQAAB.

5. *Augmentation Works at Seven (7) Number 220kv and 500kv Grid Stations in The North Group B*
6. *Mangla Refurbishment and Up-Gradation Project*
7. *220kV Transmission Lines included in Tranche-III of Second Power Transmission Enhancement Investment Program Funded under ADB*
8. *500kV Double Circuit Quad Bundle Transmission Line from Nokhar SS to Lahore North SS to Lahore HVDC Converter Station*
9. *Annual performance test of 1,500 MW Combined Cycle Project, IWPP, at Al Dur, Bahrain*


7


8

In February 2023, Nomac Al Dur Power & Water Services WLL awarded a contract to NESPAK to conduct the Annual Performance Test (APT) for NOMAC's 1500 MW Combined Cycle Integrated Water and Power Project in Al-Dur, Bahrain. The final APT report, including all contractual requirements as per the approved procedure, was submitted to NOMAC.

NESPAK completed the Technical Feasibility Study for a 600 MW Solar PV Power Plant at District Kot Addu/Muzaffargarh for the Alternative Energy Development Board (AEDB). The study included Solar PV Resource Assessment, Geotechnical Investigations, Topographic Survey, Transportation Access, and Hydrogeological aspects of the project area spanning over 2,400 acres. The contract was awarded on April 4, 2023, and the assignment was completed in February 2024.

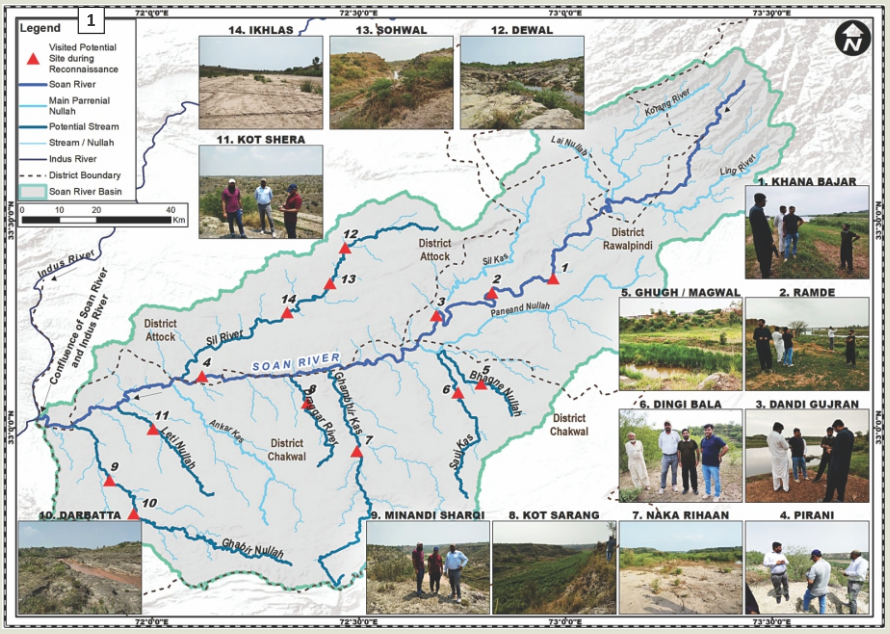
NESPAK-ECLAREON JV was engaged by the World Bank Group to conduct a pre-feasibility study on the potential for GW-scale renewable energy deployments in Balochistan. This study aimed to address the growing electricity demand of Pakistan's national grid. It explored the viability of installing solar, wind, and concentrated solar power plants, with or without the deployment of battery storage and green hydrogen production units in Balochistan. NESPAK also undertook the prequalification of EPC (Engineering, Procurement, and Construction) applicants for the innovative "Net Zero Energy Building" project in Lahore, Punjab.

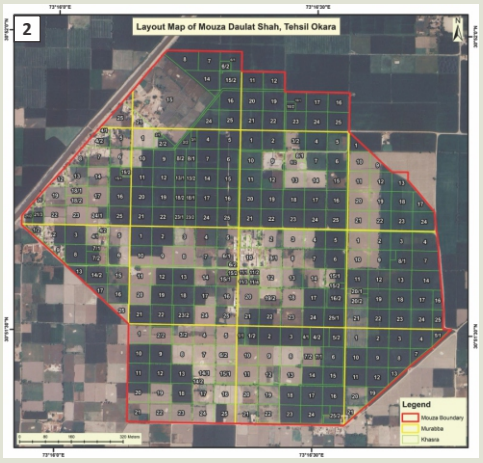

9

Water & Agriculture Development Sector

NESPAK demonstrated exceptional performance in the Water and Agriculture Sector during the Financial Year 2023-24, securing 17 new projects. These projects focused on irrigation, drainage, on-farm water management, and agricultural development. During the fiscal year, NESPAK continued providing services for 28 ongoing projects and successfully completed 12 projects.

Among the new projects, NESPAK, in collaboration with TURKPAK, Designmen, and TRS, signed a contract for the feasibility study for exploring water potential of the Soan River Basin with the Small Dam Division Jhelum, Government of Punjab. This project, costing Rs. 296 million and spanning two years, aims to identify potential sites for water conservation structures within the Soan River Basin and potential command areas for harvesting. The project commenced on March 1, 2024, and has already identified 14 potential sites for water conservation structures.



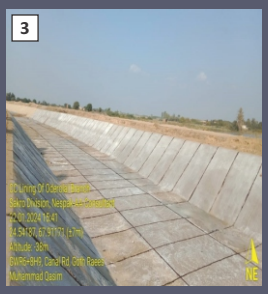


1. *Pictorial view of reconnaissance of potential sites for feasibility study for exploring water potential of Soan River Basin*

2. *Layout map of Mouza Daulat Shah, Tehsil Okara*

NESPAK, as the lead partner in a joint venture with HALCROW Pakistan, WaterSprint Ltd., and TurkPak International, was engaged as Project Implementation Supervision and Third-Party Validation Consultants for the Punjab Resilient and Inclusive Agriculture Transformation (PRIAT) Project. Funded by the World Bank, this Rs. 68,672.56 million project involves improving water conveyance systems, installing high-efficiency irrigation systems, developing water storage ponds, and promoting climate-smart agriculture. Consultants have been deployed across all 36 districts in Punjab for design review, quality control, and payment recommendations.

The Government of Punjab awarded NESPAK the Punjab Urban Land Systems Enhancement Project (PULSE) for Lahore and Sahiwal Divisions. This $150 million initiative, funded by the International



3. Cement concrete lining of Odero Lal Branch

4. Munda head work bridge after flood

5. Restoration/lining of CRBC Irrigation Division in progress under EFAP

6. Overview of proposed Sorra Dam with Pressurized Irrigation System

Development Association (World Bank), aims to strengthen land tenure security through enhanced land record systems and processes. The project includes digitizing various land record features, including grids, boundaries, and administrative zones, and is expected to be completed within eight months at a cost of Rs. 78 million.

In Sindh, the Irrigation Department hired NESPAK, in a joint venture with A.A. Associates, for the Water Requirement of K-IV Project: Improvement of Kalri Baghar Feeder and Keenjhar Lake - Phase-I. This Rs. 39,942.56 million project aims to address water seepage issues by lining the Kalri Baghar Feeder Upper canal to save 510 cusecs of water for Karachi. The design phase has been completed, and execution is scheduled for December 2024 during the canal's closure period.

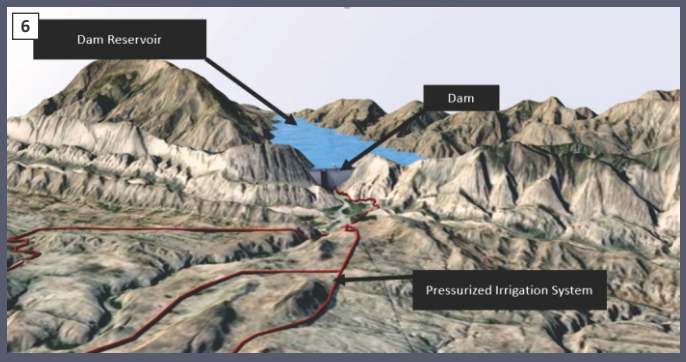
These efforts reflect NESPAK's expertise in water resource management, agricultural development, and infrastructure safety, ensuring impactful contributions to both national and international projects.

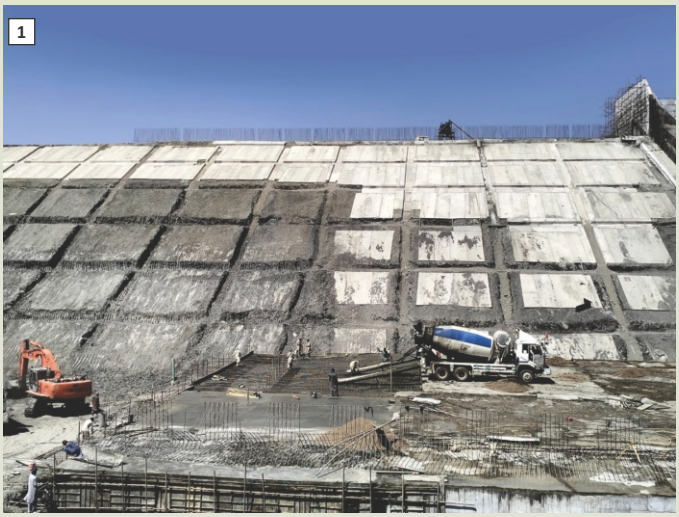
Among the ongoing projects, NESPAK, in a joint venture with A.A. Associates, is supervising the construction of the Cement Concrete Lining of Odero Lal Branch in Sindh. This Rs. 7,600 million project involves lining the Odero Lal Branch canal, which irrigates 179,600 acres. With 95% of the work completed, 150 cusecs of water have been saved to irrigate the canal's tail end areas.

The Planning and Development Board has extended the consultancy timeline for NESPAK's work on the "Harnessing of Hill Torrents in Dera Ghazi Khan and Rajanpur Districts" until June 2025. Feasibility reports for eight hill torrents have been completed, and PC-I documents for two hill torrents have been submitted. The project, valued at USD 1,257 million, involves watershed management and developing the command area to enhance irrigation and mitigate flood risks.

NESPAK is also providing consultancy for the "Emergency Flood Assistance Project (EFAP)," in KPK initiated after the 2022 floods. This project, supported by the Asian Development Bank (ADB), aims to rehabilitate and reconstruct critical infrastructure, including roads, bridges, irrigation systems, and flood risk management facilities. The EFAP also focuses on restoring economic productivity and rural livelihoods.

In collaboration with various partners, NESPAK is working on "Project Readiness Financing (PRF) for Punjab Water Resources Management





(PWRM)." This involves updating feasibility studies, detailed design, tender documents, and PC-Is for priority projects. Feasibility and design reports have been completed for the Upper Jhelum Canal Water Productivity Improvement Project and Link Canals Project, while work on the remaining projects continues.

Under the Balochistan Water Resources Development Sector Project (BWRDSP), NESPAK is supervising the construction of dams and water resource facilities. Funded by the ADB with an estimated cost of Rs. 47.84 billion, the project has achieved significant progress, including 95% completion of Killi Sardar Akhtar and 82% progress on the Karkh Subproject and 82% progress on the Khazran & Hatachi subproject. Work has also begun on several new sites under this initiative.

NESPAK, as the lead partner with ACE, has submitted detailed feasibility, planning, detailed engineering design, PC-1 reports for the Murunj Dam Project, which aims to store flows from Kaha Nullah. The Rs. 172.964 billion project includes constructing a 310 ft. high zoned earth-filled dam, diversion tunnels, and a powerhouse. It will irrigate 35,960 hectares of land and generate 6 megawatts of power while improving flood control in Dera Ghazi Khan.

In partnership with European Development Partners, NESPAK is working on sustainable sediment management for the Warsak Reservoir. This project includes procuring sediment monitoring equipment, conducting experimental flushing operations, and establishing a sediment laboratory, which was inaugurated in November 2023.

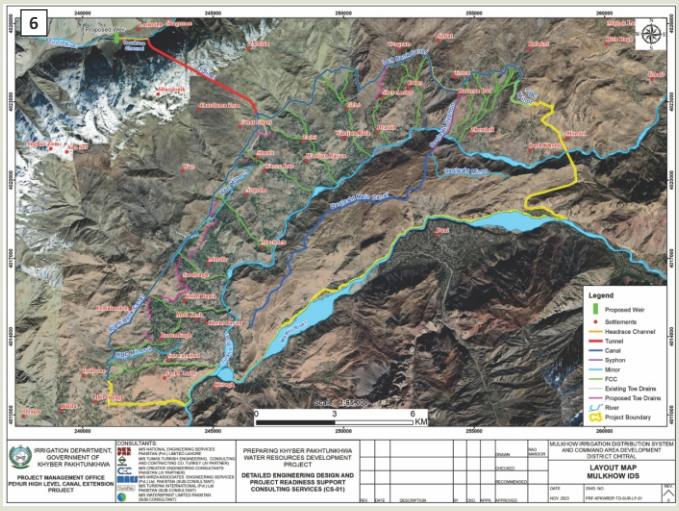
1. *Construction of Siri Toi Dam subproject, Zhob River Basin Pouring of concrete at atilling Basin of spillway*
2. *Construction of Killi Sardar Akhtar Perennial Irrigation subproject, Zhob River Basin, a view of aqueduct at flood channel*
3. *Downstream of cross regulator after lining of Nasrat Canal, Sindh*
4. *Tail regulators after lining of Nasrat Canal, Sindh*
5. *Proposed Irrigation Staff Colony at Upper Chitral - Khyber Pakhtunkhwa Water Resources Development*
6. *Layout of Mulkoh Irrigation Distribution System- Khyber Pakhtunkhwa Water Resources Development*

The Cement Concrete Lining of Nasrat Canal project in Sindh, valued at Rs. 4 billion, is progressing well. NESPAK's role involves designing, tender documentation, and supervising construction to enhance the canal's efficiency and reduce seepage losses. Completion is expected by September 2024.

