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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, Geophysics Surveys, Construction Materials and Minerals, Dams, Landslide Mitigation, Seismotectonic Studies, Seismic Risk Evaluation, Ground Improvement, Problematic Ground Mitigation and Deep Excavation Support Systems
- Airport Terminal Buildings, Hangars, Runways, Taxiways and Air Traffic Control Towers
- Deep Seaports, Fish Harbours, Marine Terminals, Container Terminals, Inland River Navigation and Marine Jetties
- Architectural and Engineering Design, Healthcare Buildings, Educational Buildings, High-rise Buildings, Corporate Office Buildings, Commercial and Community Buildings, Sports and Recreational Facilities, Industrial Buildings, Low-cost Housing, Residential Communities, Urban/Rural Planning, Slum Upgradation, Landscaping, Interior Design and Rehabilitation & Refurbishment Works
- Seismic Hazard Microzonation, Disaster Risk Reduction and Management Studies & Trainings, Implementation Strategies, Policy Formulation, Residential Communities, Advocacy Planning, Preparation of Zoning Regulations and Bye-laws, Tourism Planning, Regeneration and Building Codes
- Water Supply, Sewerage, Stormwater Drainage, Solid Waste Management, Plumbing, Water and Wastewater Treatment
- Site Characterisation/Baseline Data for Environmental Impact Assessment, Environmental Risk Assessment, Environmental Planning and Management, Environmental Health and Safety, Air and Noise Pollution Control, Climate Change Studies, Contaminated Site Assessment and Mitigation, Environmental Audit and Resettlement Action Plans
- Steel Mills, Automobile Plants, Cement Plants, Fertilizer Plants, Polyester Plants, Sugar Plants, Chemical Industrial Plants and Textile Units
- Information Technology (IT) and Software Development, Business Process Re-engineering, Management Information System, Database Applications, Web Portals, Data Warehousing, Data Conversion, Networking and Data Centres, Satellite Imagery Processing, Digital Terrain Modelling, Global Positioning System (GPS) Survey, Remote Sensing, Geographic Information System (GIS) Development and Map Digitisation
- Land Surveying, Cadastral Surveying, Hydrographic Survey, Geodetic Survey, Drone Survey, Monitoring Design and Supervision of Heating Ventilation and Air-conditioning (HVAC), Fire-fighting, Elevators, Escalators, Platform Screen Doors, Building Management Systems and Building Energy Audits
- Agriculture Development and Management, On-farm Water Management, High-efficiency Irrigation Systems, Soil and Water Conservation, Social and Environmental Institutional Development, Natural Resources Development (Aquatic Life Study, Monitoring and Evaluation Tasks, Horticulture/Floriculture Forestry, Rangeland Management, Livestock, Dairy Development & Wildlife Management and Socio-economic Project Impact Evaluation

My Word

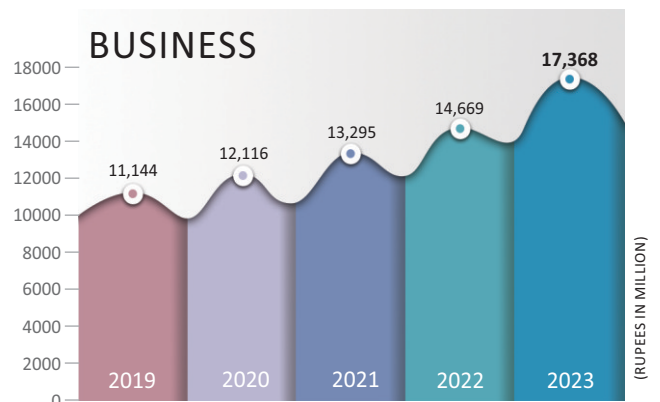
“Few things are impossible to diligence and skill.”
Samuel Johnson

National Engineering Services Pakistan (Pvt.) Limited (NESPAC) today stands at the pinnacle of glory as it has attained the status of a leading engineering consultancy organisation in Pakistan. NESPAC was established as one of the pioneers of the engineering consultancies in 1973 with the aim to reduce foreign dependence in this field. The Company, which started its journey with a small bunch of engineering professionals, has transformed itself into a successful institution by dint of hard work and diligence demonstrated by our predecessors. During the last 50 years of its existence, NESPAC has earned credibility, confidence and respect among both its clients and competitors by making its presence felt in all the spheres of engineering, be it energy, dams, water & agriculture, highways, airports, ports & harbours, architecture, environment & public health, disaster management, industry, or Information technology & GIS. The list goes on. The state-of-the-art services coupled with skills and expertise have brought the Company to an enviable position in the consultancy market in Pakistan and abroad. NESPAC has come a long way by securing business both in its own country and overseas.