NESPAK is also engaged in the Project Readiness Financing for Khyber Pakhtunkhwa Water Resources Development. This Rs. 30 billion project, funded by the ADB and the Government of Khyber Pakhtunkhwa, involves preparing detailed designs, cost estimates, and procurement documents for irrigation distribution systems in Pehur and Mulkoh irrigation zones.

Another significant initiative is the Indus Basin Irrigation System – Automation of 7 Key Sites for Discharge Measurement. With a revised budget of Rs. 23 billion, the project has expanded to 27 sites, focusing on design, installation supervision, and equitable water distribution. Completion is scheduled for June 2028.

The National Program for Improvement of



7. Completed water storage tank in Balochistan

8. Completed watercourse in Gilgit-Baltistan

9. LASER land leveling in Punjab

10. Ravi Riverfront Urban Development Project (RRUDP)

Watercourses in Pakistan, Phase-II (NPIWC-II) is advancing under NESPAK's supervision. This Rs. 155 billion project includes renovating watercourses, constructing water storage tanks, and providing laser land levelers across Pakistan's provinces. To date, 13,484 watercourses have been lined, and 6,199 laser land levelers delivered.

NESPAK continued providing its services for the Ravi Riverfront Urban Development Project (RRUDP). The PRUDP aims to transform the Ravi River into an environmentally sustainable and integrated urban feature. This first-of-its-kind initiative in Pakistan addresses Lahore's growing housing needs and unplanned urban sprawl, promoting high-quality suburban development with improved infrastructure and services. The key components of the project include: wastewater treatment plants to convert polluted river water into a freshwater body, flood control for a 1,000-year return period through river channelization, enabling waterfront development, facilities for active transportation and promotion of industrial development, environmental best practices in urban design, construction, and material reuse. NESPAK scope of services comprises infrastructure development at Chahrbagh and related to RRUDP (River Training Works & Barrage), river surveys, model studies, and expansion of Kala Khatai Road, development in Sapphire Bay (Zone 3) and trunk infrastructure in Phase 1, proposals for Zones

4, 6, 7, and Waste-to-Energy (WTE) Plant, RFP drafting for urban planning and design for Phase 1, land use surveys, industrial zone proposals, and wastewater treatment plants at Mehmood Booti and Shahdara, Strategic Development Plan (SDP) review and forestation consultancy for Jhok Reserve Forest (Phase 3), infrastructure development in industrial zones and access road construction, and master planning of Jhok Forest Reserve as a national park.

Finally, NESPAK continued its work on the Gomal Zam Dam Command Area Development and On-Farm Water Management (OFWM) project in D.I. Khan. With a total cost of Rs. 4,234 million, the project focuses on constructing watercourses and allied structures to enhance agricultural efficiency in the region.

Among the completed projects of the year, the NESPAK-led joint venture successfully finalized the feasibility study for the Thar Canal Project in Sindh. This ambitious initiative aims to supply water for drinking and agriculture to the Thar Desert through a proposed 480-kilometer-long canal, running parallel to the Pakistan-India border. The canal, designed with a discharge capacity of 5,000 cusecs, will utilize surplus flows from the Indus River during floods. It will pass through multiple districts of Sindh, irrigating approximately 250,000 acres of desert land. NESPAK's scope of services included the submission of comprehensive reports, including feasibility and environmental studies, culminating in the timely delivery of all project requirements, including the PC-I document, by March 15, 2024.

Another significant accomplishment was the Trimmu and Panjnad Barrages Improvement Project (TPBIP), undertaken for the Punjab Irrigation Department. This project involved design review, construction supervision, environmental monitoring, and project management. Initiated in October 2015, the project, with a total cost of $173 million, was completed on June 30, 2024. NESPAK delivered all specified outputs within the contract period, ensuring the barrages' enhanced functionality and operational sustainability.

NESPAK, in collaboration with its partners, also completed the Chashma Right Bank Canal (CRBC) project, which integrates both lift and gravity-fed systems. This project includes a feeder canal, a main canal, and an extensive distribution network, irrigating over 295,000 acres in Dera Ismail Khan. Notable achievements include the submission of detailed design documents, environmental assessments, and bidding documents for six contract packages. Additionally, NESPAK designed an 87MW solar power station to provide an alternative energy source. The project successfully addressed irrigation and energy needs in the region.

The Promotion of High-Value Agriculture through Solarization of Drip and Sprinkler Irrigation System project, completed in June 2023, exemplifies NESPAK's commitment to sustainable development. With a budget of Rs. 3,678.379 million, this initiative introduced climate-smart technologies, such as high-efficiency irrigation systems powered by solar energy, across 15,000 acres in Punjab. This endeavor not only reduced irrigation costs but also improved agricultural productivity, particularly in remote areas.

The successful delivery of these projects underscores NESPAK's expertise in addressing complex engineering challenges while prioritizing sustainability and innovation in its approach.

Dam Engineering Sector

The Dam Engineering Sector made significant progress during the year on numerous projects in Pakistan and the Middle East. Among these, work on the Diamer Basha Dam, one of Pakistan's most ambitious engineering endeavors and among the largest globally, continued. This 272-meter-high dam is strategically located on the Indus River between Kohistan District in Khyber Pakhtunkhwa (KPK) and Diamer District in Gilgit-Baltistan. With a 4,500 MW installed capacity and an 8.1 MAF gross water storage, the dam is poised to boost Pakistan's socio-economic development. Construction activities across the 15 sites of the main dam contract (MW-1) are progressing steadily under the supervision of the NESPAK-led Diamer Basha Consultants Group (DBCG). Notable milestones achieved include the successful diversion of the Indus River, a crucial step facilitated by a complex diversion scheme, and the completion of the Permanent Access Bridge, both of which are pivotal to the project's advancement.

Another major initiative is the Mohmand Dam Hydropower Project, located on the Swat River, approximately 37 kilometers north of Peshawar. This 213-meter-high concrete-faced rockfill dam is being constructed to achieve flood control, hydropower generation, irrigation, and water supply to Peshawar. The project features a 56-kilometer-long reservoir extending into Mohmand and Bajaur agencies. It will provide an installed capacity of 800 MW from the main powerhouse and additional power generation from auxiliary facilities, totaling 2,920 GWh annually. As of now, the project has achieved 33% progress in construction and electromechanical installations, marking a significant contribution to Pakistan's sustainable energy goals.

In the Attabad Landslide Hydropower Project (ALHPP), NESPAK achieved a critical milestone by completing the prequalification stage. On July 11, 2023, applications from ten joint venture firms were evaluated, culminating in the submission of the Draft Prequalification Evaluation Reports on September 7, 2023. This marked a significant step forward in the development of this strategically important project.

NESPAK also provided consultancy services for the Safety Evaluation of Existing Dams in the Kingdom of Saudi Arabia (KSA). This project, awarded by the Ministry of Environment, Water, and Agriculture (MEWA), includes a hydrological assessment of 574 dams, evaluation of 40 hazardous dams, inspection of 60 dams, and flood protection at 240 sites. Construction supervision services for dams in the Southern region and Yabah Dam are also underway. These efforts are vital for flood control and water supply, with an estimated project cost of 364.58 million Saudi Riyals (US$97 million).

NESPAK, as a lead partner in a joint venture with ACE, continued providing consultancy services for the Feasibility Study and Proposing Solutions of Problematic Small Dams in the Development Zone, Punjab. Valued at Rs. 256 million, this project addresses issues with 13 dams in the Potohar Zone that remain incomplete or fail to meet their intended purposes due to technical problems. The project involves identifying these issues and proposing solutions through detailed design reports, construction drawings, and feasibility studies. Completion is expected by December 2024.

Among completed assignments, remedial work at the Neelum Jhelum Hydroelectric Project was a key highlight. Following a collapse in the Tailrace Tunnel (TRT) in July 2022, which halted power generation, restoration efforts were completed by July 2023. After inspections, the powerhouse resumed operation in August 2023. However, additional inspections and repairs in early 2024 revealed major collapses in the headrace tunnels due to a rock burst from 2015. Restoration efforts are ongoing, with local contractors engaged for clearing debris while negotiations with the original Chinese contractor continue.

These projects underscore NESPAK's pivotal role in advancing infrastructure development, energy production, and water management across Pakistan and the Middle East, contributing significantly to regional economic growth and sustainability.

1. *An aerial view of the BashaDiamer Dam Project*
2. *Diversion tunnel outlet structure, Mohmand Dam Hydropower Project*
3. *Waterlane Dam site (Riyadh Region), Saudi Arabia*
4. *Bedah Dam site (Al Baha Region), Saudi Arabia*
5. *Ghalba Dam site (Aseer Region), Saudi Arabia*

Communication Sector

NESPAK continues to deliver consultancy services across multiple modes of transportation, including highways, airports, seaports, harbors, mass transit, and bridges, both in Pakistan and abroad. This year, the Highways and Transportation Sector significantly contributed to the Company's business by securing 20 new projects while services continued on 75 projects. A total of 36 projects were wrapped up during the year in the communication sector.

Roadways

Among the new projects, NESPAK has secured the Reconstruction of Turbat-Mand Road, spanning 115 kilometers from M-8 to the Iranian border at Radeeq. The Communication & Works Department of Balochistan initiated this road construction project to improve infrastructure in the province's southern region. The new road will enhance trade routes through the Iranian border and improve connectivity with the coastal belt of Balochistan, facilitating access to the Gwadar port. NESPAK is responsible for the design and supervision of the Rs. 20 billion project, which began construction in April 2024. The project also includes the reconstruction of the Neheng Bridge in District Kech.


1


2

1. *Work on embankment is in progress at Rawalpindi Ring Road*
2. *Lahore Ring Road Project Southern Loop*
3. *View of area where bridge is to be constructed at River Chenab*


3

The Rawalpindi Ring Road project aims to address traffic congestion in Rawalpindi and Islamabad. The existing transportation network forces heavy freight traffic through the urban center, causing significant congestion. To alleviate this, the Punjab Government planned a bypass, spanning 38.8 km from Banth on GT Road to the Thalian Interchange on Motorway M-2. The project features five interchanges, 13 bridges, and 10 overpasses, with a construction cost of Rs. 23 billion. NESPAK designed the project and is supervising its construction, which started in November 2023.

Another new assignment is the Lahore-Sahiwal-Bahawalnagar Motorway project, which aims to connect remote areas of eastern Punjab with the National Highways and Motorways network. The proposed 295 km route includes a six-lane motorway section from Lahore to Kassuwal and a four-lane link to Bahawalnagar. The Rs. 436 billion project, funded by the PSDP, seeks to improve connectivity and promote inter-province trade.

The rehabilitation and reconstruction of the Moro to Ranipur section of N-5, along with 32 damaged bridges, is a significant new project funded by the Asian Development Bank under the Emergency Flood Assistance Project. Spanning 80 km in Sindh and bridges across Sindh, Balochistan, and Khyber Pakhtunkhwa, the project includes design reviews and construction supervision. The Rs. 50 billion project, started in September 2024, will conclude in September 2027.

The Lahore Bypass project aims to link Multan Road to the Karachi-Lahore Motorway near Sharaqpur interchange. This 30-kilometer project is part of Lahore's 2050 Master Plan to enhance connectivity. NESPAK is conducting feasibility and detailed design for the Rs. 46 billion project.

Among the ongoing projects, NESPAK provided its services for the Lahore Ring Road Project Southern Loop (SL-III). This involved the construction of a road from Raiwind Road up to Multan Road. NESPAK was entrusted by the C&W Department through PRRA (Punjab Ring Road Authority) with the detailed design and construction supervision of SL-III, which extends from Adda Plot to Multan Road. This section is a continuation of Lahore Ring Road SL-I and SL-II. Costing Rs. 17 billion, the project spans 8 km and comprises 8 bridges, 5 subways, and 2 interchanges.

4. Construction of AWC at Jhammat Road Attock under Annual Development Program (ADP) 2022-23

5. Road embankment in progress at Bhoon Karyala Road Chakwal under Annual Development Program (ADP) 2022-23

6. Construction of road in progress at Chitral-Booni-Mastuj-Shandoor Road

7. Remodeling of toll plaza at Babu-Sabu

In another major initiative, NESPAK undertook the feasibility study and detailed design of the Karakoram Highway (KKH) realignment due to the construction of dams over the Indus River. These dams, including Dassu, Pattan, and Bhasha, necessitated the improvement and realignment of approximately 250 km of KKH from Thakot to Raikot Bridge. Entrusted by the National Highway Authority (NHA), NESPAK's work involved designing rolling and hilly alignments with 200 bridges, 17 tunnels, and numerous culverts. This Rs. 750 billion project, which began in September 2022, is nearing completion.

Another significant project involves the construction of a road from Jalalpur Pirwala to Shehr Sultan, including a bridge over the Chenab River. The Rs. 27 billion project commenced in March 2023 and is 90% complete. The Remodeling of the Babu Sabu Toll Plaza in Lahore is another ongoing project aimed at addressing traffic congestion in the area.

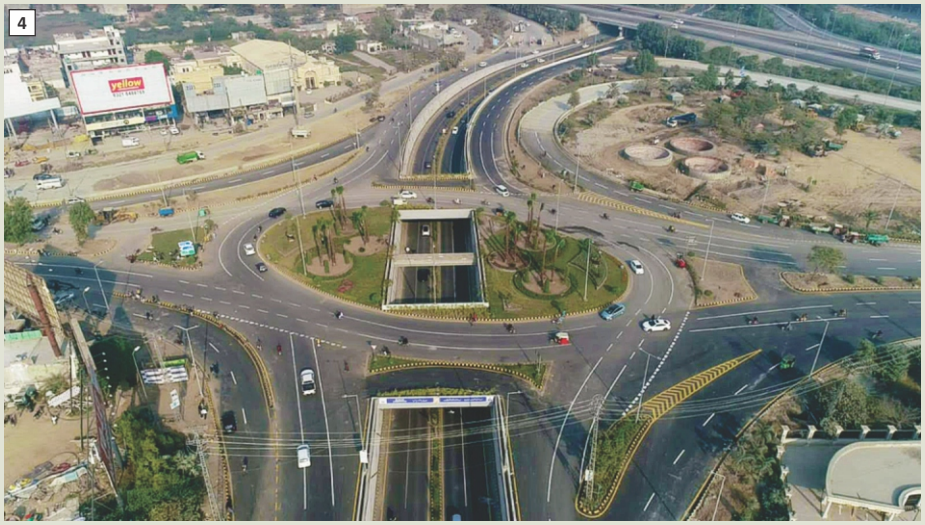
The Government of Punjab's Annual Development Program (ADP) 2022-23 focuses on road construction, improvement, and rehabilitation in remote districts. NESPAK supervises the construction of these roads, which feature both rigid and flexible pavements, along with necessary drainage and retaining structures. With project costs allocated across districts like Attock and Rawalpindi Rs. 18.3 billion and Chakwal and Talagang Rs. 10 billion, this initiative will connect remote areas to major highways and cities, fostering social and economic uplift.

Similar projects, such as the Chitral-Booni-Mastuj-Shandoor Road, the Dualization of Rawalpindi-Kahuta Road, and the Rehabilitation of the Tourism Highway from Lower Topa Murree to Chowk Pindori via Kotli Sattian, aim to address regional connectivity, traffic management, and tourism potential. These projects collectively represent a significant investment in infrastructure, enhancing trade, tourism, and economic growth while ensuring comfortable and efficient transportation.

NESPAK is actively involved in the Government of Sindh's flagship project, the detailed design and construction supervision of the BRT Yellow Corridor under the Karachi Mobility Project, in collaboration with Dar Al Handasah. The project, commissioned by the Sindh Mass Transit Authority and funded by the World Bank, has an estimated cost of USD 530 million. NESPAK's scope of services includes project planning, detailed design, preparation of bid documents, bid evaluation, and construction supervision of a 21.8 km corridor, complemented by a 71.2 km feeder network and two bus depots. The project is divided into nine packages, of which three are currently under construction. NESPAK has also completed the design and tendering process for the Engineering Consultancy Services for Rehabilitation/Upgradation/Dualization of the PQA Main Access Road (26 km), which includes bridges, flyovers, interchanges, and toll facilities. NESPAK has initiated construction supervision services and deployed staff to the project site on May 9, 2024.

Government of Khyber Pakhtunkhwa, through the Pakhtunkhwa Highways Authority (PKHA), engaged NESPAK to provide construction supervision services for the Improvement & Rehabilitation of the road from Krapa to Shakardara (35 km) in district Kohat. The approved cost for construction in the revised PC-I is Rs. 2.493 billion. Construction activities for Package-1 and Package-2 are complete, including the Defect Liability Period. Package-3 is 98% complete and expected to finish by June 2025. NESPAK, in association with TurkPAK, is providing consultancy services for the construction of a road connecting Sub-Division Wazir to the Bannu Circular Road of PKHA. The approved construction cost in PC-I is Rs. 2.296 billion. The project is divided into six packages, with Packages I and II already completed. Construction is actively progressing on Packages III, IV,

1. *Controlled Access Corridor from Niazi Interchange to Babu Sabu Interchange*
2. *3D rendering of BRT Yellow corridor and station, Karachi*
3. *Bird eye view of completed project of Flyover at Akbar Chowk (Signal Free Corridor from Jinnah Hospital to Peco Road)*
4. *Construction of Underpass at Bedian Road Round about Near Nawaz Sharif Interchange Lahore Ring Road*



5&6 Completed road with pavement marking and gantry signs at Dual Carriageway from GT Road (Benazir Chowk) to Lahore-Sialkot Motorway

7. 6-lane overhead bridge at Imamia Colony Railway Crossing Shahdara, Lahore

8. A view of completed road from Dingi Pulli to Post Graduate College Jhelum

VI, and VIII, with reported physical progress at 87%, 5%, 33%, and 42%, respectively.

Among the completed projects, the construction of a Flyover at Akbar Chowk resolved the long-standing issue of traffic congestion in a highly commercial area of the city. The Lahore Development Authority (LDA) launched this mega project as part of a signal-free corridor from Jinnah Hospital to Peco Road. Detailed design and construction supervision were awarded to NESPAK. The project featured a 980-meter-long flyover with ramps, bridges, and 10 protected U-turns. The flyover comprises two lanes in each direction, supported by separate bridges and New Jersey Barriers (NJB) on both sides. Costing Rs. 7.5 billion, this government-funded project benefits approximately 250,000 vehicles daily.

The Development of a Controlled Access Corridor from Niazi Interchange to Babu Sabu Interchange addressed the safety concerns and frequent accidents in this section of Lahore Ring Road. The Lahore Development Authority entrusted NESPAK with planning, detailed design, and construction supervision. Construction began in October 2023, and the first section, from Niazi Interchange to Saggian Interchange, was completed and inaugurated on February 16, 2024. This 7-kilometer corridor features 10 underpasses for vehicles and pedestrians.

To alleviate traffic congestion at the Nawaz Sharif Interchange, the Lahore Development Authority initiated the construction of an underpass at Bedian Road Roundabout. NESPAK was assigned detailed design and construction supervision of this fast-track project. The 540-meter-long underpass, including approach roads, spans a total of 800 meters with two lanes in each direction. Construction commenced in July 2023 and was completed by November 2023 at a cost of Rs. 2.3 billion. The rehabilitation and improvement of Saggian Road project was also completed by NESPAK.

The Rehabilitation of the Road Section from Dingi Pulli to Post Graduate College Jhelum addressed the urban area's deteriorated road conditions. Under the Annual Development Programme (ADP), this project commenced in December 2022 and concluded in December 2023, with a total cost of Rs. 243 million.

The Gujranwala Expressway, a 15.2-kilometer dual carriageway from GT Road to the Lahore-Sialkot Motorway, was completed in February 2024. This Rs. 10 billion project connects Gujranwala to Sialkot and Lahore, reducing traffic on N-5. NESPAK oversaw the design and construction supervision, while FWO served as the contractor.

The Imamia Colony Overhead Bridge in Shahdara, Lahore, addresses traffic bottlenecks at a busy railway crossing. Completed in November 2023, this Rs. 5 billion project elevated a section of N-5 for uninterrupted traffic flow. NESPAK supervised the design and construction, completed by FWO in just four months. In Faisalabad, the Abdullahpur Flyover exit ramp was completed in May 2024 to ease congestion at a busy intersection at a cost of Rs. 1.365 billion.

1. *Expansion of passenger terminal building and allied facilities at the Allama Iqbal International Airport (AIIAP), Lahore*
2. *Upgradation and expansion of Begum Nusrat Bhutto (BNB) Sukkur Airport Project*
3. *Master plan of Airport Security Force Camp (ASF) at New Gwadar International Airport Project*
4. *Aerial view of New Gwadar International Airport Project*

Airports Sector

Among the fresh projects, NESPAK recently achieved significant milestones in the aviation sector by securing two prestigious projects from the Pakistan Airports Authority (PAA). NESPAK was selected as the most advantageous bidder for the Master Plan Upgradation and Airside Expansion at Multan International Airport (MIAP), Multan and the Feasibility Study on Design and Implementation of RNP AR Instrument Flight Procedures at Existing Airport Locations in Northern Areas. The Multan Airport expansion project entails upgrading the Passenger Terminal Building, Jet Apron, Link Taxiway, and associated airside and landside facilities. The RNP AR project includes feasibility studies and implementation at airports in Gilgit, Chitral, and Skardu. This is the first time NESPAK will provide such consulting services for an airport project in Pakistan. These projects, carried out in collaboration with M/s CGX and M/s FRACS, represent a pivotal step for NESPAK in shaping the future of the country's aviation sector.

Among ongoing initiatives, NESPAK is providing Design, Field Design, and Construction Management and Supervision Services (CMSS) for the expansion of the Passenger Terminal Building and allied facilities at Allama Iqbal International Airport (AIIAP), Lahore.

includes constructing a new domestic terminal with three passenger boarding bridges, converting the existing terminal into an international facility with seven bridges, expanding immigration and baggage claim areas, and upgrading infrastructure to accommodate Code 'E' aircraft. The project, with a construction cost of approximately Rs. 26.5 billion, is expected to deliver substantial improvements upon completion.

In another significant development, NESPAK prepared the PC-I for the expansion of Begum Nusrat Bhutto (BNB) Sukkur Airport, which was presented to the Pakistan Civil Aviation Authority (PCAA) Development Forum in November 2023. The scope of this project includes a new passenger terminal building, an Air Traffic Control Tower, a Fire Crash & Rescue Building, aprons for wide-body aircraft, and various airside and landside infrastructure upgrades. The project also involves extending the runway and implementing a new Airfield Lighting System. Estimated at Rs. 40 billion, the project has been recommended for approval by the competent authorities, with a construction period of 36 months.

Additionally, NESPAK provided consultancy services for the New Gwadar International Airport (NGIA), finalizing PC-I documents,

designs, and bidding documents for critical components such as PCAA's residential complex, an Airport Security Force Camp, and external utilities. The construction cost of these facilities is estimated at Rs. 10 billion. NESPAK is also providing Project Management Consultancy (PMC) services for the NGIA. Furthermore, NESPAK prepared the PC-I for a new Airport Security Force (ASF) Camp at Bacha Khan International Airport (BKIAP), Peshawar, presented to the PCAA Development Forum in December 2023. The 3.5-acre ASF Camp includes staff accommodation, an admin block, a mosque, indoor and outdoor sports facilities, and comprehensive utility systems. Estimated at Rs. 2.1 billion, the project has been endorsed for approval, with construction expected to be completed within 24 months.

Ports & Harbours

NESPAK has continued to play a significant role in developing and enhancing the major ports of Pakistan, providing expertise on several key projects. One of the ongoing initiatives involves conducting a feasibility study for the Port Connectivity Project under a Public-Private Partnership (PPP) arrangement for Karachi Port Trust (KPT). Initiated in April 2020, this study aims to evaluate the current traffic conditions while considering forecasted cargo handling at Karachi Port. It seeks to address traffic congestion and propose efficient road and rail connectivity solutions for cargo transportation to upcountry. The study will identify the most commercially viable option for both KPT and the private sector. Under this project, NESPAK has also been tasked with designing and tendering a Connectivity Bridge between the East and West Wharfs at Karachi Port, preparing the PC-1 for the East Bay Expressway Project, and supervising the construction of the Connectivity Bridge. This six-lane, two-way bridge over China Creek will alleviate severe traffic congestion on the Jinnah Flyover by providing an alternate route for heavy port traffic. For the East Bay Expressway Project, NESPAK has prepared and submitted the PC-1 document to the Ministry of Maritime Affairs (MOMA) for approval. This project involves constructing a 9 km coastal road with bridges, street lighting, truck parking, and other facilities. The coastal road, featuring two segments with 2+2 lanes each, aims to enhance connectivity between Karachi Port and major industrial areas.

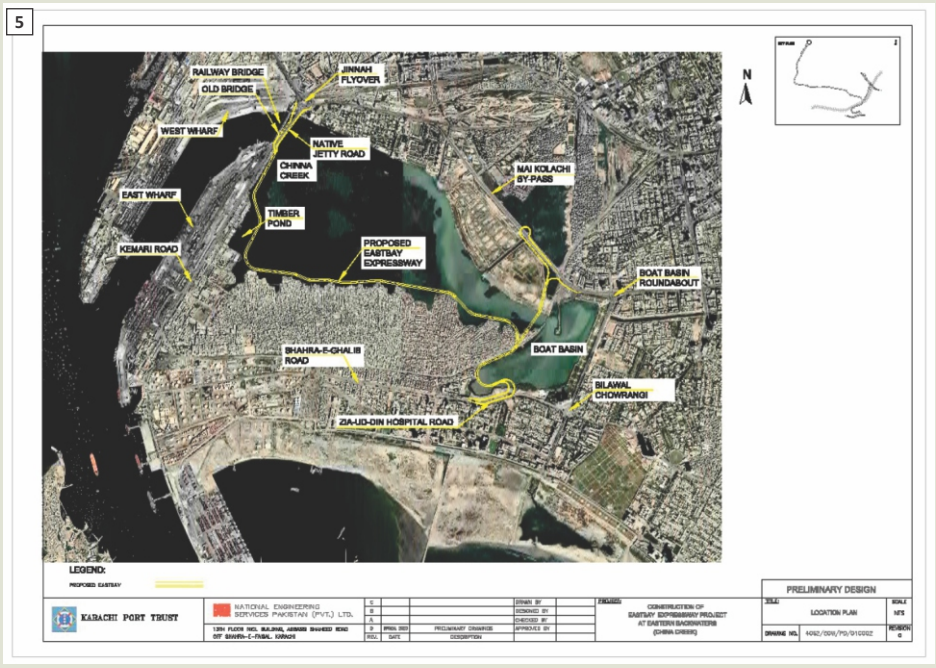
5. East Bay Expressway Project

6. Connectivity Bridge between East & West Wharf at Karachi Port

7. Container Terminal project at South Wharf, Karachi Port

In addition to these projects, NESPAK has been engaged by KPT for the new Container Terminal project at South Wharf, Karachi Port. This terminal, featuring 10 berths at an 18-meter dredged depth, is the largest container terminal in Pakistan, with 5 km of quay wall and a railway yard. NESPAK, in collaboration with Lex Firma, is overseeing the implementation of Concession Agreements to ensure compliance with technical and legal requirements. NESPAK is also providing consultancy services for the Korangi Fisheries Harbour Authority to improve infrastructure and services at the harbor.