This year's business brought the healthiest change in the Company's financial position in its 50-year history. NESPAC has been able to acquire 201 projects — a number which

has broken the Company's own record. With this figure, the Company's business acquisition has risen to 18 percent in the year 2022-2023 as compared to the last fiscal. This achievement stands as a testament to the unwavering commitment of our exceptional team and the trust that our clients place in us. Notably, seven of NESPAC's Divisions/Offices have achieved business acquisitions exceeding Rs. 1 billion this year, thus further enriching NESPAC's illustrious portfolio. NESPAC remains steadfast in its role as a pioneer in driving positive change and contributing to Pakistan's growth.

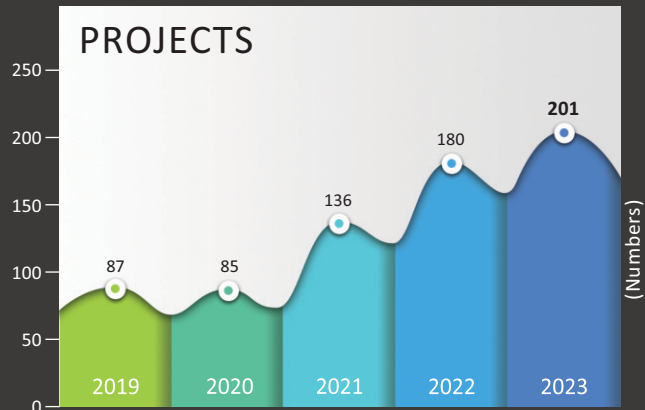
Major projects acquired during the year include Solarisation of Public Sector Buildings in Pakistan, Extension & Augmentation Works at 15 Grid Stations in Pakistan, Emergency Flood Assistance Project Khyber Pakhtunkhwa, Punjab Rural Sustainable Water Supply & Sanitation Projects in Central & South Punjab, project for the implementation of Local Area Development Program- Public Health, Livelihood Development & Downstream Fisheries Plans, Upgradation/Expansion of Begum Nusrat Bhutto Sukkur Airport, Dualisation/Improvement of N-50 from Yarik-Sagu-Zhob Section, Multi-level Grade Separation of Shahdara Morr Lahore, 40-storey PCAA Office Tower Building Islamabad, Gandhara Digital City in Peshawar & Swat, Bilquis Edhi Hospital Karachi, JPMC Medical Tower





Karachi, CTD Headquarters in five (5) Sindh Divisions, IT Infrastructure of Malir Education City Project Karachi, Academic Block of COMSATS University Islamabad and 1500MW Combined Cycle Independent Water and Power Project Al-Dur-II, Bahrain.

Despite all of its success and achievements, NESPAK is not oblivious to its performance. It keeps a watchful eye on the Company's working operations through a thorough monitoring and audit system. NESPAK has implemented strict monitoring policies and quality standards through yearly audits. An effective Quality Management System (QMS) is in place to set and achieve the performance goals. During the year, NESPAK fulfilled the requirements to renew the certifications of ISO 9001:2015 QMS, ISO 14001:2015 Environmental Management System and ISO 45001: 2018 Health and Safety System for the next three years and subsequently went through their Audits. The ISO 14001:2015 Standard is an environment-oriented and systematic approach to manage the environmental impacts of products, services and processes. The ISO 45001: 2018 Standard provides framework to identify, control and decrease the risk associated with health and safety within the workplace. The External Audits for above Standards were conducted by the Auditor of TUV Austria Bureau of Inspection & Certification to ensure compliance with their requirements.



NESPAK remains fully alive to the training of its personnel. The Company takes genuine interest in the improvement of expertise and skills of its employees including professionals, para professionals and support staff. The total staff strength of the Company stands at 4839. During the year, as many as 27 in-house training workshops were organised at NESPAK to further enhance the skills and improve professional knowledge and approach of the employees.