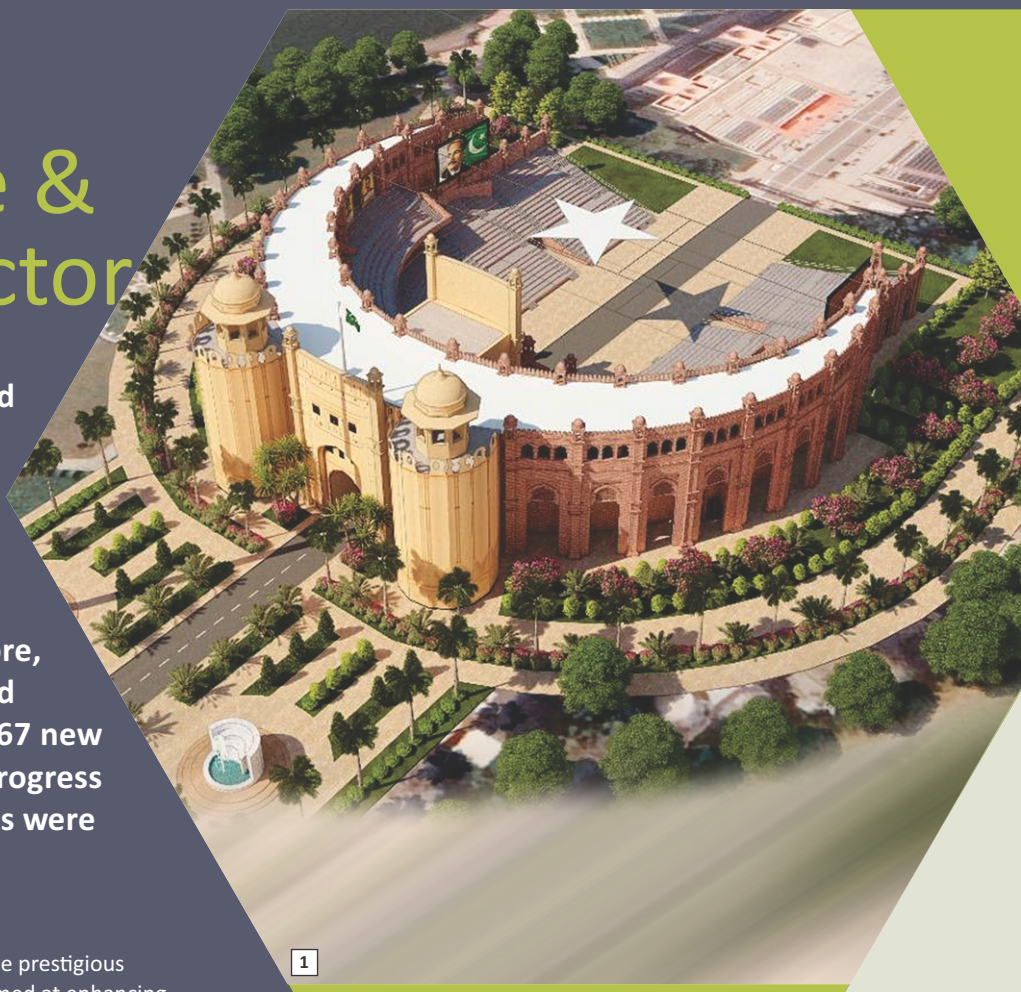
In another important venture, NESPAK has been supervising the rehabilitation of Dry Docks I and II. These docks, essential for repairing ships and submarines of up to 26,000 DWT, are over 60 years old and require significant refurbishment. Rehabilitation of Dry Dock II has been completed and handed over to KS&EW for operations. Currently, rehabilitation activities for Dry Dock I are underway, with the project expected to conclude by June 2025.



5

Architecture & Planning Sector

The architectural designs created by NESPAK's teams of architects and planners have won acclaim both at home and abroad. During the year, NESPAK's three fully equipped Architecture & Planning (A&P) Divisions in Lahore, Karachi, and Islamabad remained extremely busy as they secured 67 new projects. Services remained in progress on 138 projects while 56 projects were successfully completed.



1

Among the new projects, NESPAK secured the prestigious Expansion of Joint Check Post Wagha project, aimed at enhancing security, facilities, and tourism infrastructure at the Wagha border crossing. The project's estimated cost is PKR 3,000 million, funded by the Punjab Government, with the Works Department of Pakistan Rangers Punjab acting as the client. The 18-month project will be completed in phases to minimize disruption to border operations. Key features include increasing spectator capacity from 8,000 to 24,000, a state-of-the-art historical museum, modern waiting lounges for travelers, and relocating the world's 5th tallest flagpole from 115 to 135 meters, making it the world's 3rd tallest flagpole.

NESPAK has been awarded consultancy services for designing and detailed supervision of the NADRA RHO Building at DHA Multan. This multistory office building, spanning a plot area of 8 Kanal, involves topographic surveys, master planning, technical feasibility studies, design, tender documents, and construction supervision.

The Project Management Unit (PMU) of the Local Government & Community Development Department (LG&CDD) engaged NESPAK in April 2024 as consultants for the Master Plans / Land-Use & Zoning Plans for Local Governments in Punjab. In Phase II, NESPAK has been awarded consultancy services for 9 out of 11 packages, covering 17 districts. This includes tasks such as land-use classification, site development zones, district connectivity plans, economic strategies, and housing strategies.

Pak Arab Refinery Limited (PARCO) engaged NESPAK for engineering consultancy services for several projects. These include designing and planning new family apartment blocks, relocating the main gate house of the housing complex, and constructing a new school for A-Level students at MCR, with an overall project cost of Rs. 3,500 million.

2

3

1. *A view of Wagha Border, Lahore*
2. *A perspective view of NADRA Regional Head Office building at DHA Multan*
3. *A perspective view of new family apartment blocks for Pak Arab Refinery Limited (PARCO)*

NESPAK's Islamabad office signed a consultancy agreement with the Infrastructure Development Authority of Punjab (IDAP) for the construction of a 300-bed Federal Government Polyclinic (FGPC-II) Hospital and Parking Plaza in Islamabad. The project, valued at PKR 4.27 billion, will significantly enhance healthcare infrastructure in the city.

NESPAK also undertook a structural design review and construction supervision for a C-Type Apartment Block at Tamiz-ud-Din Road, Rawalpindi, commissioned by Military Intelligence (M.I) Directorate. Similarly, the Islamabad office managed design vetting and construction supervision of a platform at Kirana Top, PAF Base Mushaf, valued at Rs. 150 million.

NESPAK has been involved in several transformative urban projects. The Celestia Towers at Nawaz Sharif IT City (NSIT) aim to create a hub for technology and innovation. Additionally, NESPAK is working on the Central Business District Lahore, which includes infrastructure such as road networks, drainage systems, and a flyover connecting Bab-e-Pakistan and Walton.

Another milestone project is the Chahar Bagh development in Lahore under the Ravi Urban Development Authority (RUDA). Spanning 128 acres in Phase I and 180 acres in Phase II, this

4. View of Jinnah Hospital, G-11 Islamabad

5. Celestia Towers, Nawaz Sharif IT City (NSIT)

6. Flyover connecting Bab-E-Pakistan & Walton for Central Buisness District, Lahore

7. A perspective view of sustainable city residential spaces by Ravi Urban Development Authority (RUDA)

8. Construction of admin block at University of Engineering And Applied Sciences, Swat

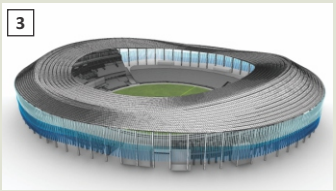
9. Conceptual view of Faculty of Paramedical & Allied Health Sciences Complex, Hayatabad, Peshawar

visionary housing project addresses the rising demand for affordable and sustainable residential spaces. The developments focus on creating vibrant communities with green spaces and innovative designs.

The Government of Khyber Pakhtunkhwa engaged NESPAK for the design and construction supervision of the Faculty of Paramedical & Allied Health Sciences Hi-Rise Complex in Hayatabad, Peshawar. The project, financed by the Faculty of Paramedical & Allied Health Sciences, has a construction cost of Rs. 1.3 billion. NESPAK is also providing consultancy services for completing the University of Engineering and Applied Sciences in Swat. This includes academic and administration blocks, a library, hostels, and staff residences, contributing to the academic infrastructure of the region.

Among the projects ongoing during the year, the Project Management Unit of the Khyber Pass Economic Corridor (PMU-KPEC) under the Sustainable Development Unit (SDU) of the Planning & Development Department, Government of Khyber Pakhtunkhwa, engaged NESPAK for the World Bank-funded project titled Consultancy Services for Preparation of Western Greater Peshawar Spatial Master Plan, worth Rs. 172.3 million, with a project cost of Rs. 19.55 billion. The project encompasses the Khyber Pass Economic Corridor (KPEC) Development Plan, which combines spatial and cluster competitiveness assessments in Western Greater Peshawar. Additionally, it includes a Detailed Master Plan for developing the urban centers of Jamrud and Landi Kotal.

The project is divided into six modules. Module I (Strategic Spatial Diagnostic) and Module II (Rapid Assessment of Cluster Competitiveness & Opportunities) have been completed and



approved by PMU-KPEC, the Project Review & Advisory Committee (PRAC), the World Bank (WB), and the Project Steering Committee chaired by the Additional Chief Secretary (ACS). Progress on Module III (KPEC Development Plan) and Module IV (Master Plans for Jamrud and Landi Kotal) is in the final stages, with completion expected by November 2024.

NESPAK has been collaborating with the Pakistan Cricket Board (PCB) for stadium upgrades in preparation for the ICC Champions Trophy 2025. The PCB has entrusted NESPAK with detailed design, construction, and supervision of renovations for Gaddafi Stadium, Lahore, National Bank Stadium, Karachi and Rawalpindi Cricket Stadium. These upgrades aim to meet international standards, showcasing NESPAK's commitment to sports infrastructure excellence.

NESPAK is also involved in the extension and enhancement of the Shrine of Hazrat Data Ganj Bakhsh (R.A.) to accommodate the increasing number of visitors. The proposed structure, covering 7,294 square feet, integrates architectural harmony with the existing shrine.

The University of Gwadar engaged NESPAK for engineering consultancy services for its establishment, with the design phase completed and tendering activities underway. The approved project cost is PKR 1.5 billion.

NESPAK also prepared a Master Plan for the Government College University (GCU) Hyderabad and is assisting in tendering activities. Additionally, NESPAK has been instrumental in projects at Quaid-i-Azam University Islamabad, where it is updating the master plan for the 1,557-acre campus.

NESPAK is actively engaged in designing and supervising critical healthcare projects, including the Bilquis Edhi Hospital in North Karachi, with an estimated cost of PKR 10 billion, and the Medical Tower at JPMC Karachi, costing Rs. 5.25 billion.

Significant infrastructure projects include the Balochistan High Court Complex in Turbat, the Sindh Forensic Science Laboratory in Karachi, and the Aerospace Design and Innovation Centre (ADIC) at Kamra, a landmark initiative for aerospace technology.

NESPAK has extended its consultancy services internationally, undertaking projects in Qatar such as the design and construction supervision of Al-Meera Mall branches and a prestigious villa in Costa Malaz, The Pearl.

NESPAK has provided master planning and design for significant residential projects, including DHA City Karachi's infrastructure development, LDA City in Lahore, and the Pakistan Housing Authority Foundation's Residencia Peshawar.

1,2 & 3. Perspective views of main building Gaddafi Stadium, Lahore, Rawalpindi Cricket Stadium & National Bank Stadium, Karachi

4. The Shrine of Hazrat Data GanjBaksh (R.A.), Lahore

5. View of proposed examination, services block at Quaid-i-Azam University (QAU), Islamabad

6. 3D view of gate house for University of Gwadar

7. Proposed Master Plan for GC University Hyderabad

8. A view of main Sindh Forensic Science Laboratory, Karachi

The organization is supervising the reconstruction of fully damaged schools in Bara, Khyber District, under Chinese assistance, and strengthening the Islamia College University, Peshawar. Both projects are expected to achieve significant milestones by 2025.

This diverse portfolio highlights NESPAK's commitment to delivering innovative and sustainable engineering solutions across various sectors, both nationally and internationally.

Among the completed projects, the Architecture and Planning (A&P) Division - Lahore, NESPAK, wraped up the engineering consultancy services for designing the National University of Pakistan (NUP), Islamabad. This flagship project is part of the government's initiative to upgrade the higher education sector by establishing institutions with modern facilities to cater to the nation's growing needs. The National University of Pakistan aims to become a leading institution of higher learning, boasting cutting-edge educational infrastructure and comprehensive academic support facilities. By doing so, it will serve as a model university and a knowledge hub. The scope of services included topographic surveys, master planning, technical feasibility studies, designing, and preparation of tender documents.

Additionally, NESPAK, completed consultancy services for designing the Institute of Inclusive Education (IIE) in Islamabad. This project aligns with the government's initiative to enhance the inclusive education sector by establishing a modern institution equipped with state-of-the-art academic facilities to meet the nation's growing needs. The Institute of Inclusive Education aims to become a premier institution for children with and without disabilities, including those who have faced abuse, mistreatment, and individuals from the transgender community. The institute will provide medical, educational, and therapeutic services to empower these children to become active contributors to the national workforce. The scope of services included topographic surveys, master planning, technical feasibility studies, detailed designing, and preparation of tender documents.

9. Aerospace Design and Innovation Centre (ADIC) building at National Aerospace Science and Technology Park (NASTP), Kamra

10. Perspective view of Academic Block at National University of Pakistan, Islamabad

11. Kohat Institute Of Medical Sciences (KIMS), Kohat

In Qatar, NESPAK successfully completed the modification and upgrade of the firefighting and stormwater system at Barwa Al Baraha Warehouses and Workshops. Barwa, one of the leading international developers, appointed NESPAK to carry out the modifications. The scope included preparing tender documents and supervising construction of the firefighting and stormwater systems for workshops and warehouses, following a review of authority-approved drawings, as-built drawings, and on-site verification. Covering a site area of 710,000 sq. m. with 36 buildings consisting of workshops and warehouses, the project was completed on January 20, 2024.

Another notable project in Qatar was the construction, completion, and maintenance of a 367-meter precast boundary wall for a prison at the Military Police Camp in Sailiyah. The work included the construction of a security room, gates, electronic arm barriers, barbed wire covering, perimeter intrusion detection systems, CCTV installations, and boundary wall lighting. This project was completed on June 30, 2024.

Under the FATA Infrastructure Program (FIP), the Government of Khyber Pakhtunkhwa engaged NESPAK through the Project Management Unit to render consultancy services for various projects valued at Rs. 1.763 billion. The work included construction supervision of Government Degree College Dogar in District Kurram and Government Technical Institute Ghiljo in District Orakzai, as well as the design and supervision of 38 fully damaged schools in Bajaur and Mohmand tribal districts and the design of 17 fully damaged schools in Khyber tribal district. Additionally, NESPAK designed the Land Record Complex for merged districts in Peshawar, incorporating four service delivery centers. The consultancy services agreement was concluded on October 31, 2023, with all schools handed over to the client.

The Kohat Institute of Medical Sciences (KIMS) faced space constraints due to its rapid expansion and the addition of various facilities. To address this, the Government of Khyber Pakhtunkhwa engaged NESPAK in 2014 to provide design and construction supervision services for a new medical academic block, a dental hospital and academic block, a girls' hostel, and auxiliary development works. Initially valued at Rs. 1.72 billion, the project underwent multiple revisions, with the latest cost reaching Rs. 2.748 billion. The consultancy services were concluded on September 30, 2023, following the handover of the medical academic block, dental hospital and academic block, girls' hostel block, and external works. The consultancy fee for this project was Rs. 75 million.

Environmental & Public Health Engineering Sector

In the Environmental & Public Health Engineering (E&PHE) Sector, NESPAK continues to deliver impactful solutions, demonstrating its expertise and commitment to public health engineering. NESPAK has established itself as a reliable and consistent performer, securing 12 new consultancy projects during the year. The Company continued its top-notch services for 30 projects while 11 assignments were concluded during the year.

Among the new projects, the Water and Sanitation Agency Faisalabad (WASA-F) has entrusted NESPAK with the project titled Design and Resident Supervision of Construction of Arterial Main, Secondary, and Distribution Network in the Areas in the Eastern Part of City (Water Supply System), Faisalabad. The project scope includes the preparation of a detailed design report, tender documents, and construction supervision. The project involves key components such as an arterial water supply network (66,870 ft of pipe sizes 400-1000 mm), five underground and overhead water tanks with a combined capacity of 5 MGD, and a proposed water distribution network (1,605,961 ft of pipe sizes 90-710 mm).

The Water and Sanitation Agency (WASA), Lahore, has engaged NESPAK for the design and construction supervision of a disposal station and RCC sewer line from Purana Kahna to Sua-e-Asal Drain in Lahore. The project includes a 6.5 km long main trunk sewer line, a 5.2 km rider sewer, and a disposal station to manage sewage flow along Ferozepur Road. The project is valued at Rs. 1.49 billion.

1. *Steel fixing for manhole raft of 72" Dia pipe line encountering G.W.T at disposal station and sewer line sua-e asal drain, Lahore*

2. *Laying of 72" Dia pipe Encountering G.W.T at disposal station and sewer line sua-e asal drain, Lahore*

The Sindh Flood Emergency Rehabilitation initiative entrusted NESPAK with the project Technological Option, Costing and Feasibility Study for Rural Water and Sanitation Solutions in Sindh. The agreement, signed on October 3, 2023, involves a feasibility study for rural water supply and sanitation covering nine districts and 31 villages in Sindh. The project's total cost is Rs. 4,427.79 million.

The Strategic Planning & Implementation Unit, PGDP, Environmental Protection Department, Punjab, awarded NESPAK the project titled "Survey, Engineering Design, Technical Specifications, and Preparation of Bidding Documents for Three Pilot Plants of Wastewater Treatment in Punjab." This project has a total cost of Rs. 544 million.

Under the Punjab Affordable Housing Program, NESPAK was awarded the project titled Technical Study on Wastewater Treatment Options for Housing Schemes on May 14, 2024. This project involves conducting technical studies for wastewater treatment plants for housing schemes.

Overseas, NESPAK was awarded the project titled Drainage Network with Duqm Refinery by The Public Authority for Special Economic Zones and Free Zones (OPAZ) in Sultanate of Oman. The scope of services includes detailed design and construction supervision.

Among the ongoing ventures, NESPAK is actively engaged in several major projects, showcasing its expertise across diverse sectors. NESPAK is providing consultancy services for the engineering design and construction supervision of Punjab Rural Sustainable Water Supply & Sanitation Project (Pilot Phase), Cluster Central-I and South-III. NESPAK was engaged by PRMSC for this initiative, which includes design documentation, preparation of PC-I documents, and bill of quantities to ensure efficiency and achieve desired outcomes. In Cluster South-III, 40 revenue villages in Tehsils Taunsa, Rojhan, and Liaquatpur were selected, with work awarded for 17 villages in seven packages amounting to Rs. 5,609.68 million. In Cluster Central-I, 32 villages in Tehsils Darya Khan, Bhawana, and Ahmadpur Sial were selected, and work for all villages was awarded in six packages worth Rs. 3,824.11 million.

NESPAK is also providing services to WAPDA for the Local Area Development Program (LADP) Public Health, Livelihood Development, and Downstream Fisheries Plans. This project, valued at USD 23 million, involves detailed design and construction supervision for 53 schemes, of which 28 have been awarded and are

3. Site of technological options, costing and feasibility study for rural water and sanitation solutions, Sindh

4&5. Laying of sewer line at Darya khan and HDPE main jointing at Tehsil Rojhan under Punjab Rural Sustainable Water Supply & Sanitation Project

6. Construction of Sanitation and Sewerage System for Komila & Dasu

7. Construction of Seo Razika Road, Dasu, KPK

8. Provision of sewerage system in Muridke 2 under Infrastructure Sub Project, Sectoral Planning & Resident Supervision in 16 cities of Punjab Package No. 02

under execution. NESPAK's timely design completion has been lauded, with World Bank representatives visiting the site in September 2024 to praise the team's efforts. Following this, WAPDA awarded NESPAK additional projects, including Mini Hydel Projects in Kohistan districts, for which an amendment of Rs. 2.355 billion has been submitted for approval.

For the Infrastructure Sub-Projects, Sectoral Planning & Resident Supervision in 16 Cities of Punjab (Package 2), NESPAK leads a joint venture with MMP and ACE. This project includes water supply, sewerage systems, roads, and parks in Hafizabad, Kamoki, and Muridke. In Multan, NESPAK has been providing resident supervision services for Seven Sewerage ADP Schemes (2021-22) and Water Supply & Sewerage Schemes (DDSC). Approximately 90% progress has been achieved, including the laying of 55 km of sewer pipes.

In Karachi, NESPAK is overseeing the Karachi Water & Sewerage Services Improvement Project (KWSSIP) for KW&SC, funded by the Government of Sindh, AIIB, and the World Bank. Out of 19 awarded contracts worth Rs. 13.2 billion, nine have been completed, and 10 are ongoing. The works include water supply and sewerage facilities in Katchi Abadis, bulk water line protection, chlorination stations, and other infrastructure, with 42% overall progress.

1. *Laying of rigid pavement concrete for road in progress with mechanical paver at Quaid-E-Azam Business Park (QABP) on Motorway, M-2, District Sheikupura*
2. *A view of under construction underground/overhead water tank in Soba Nagar under Karachi Water & Sewerage Services Improvement Project*
3. *Work on stone gabions in progress for protection of bulk water line in Malir River Nagar under Karachi Water & Sewerage Services Improvement Project*

NESPAK has been providing Engineering Consultancy Services for the construction of pump houses, underground water tanks, overhead water tanks, and auxiliary works in the Eastern Industrial Zone at Port Qasim, including construction supervision in Karachi.

Meanwhile, NESPAK continued services for the planning, designing, review of the existing design, preparation of tender documents, and construction supervision of the Combined Effluent Treatment Plant (CETP) in the North-West Industrial Zone (NWIZ). This also includes the upgradation and enhancement of the existing sewage treatment plant in the Edible and Molasses Area at Port Qasim, Karachi.

For the Quaid-e-Azam Business Park on Motorway M-2, NESPAK has been supervising this 1860-acre industrial estate, declared a Special Economic Zone (SEZ), since June 2020. The project, valued at Rs. 16.1 billion, is expected to generate employment for 500,000 workers and is 41% complete, with completion anticipated by December 2025.

Additionally, NESPAK is engaged with Punjab Aab-e-Pak Authority (PAPA) to provide consultancy for the Provision of Safe Drinking Water in Six Districts of Punjab. This project involves utilizing 111 existing boreholes for safe water supply, with services including feasibility study review, design, and tender documentation.

Finally, NESPAK is contributing to the Punjab Intermediate Cities Improvement Investment Program (PICIIP) funded by ADB. This US$250 million program enhances public infrastructure in Sahiwal, Sialkot, and Lahore, including water, sanitation, roads, and parks.

The NESPAK Regional Office in Riyadh, KSA, is overseeing the water transmission project from Hali, Yubah, Qanuna, and Laith Dams to the Al-Shuaibah Plant in the Makkah Region, covering all phases from Phase 1 to Phase 5. This ongoing project involves design review and construction supervision, with a total cost of USD 37 million. The client for this project is the Ministry of Environment, Water, and Agriculture, Saudi Arabia.

M. H. Aitah-NESPAK is providing consultancy services for this initiative, which aims to deliver treated water from the Yubah Dam to the main water supply line at

4. *Construction of RCC Manhole, Lot-01, Sahiwal under Punjab Intermediate Cities Improvement Investment Program (PICIIP)*
5. *Thrust Bore Manhole Top Slab Concrete in Progress at Commissioner Road, Sialkot under Punjab Intermediate Cities Improvement Investment Program (PICIIP)*
6. *Yuba Water Treatment Plant, Kingdom of Saudi Arabia*
7. *Qanuna Water Treatment Plant, Kingdom of Saudi Arabia*
8. *Pump Station for Al-Kamil Pipeline Project, Kingdom of Saudi Arabia*
9. *Testing & commissioning of CS pipeline DN 400*
10. *View of rehabilitation and widening of Gujjar Nullah, Karachi*

Al-Shuaibah. The project includes the construction of a water treatment plant with a capacity of 18,000 cu.m/day downstream of the Qanuna Dam. It also involves laying a 62 km long DN 600 mm carbon steel water main to connect the treatment plant to the main pipeline, which has a diameter of 1,500 mm, leading to Al-Shuaibah.

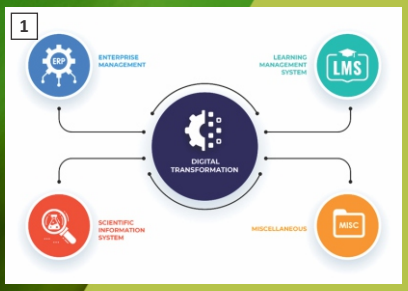
Among its completed projects, NESPAK successfully provided consultancy services for the Construction Supervision of Five (05) ADP Schemes of WASA Multan for the Financial Year 2017-2018. The construction supervision contract, valued at Rs. 750 million, involved comprehensive infrastructure enhancements for water supply and sewerage systems in Multan. The project scope included the installation of three tube wells, each with a capacity of 4 cusecs, and the establishment of 51 water purification plants strategically located across the city. Additionally, three overhead reservoirs with a storage capacity of 50,000 gallons each were constructed, alongside the installation of 210,000 feet of water supply lines.

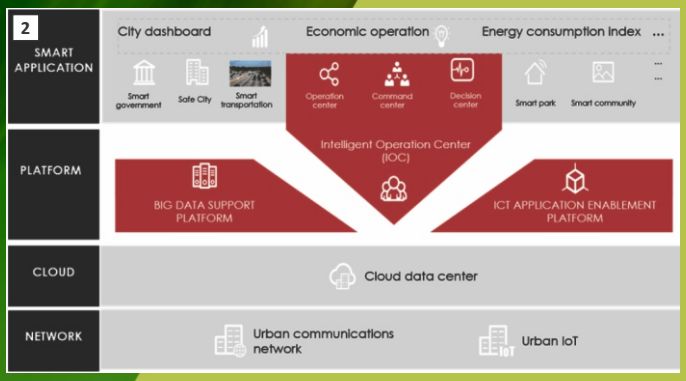
NESPAK has successfully completed supervision services for both the Gujjar Nullah and Orangi Nullah projects, along with their tributaries in Karachi. The Gujjar Nullah is a natural drain starting from New Karachi and ending at the Chuna Depot in Haji Mureed Goth, where it flows into the Lyari River before draining into the Arabian Sea. The project scope included the completion of cross structures, trunk sewer systems, sub-sewer networks, and RCC beds and walls. The construction costs were PKR 12.943 billion for Gujjar Nullah and PKR 14.128 billion for Orangi Nullah.