Strenuous efforts are being made to seek more business by winning new clients, particularly in the foreign countries. Adept professionals have been posted in the relevant countries to find fresh business. In addition to that, visits by the Company professions are arranged from time to time to explore business opportunities overseas.

Attempts are continuing on every front to make improvement in all domains, be it the business acquisition, performance monitoring, or training of personnel. By the grace of Allah Almighty, it is hoped that all of our dreams, plans and endeavours will turn into reality and a dawn of prosperity and development will welcome us in the days to come.

MUHAMMAD ZARGHAM ESHAQ KHAN
Managing Director & President



NESPAK performed fairly well in the Energy Sector during the Financial Year 2022-2023 by securing a total of 25 projects worth Rs. 343 billion. The Company created a landmark in the realm of solar energy by attaining the project of Solarisation of Public Sector Buildings in Pakistan. NESPAK continued to provide its state-of-the-art services for 28 ongoing projects worth Rs. 2,690 billion during the year.

Energy Sector

Among the fresh projects during the year, the National Transmission and Despatch Company (NTDC) hired NESPAK's services for Extension and Augmentation Works at a total of 15 Grid Stations (220/500 kV) in Pakistan under two separate contracts. Among them, seven (7) sub-projects are located in the north of Pakistan and they are classified as Group B for the sake of execution. The eight (8) grid stations under Group A are located in the south and north of the country. The services for this project comprise design review/approval and construction supervision of extension and augmentation works at three different sites of Islamabad University, New

Kot Lakhpat, Lahore and Ludewala, Sargodha. These projects will be completed at the cumulative cost of Rs. 25 billion.

NESPAK has been engaged by the M/s S.K. Hydro (Pvt.) Limited to provide consultancy services for the installation of two banks of 66 MVAR Shunt Reactors at 884MW Suki Kinari Hydropower Project (Phase-I). NESPAK scope of work includes preparation of prequalification & bidding documents, bid evaluation and award of contract. The project will be carried out at a total cost of Rs. 7 billion.

The NTDC and NESPAK signed a consultancy contract for the construction of 220 kV Double Circuit Transmission Line from 500/220 kV Faisalabad West Grid Station to 220 kV Grid Station at Lalian. NESPAK will supervise the construction of this Rs. 4 billion project along with the services during the Defects Liability Period.

The NTDC has entrusted NESPAK with rendering services for 220 kV Double Circuit Twin Bundle Overhead Transmission Line from Sheikhpura Grid Station to Bund Road Grid Station, Lahore. NESPAK will carry out construction supervision and allied activities including testing & commissioning of this 28 km long transmission line. The Rs. 2 billion project is expected to be completed in one year.

The KOAK Power Limited has appointed NESPAK as an independent consultant for the selection of an EPC (Engineering, Procurement and Construction) Contractor





for the 229MW Asrit-Kedam Hydropower Project at the Swat River in Khyber Pakhtunkhwa (KPK). NESPAK services include review of prequalification documents, evaluation of prequalification applications, review of request for proposals for the selection of the EPC contract along with the evaluation criteria, support to the Client in pre-bid meeting(s) and in the preparation of responses to any query/question by potential bidders, preparation of bid evaluation report and its submission to the relevant agency & Client, and assistance in award of contract. The Asrit-Kedam Hydropower Project is being developed as an IPP venture through the Khyber Pakhtunkhwa Energy Development Organisation. The estimated cost of this project stands at Rs. 178 billion.

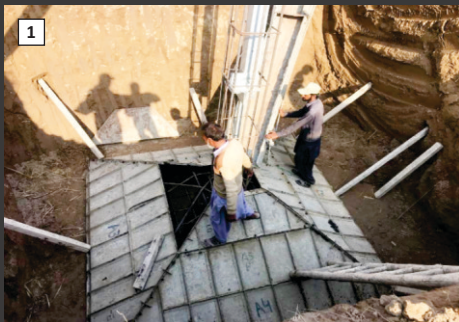
The Ministry of Energy (Power Division) has tasked NESPAK with Solarisation of Public Sector Buildings in Pakistan. Under this assignment, NESPAK will prepare design reports for more than 350 public sector buildings in the cities of Islamabad, Karachi, Lahore, Faisalabad, Peshawar, Quetta, Multan, Rawalpindi, Sukkur, Jauharabad and Sargodha along with 54 Cantonment buildings all over Pakistan. NESPAK shall validate the project deliverables of design review, material delivery verification and installation completion verification for this Rs. 2 billion venture.