The Al-Kamil Pipeline Project in Saudi Arabia is currently in the testing and commissioning phase after completion. The project involved design review and construction supervision, with a total cost of USD 51.4 million. The client for this initiative is the Ministry of Environment, Water, and Agriculture, Saudi Arabia. M.H. Aitah-NESPAK provided consultancy services for the project.

Information Technology (IT) & Geographical Information System (GIS) Sector

NESPAK has been providing exceptional services in the Information Technology (IT) and Geographical Information System (GIS) sector, adhering to international standards and addressing the needs of diverse clients.





1. *Proposed Software Application Modules for DTSA-PCSIR Project*
2. *Overall Structure of Education City Solution: Converged Structure and Application Enablement*

Information Technology

Among the significant ongoing projects, NESPAK is making notable progress in delivering consultancy services for the Digital Transformation, Strengthening, and Automation (DTSA) of the Pakistan Council of Scientific and Industrial Research (PCSIR). This initiative has achieved several milestones, including the completion of the bidding document for software development. The customized software application will serve PCSIR's Head Office, laboratories, and training institutes located across Pakistan. Currently, the selection process for a qualified software contractor to execute PCSIR's digitalization and software development initiatives is in progress.

Another major project under NESPAK's supervision is the Feasibility and Design of IT Infrastructure for the Education City Project in District Malir, Karachi. Spanning an area of 8,921 acres, this project is based on the Smart & Safe City Concept and incorporates cutting-edge technologies. The proposed systems include seamless Wi-Fi connectivity, intelligent access control, video surveillance, automated number plate and face recognition, smart parking, waste management, and solar-powered EV charging stations. Additional features include a command and control center, baggage scanning systems, and advanced air quality monitoring. NESPAK's IT team has submitted the detailed design and engineering cost estimates, which have been approved by the client.

NESPAK remains committed to delivering innovative and robust solutions in the IT and GIS domains, contributing significantly to infrastructure development and technological advancement.

Geographical Information System

In the modern era of information technology, GIS and remote sensing have become essential tools for the computerized collection, integration, manipulation, and analysis of earth surface data. NESPAK has witnessed steady growth in its GIS portfolio, driven by the exceptional services rendered by its skilled professionals.

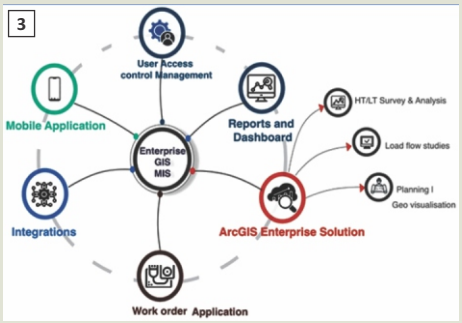
Among the new projects during the year, NESPAK has secured a consultancy contract for the software development project titled "Implementation of Web-Based GIS along with Mobile Application and Mapping of HT/LT Distribution and Transmission Network of LESCO." This project involves surveying 10 HT feeders and their respective LT networks for the Lahore Electric Supply Company (LESCO). NESPAK is tasked with developing an enterprise GIS solution integrated with LESCO's existing and future systems, such as ERP, ENC, AMI, SynerGEE, and CIBS. The project also includes creating a state-of-the-art mobile application for Android and iOS platforms to facilitate field data collection. This advanced solution aims to enhance efficiency, automate systems, manage loads, and reduce theft by leveraging technology for detailed loss calculations and analysis at feeder and transformer levels.

In an international milestone, NESPAK has undertaken the Daru Island Infrastructure Mapping Project in Papua New Guinea under a long-term agreement with the United Nations Office for Project Services. This comprehensive project includes infrastructure mapping, electronic-waste management, construction of e-waste facilities, training centers, port storage structures, and environmental and social impact assessments. NESPAK will also contribute to climate adaptation initiatives and community engagement in key urban centers, including Port Moresby, Lae City, Mount Hagen, and Daru Island.

Among the ongoing GIS Projects, NESPAK continues to deliver GIS Networks for the Faisalabad Electric Supply Company (FESCO) and Digitized Mapping through a Web-Based Enterprise GIS Application for the Distribution Network of Islamabad Electric Supply Company (IESCO) – Phase II.

Among NESPAK's completed projects is the digital documentation of the 3.5 km Tailrace Tunnel at the Neelum Jhelum Hydropower Project. Using state-of-the-art Topcon GLS 2200 3D Laser Scanner equipment, the Geomatics & GIS section of NESPAK's GT&GE Division generated a high-resolution point cloud comprising 619 million ground strikes with a point density of less than 1 cm. This digital representation will serve as a crucial reference for future monitoring and inspection activities, marking the initiation of a comprehensive periodic monitoring program. In the reflectivity mode used during this process, colors are displayed based on an object's reflectance, ranging from 0 to 255. Reflectance, a material-specific characteristic, remains consistent regardless of illumination conditions, providing accurate data for analysis.

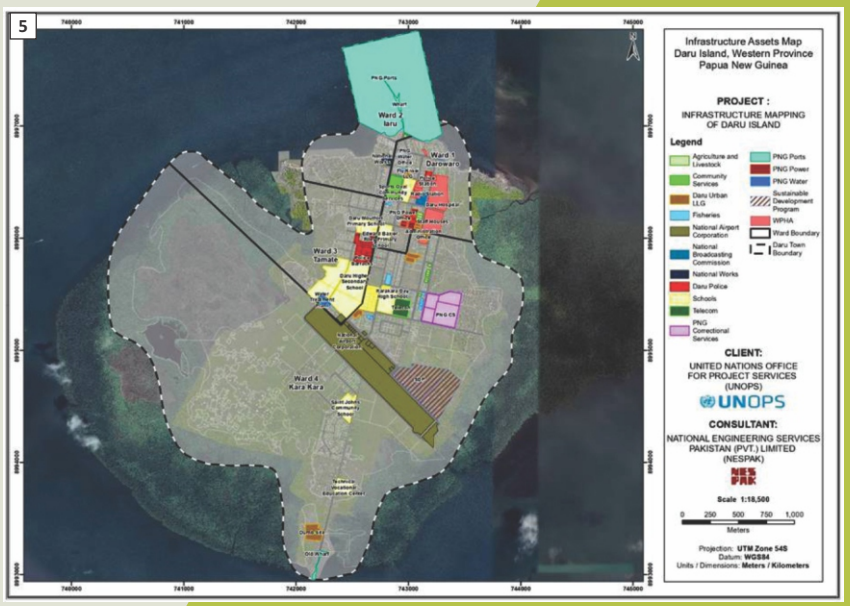
NESPAK's commitment to innovation and technological advancement in GIS continues to strengthen its reputation as a leader in the field, delivering impactful solutions locally and internationally.



3. *LESCO Enterprise Software Solution*

4. *Mobile Application for HT and LT Field Survey for IESCO Project*

5. *Infrastructure Mapping of Daru Island, Papua New Guinea*



Major New, Ongoing & Completed Projects

a) Feasibility Study
b) Project Planning
c) Detailed Design
d) Tender Document
e) Construction Supervision
f) Design Review
g) Software Requirement Specification
h) Functional Specification Document
i) System Study
j) Software Development
k) Testing & Commissioning
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
ENERGY SECTOR				
New				
Single Circuit Loop In/Loop out of Existing 500kV K2/K3 Port Qasim Transmission Line at New 500kV KKI Grid Station	Pakistan	K-Electric Limited	e	359 1
Solarization of Pakistan Railways Buildings Under Build Own Operate Transfer Model	Pakistan	Pakistan Railways	a d	N.A
200kV Double Circuit Transmission Line (Lilo Portion Overhead and Unerground) for KE Dhabeji - NTDC Interconnection	Pakistan	K-Electric Limited	e f	566 2
Modern and State of Art Load Dispatch Center, SCADA/DMS and Communication Network for GEPCO 132/11.5kV, Distribution Network, Gujranwala	Pakistan	Gujranwala Electric Power Company	c d e f	N.A
Grid Station Included in NOR-112R2-2022 (220/11kV GIS Dhabeji Substation) Under NTDC Own Resources, Sindh	Pakistan	National Transmission & Despatch Company	e	N.A
Neom Project WOA-Part 20	Saudi Arabia	Saudi Electric Company	e	3,790 13
Tashkent Thermal Power Plant Rehabilitation/ Refurbishment Project, Uzbekistan	Uzbekistan	JSC Tashkent Thermal Power Plant	a d	180,050 650
Low and Medium Voltage Electrical Networks in Aden Governorate in the Republic of Yemen	Yemen	Saudi Development & Reconstruction Program	c d	N.A
Ongoing				
4500MW Diamer Basha Dam Company (Private) Limited, Pakistan	Pakistan	Diamer Basha Development	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 and Refurbishment of Generating Units (1-6) of Mangla Power Station	Pakistan	Water and Power Development Authority	e f	52,224 497
1263MW Re-Gasified Liquified Natural Gas (RLNG) Based Combined Cycle Power Plant near Trimmu Barrage in Jhang District	Pakistan	Punjab Thermal Power (Pvt.) Limited	a d e f	95,000 904
900MW Bin Qasim Power Station (BQPS-III) Combined Cycle & Associated Transmission Projects	Pakistan	K-Electric Limited	e f	100,219 638
Revival of 415MW Combined Cycle Power Plant at TPS, Guddu	Pakistan	Central Power Generation Company Limited	c d e f	100,000 549
500/132kV Grid Station Allama Iqbal Industrial City, Faisalabad	Pakistan	National Transmission & Despatch Company	d e f	14,400 81
Extension & Augmentation Works at Seven 220kV and 500kV Grid Stations in the North (Group B) in Punjab, Khyber Pakhtunkhwa and Islamabad	Pakistan	National Transmission & Despatch Company	e f	25,000 117
500kV Transmission Lines Interconnection Arrangement for Power Evacuation from Suki Kinari, Kohala and Mahl Hydropower Projects in Northern Areas of Pakistan	Pakistan	National Transmission & Despatch Company	b c d e f l p	100,000 746

PROJECT	LOCATION	CLIENT	SCOPE OF WORK	COST Rs. Million US$ Million
220kV Tarbela-Burhan Twin Bundle Transmission Line Using Low Loss ACSR Conductor	Pakistan	National Transmission & Despatch Company	c d e f	2,019 13
220kV D/C Twin Bundle Transmission Line from 550/220kV Faislabad West Grid Station to 220kV Lalian Grid station (55km)	Pakistan	National Transmission & Despatch Company	e	4,200 19
220kV D/C Twin Bundle Overhead Transmission Line from Sheikhupura Grid Station to Bund Road Grid Station (28km)	Pakistan	National Transmission & Despatch Company	e	2,000 9
24MW Rabat Hydropower Project Kashkadarya Region	Uzbekistan	Joint Stock Company Uzbekhydroenergo	e f	12,750 75
Completed				
500kV Double Circuit Quad Bundle Transmission Line: Nokhar S/S - Lahore, North S/S - Lahore HVDC Converter Station (135km)	Pakistan	National Transmission & Despatch Company	e	8,000 50
1500MW Combined Cycle Power Project, Al Dur-II	Bahrain	NOMAC Al-Dur Power & Water Services WLL	Testing	N.A
110kV Thuwal Project Jeddah	Saudi Arabia	Saudi Electric Company	e	N.A
WATER RESOURCES & DAM ENGINEERING SECTOR				
New				
Punjab Resilient and Inclusive Agriculture Transformation	Pakistan	Agriculture Department, Government of the Punjab	f I	68,673 242
Third Party Monitoring and Evaluation of Implementation of M&R Works in Irrigation Department	Pakistan	Irrigation Department, Government of the Punjab	e	20,000 71
Water Requirement for K-IV Project: Improvement of Kalri Bhagar Feeder and Keenjhar Lake - Plain Cement Concrete Lining of Kalri Baghar Feeder Upper - Phase-I	Pakistan	Irrigation Department, Government of Sindh	c e	39,943 140
Improvement & Rehabilitation Works of Akram Wah Canal	Pakistan	Sindh Irrigation & Drainage Authority	e f	19,000 68
Exploring Water Potential of Soan River, Punjab	Pakistan	Irrigation Department, Government of the Punjab	a c d	N.A
Flood Affected Health Facilities, Khyber Pakhtunkhwa	Pakistan	Pakistan Red Crescent Society	c d e	N.A
Consultancy Services for Study and Evaluation of Safety of 574 Dams in different Regions	Saudi Arabia	Ministry of Environment, Water & Agriculture	c d Hydrology Assessment	N.A
Ongoing				
Emergency Flood Assistance Project, Khyber Pakhtunkhwa	Pakistan	Irrigation Department, Government of Khyber Pakhtunkhwa	c e	15,254 54
Remodelling of Warsak Canal System in Peshawar and Nowshera	Pakistan	Irrigation Department, Government of Khyber Pakhtunkhwa	c d e	16,695 186
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	National Project Coordinator, Federal Water Management Cell,	c e f	154,000 933
Kachhi Canal Project	Pakistan	Water and 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	47,837 344

PROJECT	LOCATION	CLIENT	SCOPE OF WORK	COST Rs. Million US$ Million
Project Readiness Support for Khyber Pakhtunkhwa Water Resources Development Project	Pakistan	Irrigation Department, Government of Khyber Pakhtunkhwa	c f	29,640 103
Gomal Zam Dam Command Area Development and On-Farm Water Management for High Value & High Efficiency Agriculture	Pakistan	Gomal Zam Dam Command Area Development Project	c d e	4,234 41
Project Readiness Financing for Punjab Water Resources Management	Pakistan	Irrigation Department, Government of the Punjab	a c d	250,000 1,374
Harnessing of Hill Torrents in D.G. Khan and Rajanpur	Pakistan	Irrigation Department, Government of the Punjab	a c d PC-I	465,000 2,906
Installation of Telemetry System for Real Time Discharge Monitoring at 27 Key Sites Indus Bassin Irrigation System	Pakistan	Water and Power Development Authority	c d e f	2,400 8
Command Area Development Component of Jalalpur Irrigation Project	Pakistan	Agriculture Department, Government of the Punjab	c d e f	4,000 24
Murunj Dam Project	Pakistan	Water and Power Development Authority	a c d	172,964 1,048
Cement Concrete Lining of Nasrat Canal and Odero Lal Branch, Sindh	Pakistan	Irrigation Department, Government of Sindh	c d e	8,000 40
Rehabilitation/Restoration of Karo Gungro Outfall Drain System and its Allied Structures including Construction of Dewan Drain From Drainage Inlet Darya Khan Branch Drain to Karo Gungro Drain in Tando Muhammad Khan Drainage	Pakistan	Irrigation Department, Government of Sindh	c e	2,000 7
Flood Protection Dam (B6) in Al-Jufainah Muscat Governorate	Oman	Ministry of Agriculture & Fisheries	e f	13,393 130
Completed				
Trimmu and Panjnad Barrages Improvement Project	Pakistan	Irrigation Department, Government of the Punjab	b c d e f	18,316 178
Promotion of High Value Agriculture Through Solarization of Drip & Sprinkler Irrigation System, Punjab	Pakistan	Agriculture Department, Government of the Punjab	e f	3,678 24
Chashma Right Bank Canal (Lift Cum Gravity) Project, Punjab	Pakistan	Water and Power Development Authority	a b c d	179,600 1,137
Kano River and Hadejia Valley Irrigation Schemes, Dams Safety and Rivers Training in Hadejia Jama'are River Basin	Nigeria	Federal Ministry of Water Resources	e f	36,983 285
COMMUNICATION SECTOR **Roadways** **New**				
Lahore - Sahiwal - Bahawalnagar Motorway (295km)	Pakistan	National Highway Authority	a c	435,720 1,551
Rehabilitation and Reconstruction of N-5 from Moro to Ranipur (86km) & 32 Damaged Bridges	Pakistan	National Highway Authority	e f	49,600 178
Less Developed Areas of Balochistan; 1) Turbat Mand Road from Motorway (M-8) to Iranian Border (Radeeq) 115km 2 Ninheng Bridge at Rodbun, District Kech	Pakistan	Communication, Works, Physical Planning and Housing Department, Balochistan	e	20,144 73
Remodeling and Upgradation of Ada Nullah and Walton Road (Package-I), Lahore	Pakistan	Punjab Central Business District Development Authority	e	14,869 52
Inter District Road from Torghar to Buner District (25km)	Pakistan	Pakhtunkhwa Highway Authority	e	4,250 15
Road Connectivity Bridge from East & West Wharves at Karachi Port	Pakistan	Karachi Port Trust	e	2,319 8

PROJECT	LOCATION	CLIENT	SCOPE OF WORK	COST Rs. Million US$ Million
Rawalpindi Ring Road 38.3km Main Carriageway Banth (N-5) to Thalian (M-2)	Pakistan	Rawalpindi Development Authority	e	23,300 83
Internal Infrastructure of CBD Walton (Phase 2&3) and Flyover Connecting Bab-e-Pakistan to Walton	Pakistan	Punjab Central Business District Development Authority	e	6,668 23
Al-Batinah Expressway (Package-III)	Oman	Ministry of Transport, Communication & Information Technology	c e	N.A
Dualization of Road and Landscapping Work in Wilayat Al-Jabal Al-Akhdar in Al-Dakiliyah	Oman	Al-Dakiliyah Governorate	c e	N.A
Ongoing				
Lahore Ring Road (22.4km) Project Southern Loop	Pakistan	Punjab Ring Road Authority, Government of the Punjab	a b c d e f	75,000 1,263
Realignment of KKH from Thakot to Raikot Due to Construction of Dams on River Indus	Pakistan	National Highway Authority	a c	750,000 3,589
Permanent Reconstruction Works in Federally Administered Tribal Areas (FATA)	Pakistan	Temporarily Dislocated Persons Support and Management Secretariat	c e	12,352 119
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	22,239 135
Bus Rapid Transit (BRT) Yellow Corridor under Karachi Mobility Project	Pakistan	Transport & Mass Transit Department, Government of Sindh	c d e	70,000 407
Dualization & Improvement of Existing N-50 from Yarik-Sagu-Zhob including Zhob Bypass (210km), Balochistan	Pakistan	National Highway Authority	e	80,000 277
Khyber Pakhtunkhwa Integrated Tourism Development Project	Pakistan	Communication & Works Department, Govt. of Khyber Pakhtunkhwa	a c e	20,000 120
Multi-Level Grade Separation at Shahdara Morr, Lahore	Pakistan	Lahore Development Authority	c e	6,515 29
Bridge at Korangi Causeway, Karachi	Pakistan	Local Government Department, Government of Sindh	c e	6,600 24
Circular Bypass Road (65km) Bannu	Pakistan	Pakhtunkhwa Highway Authority	e f	8,000 58
Port Qasim Authority Main Access Road (26km) including Construction of Bridge, Flyovers, Interchanges and Toll Plazas from T-Junction National Highway to Ghaghar	Pakistan	Port Qasim Authority	b c d e	10,000 56
Dualization & Improvement of Pindigheb-Kohat Road N-80 (80km)	Pakistan	National Highway Authority	e f	20,000 144
Design Review and Construction Supervision Chitral-Booni-Mastuj-Shandur Road (153km)	Pakistan	National Highway Authority	e f	16,745 99
Dualization of Rawalpindi-Kahuta Road (28km) including 4-Lane Bridge over Sihala Railway Pass, Sihala Bypass & Kahuta Bypass	Pakistan	National Highway Authority	e f	23,000 104
Rehabilitation & Upgradation of 55km Long Awaran-Jhaljao Road, Balochistan	Pakistan	National Highway Authority	e f	7,412 33
Completed				
Remodelling of Main Boulevard from Liberty Chowk to Kalma Chowk - CBD Square, Lahore	Pakistan	Punjab Central Business District Development Authority	e	4,228 19
Dual Carriageway from GT Road (Benazir Chowk) to Lahore-Sialkot Motorway (Wahndo Interchange), Gujranwala	Pakistan	Communication & Works Department, Government of the Punjab	c e	10,000 35
Akbar Chowk Flyover and 4 other LDA Projects	Pakistan	Lahore Development Authority	e	22,000 96

PROJECT	LOCATION	CLIENT	SCOPE OF WORK	COST Rs. Million US$ Million
Airports				
New				
Design and Implementation fo RNP AR Instrument Flight Procedures at Existing Airport Locations in Northern Areas	Pakistan	Pakistan Airports Authority	a 1. Studies 2. Master Planning	N.A
Master Plan Upgradation and Airside Expansion at Multan International Airport	Pakistan	Pakistan Airports Authority	a c e	N.A
Ongoing				
Expansion of Terminal Building & Allied Facilities at Allama Iqbal International Airport, Lahore	Pakistan	Civil Aviation Authority	a b c d e p	26,500 336
Project Management Consultancy Services for New Gwadar International Airport	Pakistan	Civil Aviation Authority	e	10,000 49
Extension of Terminal Building at Bacha Khan International Airport, Peshawar	Pakistan	Civil Aviation Authority	b c d e	3,800 48
Expansion and Renovation of Begum Nusrat Bhutto Airport, Sukkur	Pakistan	Civil Aviation Authority	a b c d e	40,000 179
Ports & Harbours				
Ongoing				
Refurbishment of Dry Docks	Pakistan	Karachi Shipyard and Engineering Works	e	4,000 23
Establishment of Business Park, Modification of Auction Hall and Establishment of Cold Storage & Freezing Tunnels at Korangi Fisheries Harbour Authority, Karachi	Pakistan	Korangi Fisheries Harbour Authority, Karachi	a c e	N.A
Port Connectivity Project under Public Private Partnership (PPP)	Pakistan	Karachi Port Trust	a b c d	12,000 86
Development of the Container Terminal at Pakistan Deep Water Container Port Project	Pakistan	Karachi Port Trust	f	72,812 455
Completed				
Works for the Upgradation of Karachi Shipyard Project 313	Pakistan	Karachi Shipyard and Engineering Works	f	N.A
ARCHITECTURE & PLANNING SECTOR				
New				
Development of Central Business Development (CBD), Punjab	Pakistan	Punjab Central Business District Development Authority	Project Management	N.A
Celestia Tower, Nawaz Sharif IT City Lahore	Pakistan	Punjab Central Business District Development Authority	e	7,995 29
The National Police Hospital, Islamabad	Pakistan	Pakistan Public Works Department Islamabad	c e	7,000 25
Re-Construction of Lady Willington Hospital, Lahore	Pakistan	Infrastructure Development Authority of the Punjab	e	5,300 19
Expansion of Check Post at Wagha, Lahore	Pakistan	Pakistan Rangers	c d e	2,900 10
Completion of Leftover Works of Chotagala Campus, University of Poonch Rawalakot Through Loan of Kuwait Fund for Arab Economic Development, Azad Jammu and Kashmir	Pakistan	University of Poonch, Rawalakot	c d e f	3,550 7

PROJECT	LOCATION	CLIENT	SCOPE OF WORK	COST Rs. Million US$ Million
Establishment of Jinnah Hospital at G-11/3, Islamabad	Pakistan	Infrastructure Development Authority of the Punjab	e	4,274 15
District Judicial Complex Kohat	Pakistan	Communication & Works Department, Govt. of Khyber Pakhtunkhwa	e	1,920 7
Establishment of Paramedical and Allied Health Sciences Complex at Hayatabad, Peshawar	Pakistan	Communication & Works Department, Govt. of Khyber Pakhtunkhwa	c e	1,300 5
Re-Supervision for External Services at Gwadar	Pakistan	General Headquarters (GHQ), Rawalpindi	e	1,578 6
Design of Infrastructure Development at Chahar Bagh (Phase-II) of Ravi Riverfront Urban	Pakistan	Ravi Urban Development Authority (RUDA)	c 1. PC-I 2. Geotech Investigation	940 3
New GOR near DHA Phase-9	Pakistan	Infrastructure Development Authority of the Punjab	e	1,587 6
Establishment of Research Institute of Hepatology, Hepatobiliary Pancreatic Surgery & Transplantation & Research Institute of Diabetology, Endocrinology and NCDS	Pakistan	Khyber Medical University, Peshawar	e	500 2
Establishment of University of Engineering and Applied Sciences, Swat	Pakistan	University of Engineering & Applied Sciences, Swat	e	N.A
Ongoing				
Reconstruction and Rehabilitation of Earthquake Affected Areas	Pakistan	Earthquake Reconstruction and Rehabilitation Authority	b c d e f	200,000 3,324
Pakistan Kidney & Liver Institute and Research Center (Package-C1)	Pakistan	Infrastructure Development Authority of the Punjab	c d e	3,240 32
Establishment of Infrastructure in LDA City (Phase-I) Lahore	Pakistan	Lahore Development Authority	e f	15,000 108
Various Projects of Peshawar	Pakistan	Peshawar Development Authority Development Authority	a b c d e	13,000 127
Expo Centres at Balochistan, Khybar Pakhtunkhwa and Punjab	Pakistan	Pakistan Expo Centers (Pvt.) Limited	c e	N.A
Multi-Storey (40-Storey) Office Building at Commercial Plot in Blue Area, Islamabad	Pakistan	Civil Aviation Authority	a c d e	13,000 59
Development of Housing Scheme at Surizai, Peshawar	Pakistan	Pakistan Housing Authority	a b c d e	101,472 615
PCB's Upcoming Engineering Projects of Stadiums, Hotels and Shops	Pakistan	Pakistan Cricket Board	a b c d e 12	2,600
Low-Cost Housing Scheme at Alipur Farash, Islamabad	Pakistan	Capital Development Authority	e f	32,000 182
Federal Government Employees Housing Authority Scheme Situated at Mouza Tamma & Morian, Zone-IV, Islamabad	Pakistan	Federal Government Employees Housing Authority, Islamabad	a c d e	14,000 64
UNHCR Offices in Pakistan for Refugees	Pakistan	United Nations High Commissioner for Refugees	c d e	N.A
Master Plan for National Aerospace Science & Technology Park (NASTP), Aviation City Kamra	Pakistan	Aviation City Pakistan (Pvt.) Limited	a b c d e	4,318 35
Bilquis Edhi Hospital at North Karachi	Pakistan	Edhi Foundation, Karachi	c d e	10,000 35
Urban Regeneration of Walton Center Business District, Phase-I (Civil Works), Punjab	Pakistan	Punjab Central Business District Development Authority	e	3,000 17