Overseas, NOMAC Al-Dur Power & Water Services W.L.L. awarded a contract to NESPAK to conduct the Annual Performance Test (APT) of NOMAC's 1500MW Combined Cycle Independent Water and Power Project Al-Dur-II, Bahrain. The services included review of the test procedure, verification of instruments calibration in compliance with applicable standards, on-site witnessing

of the APT (testing of 4 units, 24 hours each), pre and post-test uncertainty analysis, drafting test reports and calculations, attending online meetings with Client/Buyer, etc. The final APT Report has been submitted to NOMAC.

Among the ongoing projects during the year,

construction activities on the 4500MW Diamer-Basha Dam Project, the highest roller-compacted concrete (RCC) dam in the world, are continuing at a steady pace. Work on 13 different fronts of Rs. 442 billion Contract MW-1 (Main Dam Civil Works and 21MW Tangir Hydropower) are in progress under the supervision of the NESPAK-led Diamer-Basha Consultants Group (DBCG). The DBCG is a joint venture comprising six firms including Pöyry (AFRY) Switzerland Limited, MWH (Stantec) International, Inc., USA, DOLSAR Engineering Inc. Co., Turkey, Associated Consulting Engineers (Pvt.) Ltd. and Mott MacDonald Pakistan (Pvt.) Ltd. The joint venture is also involved in design and contract administration of this mega project having an overall cost of Rs. 1,862 billion. During the year design and site works remained in progress. The design works are related to the diversion scheme components, main dam and power complex. The ongoing site works include the diversion scheme components, the excavation of main dam abutments, left and right bank power intake and dam foundation pit. The testing for RCC-mix design is also in progress. The permanent bridge construction has picked up speed and other related projects like the Tangir Hydropower Project, periphery roads and Cadet College are going along. This hydropower project is located on River Indus between the KPK's Kohistan District and Gilgit-Baltistan's Diamer District.



1. Shuttering activity at 220 kV DC Twin Bundle Transmission Line from Faisalabad Grid Station to 220 kV Lalian Grid Station

2. Work under way at the Diamer-Basha Dam site

3. A view of the 1500MW Combined Cycle Independent Water and Power Project at Al-Dur, Bahrain

NESPAK-led Joint Venture (JV) viz. Mohmand Dam Consultants Group (MGDC) is involved in design/review, construction supervision and contract management services for 800MW Mohmand Dam Hydropower Project awarded by the Water and Power Development Authority. Construction works at project colony, diversion tunnels and access roads are in full gear. The critical path components – Diversion Scheme, Main Dam and Powerhouse are priority for NESPAK to complete this Rs. 309 billion project on time. Construction activities are moving forward at preparatory works, main civil works and irrigation facilities. A high-level meeting was also held to review the progress of the project during the year. The 213m high Mohmand Dam is being constructed on the Swat River five (5) kilometres upstream of Munda Headworks in the Mohmand Tribal Area, KPK.

In Uzbekistan, the NESPAK-DOLSAR Joint Venture continued to provide services for the construction of three Hydropower Plants (24MW) on the Aksu River in the Kashkandarya Region, Uzbekistan. The projects are named Rabat Hydropower Project, Chappasuy Hydropower Project and Tamshush Hydropower Project. The NESPAK Joint Venture is involved in the project management, performance monitoring, design review and construction supervision. The Joint-Stock Company, Uzbekhydroenergo, is the project execution agency. This US\$ 75 million EPC project is being funded by the Asian Development Bank (ADB)

Various headways have been made on the 900MW Bin Qasim Power Station (BQPS-III) Combined Cycle and Associated Projects. NESPAK, as part of a consortium, is providing consultancy for this Rs. 100 billion project awarded by the K-Electric (Pvt.) Limited. NESPAK scope of work comprises design review, construction supervision and defects liability period services. The project includes two single shaft combined cycle units each of about 450MW capacity and has interfaces with the KE's existing BQPS-I and BQPS-II power stations. The project also includes upgrading and rehabilitation of four associated grids.