PROJECT	LOCATION	CLIENT	SCOPE OF WORK	COST Rs. Million US$ Million
Establishment of 200 Bed Mother & Child Hospital and Nursing College at District Bahawalnagar	Pakistan	Infrastructure Development Authority of the Punjab	e	3,500 15
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	8,300 53
Establishment of 200 Beds Accident and Emergency Centre at PIMS, Islamabad	Pakistan	Infrastructure Development Authority of the Punjab	e	2,150 10
Reconstruction/ Rehabilitation of Fully Damaged Schools in Bara, Tribal District Khyber, Khyber Pakhtunkhwa (Package I, II & III)	Pakistan	Works & Services Department, Government of Khyber Pakhtunkhwa	c e f	1,348 8
Establishment of University of Gwadar, Balochistan	Pakistan	University of Gwadar	e	2,000 7
Infrastructure Development of Gwadar Cantonment, Gwadar City	Pakistan	Engineer-in-Chief Branch, Pakistan Army	e f	4,006 24
Sardar Fateh Muhammad Khan Buzdar Institute of Cardiology DG Khan	Pakistan	Infrastructure Development Authority of the Punjab	e	2,050 12
Existing and New Campus Facilities of Comsat University Wah Campus	Pakistan	COMSATS University Islamabad	c d e	2,770 16
AJK Legislative Assembly Complex Project, Muzaffarabad	Pakistan	Ministry of Kashmir Affairs & Gilgit Baltistan, Pakistan	e f	2,499 16
Rehabilitation of Police Stations in Khyber Pakhtunkhwa	Pakistan	Police Department, Government of Khyber Pakhtunkhwa	c e	1,350 6
Peshawar Uplift Programme (Phase-II)	Pakistan	Government of Khyber Pakhtunkhwa	b c d e	1,000 5
Pakistan Digital City, Haripur	Pakistan	Khyber Pakhtunkhwa Information Technology Board (KPITB)	c d e	1,450 7
Development and Improvement of Academic Facilities at Ghazi University, Dera Ghazi Khan	Pakistan	Ghazi University, Dera Ghazi Khan	b c d e	1,000 7
Supreme Court Employees Cooperative Housing Scheme, Islamabad	Pakistan	Supreme Court Employees Cooperative Housing Society	d e	7,000 34
Academic & Research Facilities at University of Kotli, AJK	Pakistan	University of Kotli, AJK	c d e	1,000 8
Establishment of Women Sub Campus, University of Swat	Pakistan	University of Swat, Khyber Pakhtunkhwa	b c d e	1,609 11
Uplifting of Academic & Infrastructure Facilities at Hazara University, Mansehra	Pakistan	Hazara University, Mansehra	c d e	1,096 7
Academic Block at Shaheed Zulfiqar Ali Bhutto Medical University, Islamabad	Pakistan	Shaheed Zulfiqar Ali Bhutto Medical University, Islamabad	c d e	2,000 11
Rehabilitation/Renovation and Construction Works for Establishment of Government College University, Hyderabad	Pakistan	Government College University, Hyderbad	c e	472 3
Upgradation of Bannu University of Sciences & Technology Lakki Marwat Campus to Full-Fledged University	Pakistan	University of Lakki Marwat, KPK	b c d e	1,578 10
Divisional CTD Complexes/Headquarters at 05 Division of Sindh (Hyderabad, Mirpur khas, Sukkur, Larkana & Shaheed Benazirabad)	Pakistan	Counter Terrorism Department, Government of Sindh	c e	974 4
Pakistan Navy Farms Scheme, Sector D, Main Simli Road	Pakistan	Pakistan Navy	c d e	775 3

PROJECT	LOCATION	CLIENT	SCOPE OF WORK	COST Rs. Million US$ Million
Al-Meera Five Malls (Al-Froosh, Umm Al-Amad, Al-Luqta, Al-Thumama and Al-Muaither)	Qatar	Al-Meera Consumer Goods Co.	c d e	4,620 29
Completed				
Infrastructure Work under FATA Infrastructure Program (FIP)	Pakistan	Planning & Development Department, Government of Khyber Pakhtunkhwa	c e	4,015 25
Provision of Cricket High Performance Centers at Divisional Headquarter Faisalabad & Sialkot	Pakistan	Punjab Sports Board	d e	1,400 8
Establishment of Kohat Institute of Medical Science	Pakistan	Communication & Works Department, Govt. of Khyber Pakhtunkhwa	c e	2,748 12
ENVIRONMENTAL & PUBLIC HEALTH ENGINEERING SECTOR				
New				
Arterial Main, Secondary and Distribution Network in the Areas in the Eastern Part of City (Water Supply System), Faisalabad	Pakistan	Water & Sanitation Agency, Faisalabad	c d e 1. EIA Study 2. Survey	8,450 30
Construction of Disposal Station and Sewer Line from Purana Kahna to Suae Asal Drain, Lahore	Pakistan	Water & Sanitation Agency, Lahore	b c d e m p	2,000 7
Remaining Sewerage Network & Design and Build of Sewage Treatment Plant, Buildings and Pipeline for Wilayat Al-Musanaah	Oman	Oman Water and Wastewater Company	c e	N.A
Drainage Network with Duqm Refinery	Oman	The Public Authority for Special Economic Zones and Free Zones (OPAZ)	c e	N.A
EU Wash Project in Port Moresby, LAE and Mount Hagen	Papua New Guinea	United Nations Office for Project Services	a l	N.A
Ongoing				
Punjab Intermediate Cities Improvement Investment Program (PICIIP)	Pakistan	Local Government & Community Development Department, Punjab	b c d e g h i j k l	28,000 246
Stormwater Drain Projects - Gujjar Nullah and Orangi Nullah, Karachi	Pakistan	National Disaster Management Authority	e f	26,000 156
Combined Effluent Treatment Plant and Upgrading of Existing Sewage Treatment Plant, Industrial Zone Karachi	Pakistan	Port Qasim Authority	c d e f	6,000 38
Implementation of Local Area Development Program Public Health, Livelihood Development and Downstream Fisheries Plans	Pakistan	Water and Power Development Authority	a c d e	12,000 54
Infrastructure Sub-Project, Sectoral Planning & Resident Supervision in16 Cities of Punjab Package No. 02	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	11,000 63
Replacement of Outlived Sewer in Multan Phase-II	Pakistan	1. Multan Development Authority 2. Water & Sanitation Agency, Multan	c d e	2,154 13
DS 303 Hatta Sewerage and Stormwater System - Hydrological & Hydraulic Modelling along with Special Studies Related to Dam	UAE	Dubai Municipality	c d Hydraulic Study	N.A
INFORMATION TECHNOLOGY (IT) SECTOR				
Ongoing				
IT Infrastructure of Education City Project Based on Smart & Safe City Concept (8921 Acres), Sindh	Pakistan	CGD Consulting Services (Pvt.) Limited	a c d	N.A

PROJECT	LOCATION	CLIENT	SCOPE OF WORK	COST Rs. Million US$ Million
Software Development Under The Project Establishment of Pilot Citizen Facilitation Centre in Peshawar	Pakistan	Khyber Pakhtunkhwa Information Technology Board	g h j k l	N.A
Digital Transformation, Strengthening and Automation of PCSIR, Islamabad	Pakistan	Pakistan Council of Science & Industrial Research	d f g i	N.A
GEOGRAPHIC INFORMATION SYSTEM (GIS) SECTOR				
New				
Implementation of Web Based Geographical Information System along with Mobile Application and Mapping of HT/LT (Survey of 10 HT Feeders along with their Respective LT Network) Distribution & Transmission Network of LESCO	Pakistan	Lahore Electric Supply Company	j n q 1. GIS 2. Mapping 3. Software Development	N.A
Digitization of Massavie Maps in the Punjab Package-II - Lot 2: Lahore Division Districts (Kasur, Lahore, Nankana Sahib, Shiekhupura)	Pakistan	Punjab Urban Land Systems Enhancement	n q 1. GIS 2. Mapping	N.A
Conducting Baseline/Feasibility Study for Seismic, Tsunami and Cyclone Hazards Along Coast of Sindh and Identification of Suitable Sites for Installation of Multi-Hazards Early Warning Systems	Pakistan	Provincial Disaster Management Authority, Government of Sindh	a m n o p q r s Hazard Assessment	N.A
Daru Island Infrastructure Mapping	Papua New Guinea	United Nations Office for Project Services	b l m n o p r	N.A
Ongoing				
Implementation of Web Based GIS along with Mobile Application and Mapping of HT/LT Distribution	Pakistan	Faisalabad Electric Supply Company	j q 1. GIS 2. Mapping 3. Software Development	N.A
Digitized Mapping through Web Based Enterprise GIS Application for the Distribution Network of Islamabad Electric Supply Company Phase-II	Pakistan	Islamabad Electric Supply Company Limited	j n q	N.A
Western Greater Peshawar Spatial Master Plan	Pakistan	Planning & Development Department, Government of Khyber Pakhtunkhua	a c m n p q r	19,550 90
Master Plans/Land Use & Zoning Plans for Local Governments in Punjab (Phase-I), Package-V (Khanewal & Vehari), Punjab	Pakistan	Local Government & Community Development Department, Punjab	b m n q r	N.A
Completed				
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
Tailrace Tunnel Restoration Works of Neelum-Jhelum Hydroelectric Project	Pakistan	Water and Power Development Authority	c e	5,000 19

National Engineering Services Pakistan (Pvt.) Limited (NESPAK)
(Consulting Engineers)

1: NESPAK House: 1-C, Block-N, Model Town Extension, Lahore-54700, Pakistan
PABX: +92 42 99090000 Fax: +92 42 99231950 P.O.Box: 1351
E-mail: info@nespak.com.pk Website: www.nespak.com.pk

2: IEEEP Building, 17-C-1, Civic Centre, Faisal Town, Lahore-54700, Pakistan
PABX: +92 42 99232261-74 Fax: +92 42 99232275 P.O.Box: 1351

/nespakofficial *@nespak.official* *@nespakofficial*
/nespakofficial

LOCAL OFFICES

KARACHI: 13th Floor, NICL Building, Abbasi Shaheed Road, Off. Shahrah-e-Faisal, Karachi Phone: +92-21-99207277-84 Fax: +92-21-35651994
E-mail: karachi@nespak.com.pk nespakkh@gmail.com

ISLAMABAD: NESPAK House, Sector-G, 5/2, P.O. Box 2461
Phone: +92-51-9221910-13 Fax: +92-51-9221914
E-mail: <nespak.isd@gmail.com> <islamabad@nespak.com.pk>

QUETTA: House No. 18-19B, Street No. 2, Phase-III, Shahbaz Town, Quetta Cantt. Phone: +92-81-9202454, 9201707 Fax: +92-81-9202982
E-mail: roquetta@nespak.com.pk

PESHAWAR: NESPAK House, 24, Sector B-2, Phase-V, Hayatabad, Peshawar
Phone: +92-91-5828478-79, 5828481, 5837220 Fax: +92-91-5828482
E-mail: peshawar@nespak.com.pk

OVERSEAS OFFICES

KINGDOM OF SAUDI ARABIA: M.H. Aitah-NESPAK Engineering Consultant Company, Office #2, First Floor, Ibrahim Muhammad Al-Moosa Commercial Complex Abdul Aziz Bin Masaad Bin Jalwi Road (Dabbab Road) Riyadh P.O.Box 50344, Riyadh 11523, Phone: +966-11-4052297, 4059583
Fax: +966-11-4051031 E-mail: nespaksa@gmail.com

SULTANATE OF OMAN: NESPAK & Partners L.L.C., P.O. Box 3506, Ruwi, Postal Code 112, Ruwi, Office No. 105, 106, (First Floor), Musa Abdul Rehman Complex, Near Sultan Qaboos Mosque, Ruwi/Halat Al-Noor, Way: 3109, Block No. 131, Building No. 477, Muscat, Phone: +968-24789668
Mobile: +968-98237227 Fax: +968-24703702
E-mail: <nespak@omantel.net.om> <khadim_jakhar@yahoo.com>

STATE OF QATAR: National Engineering Services Pakistan W.L.L. Limited, Al-Muntazah Building, Office No. 4, (1st Floor) Unit-6, Building No. 146/ Ibn Sina Street: 950/Zone 24, Doha, P.O. Box 32057, Phone: +974-44429696, 44420324
Fax: +974-44429969 E-mail: <info@nespak-qatar.com>

ISLAMIC REPUBLIC OF AFGHANISTAN: National Engineering Services Pakistan (Pvt.) Limited, House No. 250, District (Nahiya) 10, Street No. 16, Wazir Akbar Khan, Kabul Phone: +92-0-51-9221911-12, +93-78-601-6050
Fax: +93-0-20-2312967, +92-0-51-9221914 Mobile: +92-333-2507797
E-mail: <nespak_af@yahoo.com> <engr.mukhtararshad@gmail.com>

UNITED KINGDOM: NESPAK UK Limited, Parkview 183-189, The Vale, London, UK W3 7RW, Phone: +44-2088111188 Fax: +44-2088111189
Email: nespakuk@gmail.com

ASSOCIATED COMPANIES

TURKPAK INTERNATIONAL (PVT.) LTD.
1-Nursery Lane, Lawrence Road, Lahore - Pakistan
Phone: +92-42-99202710, 3628544-45
E-mail: info@turkpak.com, turkpakint@yahoo.com
Website: www.turkpak.com

ECO CONSULTANCY & ENGINEERING COMPANY (PVT.) LTD. (ECO-CEC)
1-Nursery Lane, Lawrence Road, Lahore - Pakistan
Phone: +92-42-99202710, 36282544-45
E-mail: ecocec@wol.net.pk

NESPAK FOUNDATION
IEEEP Building, 17-C-1, Civic Centre, Faisal Town, Lahore-54700, Pakistan
PABX: +92 42 99232261-74 Fax: +92 42 99232275 P.O.Box: 1351

TÜV AUSTRIA

National Engineering Services Pakistan (Pvt.) Limited
NESPAK House: 1-C, Block-N, Model Town Extension,
Lahore-54700, Pakistan
PABX: 92-42-99090000
Fax: 92-42-99231950 P.O. Box 1351
E-mail: info@nespak.com.pk
Website: www.nespak.com.pk

Editor: Ahsan Anwar, EVP/Head, Human Resources Division
Deputy Editors: Zulfikar Ali Khan, Hina Naz, Sidra Ilyas, Abdul Rehman
Designer: Muhammad Ahmed Nadeem