Construction works are fast nearing completion for the 1263MW Re-Gasified Liquefied Natural Gas (RLNG)-based Combined Cycle Power Project near Trimmu Barrage at Haveli Bahadur Shah, District Jhang under NESPAK's supervision. NESPAK is also involved in the tender documentation, design review for this Rs. 95 billion venture. During the year, the hot commissioning of the combined cycle part (steam turbine, steam turbine generator, auxiliary systems, and related BOP systems) was completed. Performance test of the RLNG Complex has been performed under the supervision of NESPAK. Reliability Run Test and of the Complex and Initial Capacity Test have also been completed. Amendment No. 5 to the existing contract has been signed between the Client, Punjab Thermal Power (Pvt.) Ltd., and NESPAK for the additional consultancy services.

The construction of a 500kV Transmission Line from Suki Kinari to Sangal under the Interconnection Arrangement for Power Evacuation from Suki Kinari, Kohala and Mahl Hydropower Projects is in full swing under NESPAK supervision. Approval of design submittals, procurement of materials, construction of tower foundations and stringing activities are in progress. Under this Rs. 100 billion project, the Interconnection of the Karot Hydropower Project with the Neelum-Jhelum Transmission Line has been constructed under NESPAK supervision. The Karot Plant is the maiden hydropower plant connected with the Neelum-Jhelum Transmission Line under the China-Pakistan Economic Corridor.

Work continued for the 500 kV Double Circuit Quad Bundle Transmission Line from Nokhar Substation (Gujranwala) to Lahore North Substation to Lahore HVDC Converter Station project awarded by the NTDC. Construction of this Rs. 8 billion transmission line proceeded at a good pace under NESPAK supervision during the year.

Construction works on the 220kV Double Circuit Transmission Line on Rail Conductor from Dera Ismail Khan to Zhob, Balochistan has substantially been completed under the NESPAK supervision. Pre-commissioning tests for this 220 km long project have been carried out successfully. The joint inspection/patrolling by the representatives of the Client, Consultants, and Contractor remained in progress. The Rs. 7 billion job is being financed by the ADB.

Work started on the 500/132kV Grid Station Allama Iqbal Industrial City/M-3 in Faisalabad during the year. A NESPAK-Barqab Joint Venture is involved in tender documentation, design review and construction supervision for this Rs. 14 billion fast-track project awarded by the NTDC.

NESPAK as a lead partner in a joint venture with Barqab is supervising the construction of two new substations under the ADB-200 Tranche-II of 2nd Multi-Tranche Financing Facility (MFF-II) of the Power Transmission Enhancement Investment Program. The project includes, 220/132kV Mirpurkhas substation and 220/132kV Zhob substation and extension works of two existing substations (220/132kV Hala Road and 220/132kV Dera Ismail Khan. Satisfactory progress has been reported on this Rs. 4 billion project.

Among the projects wrapped up during the year, NESPAK completed construction supervision and allied activities including testing & commissioning of the 500kV D/C Quad Bundle Transmission Line from the SECL Power Plant in Thar Block-1 to DC Converter Station at Matiari in Sindh. This Rs. 20 billion transmission Line (221km) has achieved a significant milestone with its successful energisation.

NESPAK completed tender documentation, design review and construction supervision of 500kV Faisalabad West Grid Station and its associated 500/220kV Transmission Lines Project during the year. The substation was completely energised in 2023. The Rs. 8 billion venture was financed by the Japan International Cooperation Agency.



1. Mohmand Dam Hydropower Project site

2. Under-construction Bin Qasim Power Station Combined Cycle and Associated Projects

3. 500kV Transmission Line from Suki Kinari to Sangal under the Interconnection Arrangement for Power Evacuation from Suki Kinari, Kohala and Mahl Hydropower Projects

4. 500kV Double Circuit Quad Bundle Transmission Line from Nokhar Substation (Gujranwala) to Lahore North Substation to Lahore HVDC Converter Station

5. A view of 1263 RLNG Power Plant at Haveli Bahadur Shah, Jhang

6. Work continuing on two projects under ADB-funded Power Transmission Enhancement Investment Program

NESPAK came up with a brilliant performance in the Water and Agricultural Development Sector during the year. The Company attained 11 new projects worth Rs. 148 billion in the fields related to the irrigation, drainage, on-farm water management and agricultural development. NESPAK continued to render its remarkable services for 21 jobs worth Rs. 1,446 billion and completed four (4) projects worth Rs. 24 billion during the fiscal year.



Water & Agricultural Development Sector



Among the fresh projects during the year, NESPAK has been engaged for the Emergency Flood Assistance Project in Khyber Pakhtunkhwa (KPK) by the Provincial Irrigation Department. NESPAK scope of services includes detailed design, tender documents and construction supervision. The Asian Development Bank (ADB) will finance this Rs. 15 billion project likely to be completed in three years. The scope of work includes the strengthening, rehabilitation, and reconstruction of the irrigation and flood protection structures in Hazara, Swat, Dir, Chitral, Malakand, Charsadda, Nowshera, Peshawar, Bannu and Dera Ismail Khan Districts including the rehabilitation of two major irrigation systems i.e., Chashma Right Bank Canal and Lower Swat Canal, which were devastated by the 2022 Floods.

The Sindh Irrigation Department hired a NESPAK-led Joint Venture of A. A. Associates for Cement-Concrete Lining of the Nasrat Canal in Shaheed Benazirabad District. NESPAK services include detailed design, tender documents and construction supervision for this Rs. 4 billion project likely to be completed in two years.

NESPAK as a lead partner in a joint venture with A. A. Associates, Karachi signed a contract with the Sindh Irrigation Department for the Rehabilitation/Restoration of the Karo Gungro Outfall Drain System and its allied structures, including the construction of the Dewan Drain from the drainage Inlet of the Darya Khan Branch Drain to the Karo Gungro Drain in Tando Muhammad Khan Drainage. NESPAK services include review of feasibility study, detailed design and construction supervision for this Rs. 2 billion project

A NESPAK-led Joint Venture has been selected for Project Readiness Financing for the Khyber Pakhtunkhwa Water Resources Development Project – Detailed Engineering Design and Project Readiness Support. Funded by the ADB and the KPK Government, this Rs. 25 billion project will be executed by the KPK Irrigation and Agriculture Departments. The joint venture includes Turkish

Engineering Consulting & Contracting Co, Turkey and Creative Engineering Consultants in association with Water Sprint, Turpak International and Mirza Associates Engineering Services. NESPAK services include review of feasibility-level design, detailed design and tender documents.

The Pakistan Water and Power Development Authority (WAPDA) has entrusted a NESPAK-led firm with the Indus Basin Irrigation System – Automation of 7 Key Sites for Discharge Measurement. The scope of works includes design, bidding documents, design review, installation supervision and contract administration. The Indus Basin Irrigation System is the world's biggest contiguous irrigation system, with an irrigated area spanning four provinces in Pakistan. The challenges of maintaining such a vast river and canal system and dispersing flows equally among the four provinces' canal commands are significant. The project costing Rs. 2 billion is likely to be completed in two years.

Among the ongoing projects, the National Program for Improvement of Watercourses in Pakistan, Phase-II (NPIWC-II) demonstrated a superb performance under the supervision of NESPAK during the year. The NESPAK-led Joint Venture of Associated Consulting Engineers (Pvt.) Ltd. (ACE) and Rehman Habib Consultants (Pvt.) Ltd. (RHC) in association with Kasib Associates (Pvt.) Ltd. is involved in design review, implementation assistance, execution supervision and third-party validation for this Rs. 155 billion project. The quantitative objectives include mobilisation through capacity building of 62210 water user associations/farmer organisations, reconstruction/ renovation & remodelling of 47278 watercourses and provision of 11610 Laser land levellers. The project activities are progressing at a moderate pace in the Punjab, Khyber Pakhtunkhwa, Balochistan, Azad Jammu & Kashmir, Gilgit-Baltistan and Islamabad Capital Territory under the NPIWC-II. To date, 11561 watercourses have been lined whereas 4337 tanks have been constructed. As many as 6,043 Laser land levellers have also been delivered under this project of prime importance.



1. Karo Gungro main Outfall Drain, Sindh



2. Nasrat Canal X-Regulator, Shaheed Benazirabad, Sindh

Construction works for the Kachhi Canal Project have been substantially completed under the supervision of the NESPAK-led Joint Venture of Kachhi Canal Consultants (KCC). The Rs. 152 billion mega venture is currently undergoing the Defects Liability Period. The KCC comprises National Development Consultants (Pvt.) Ltd., Associated Consulting Engineers ACE (Pvt.) Ltd., and Barqaab (Pvt.) Ltd., in association with Engineering General Consultants (EGC) (Pvt.) Ltd. The KCC is rendering services under the Amendment No.14 to the original consultancy services agreement. NESPAK has also prepared detailed design and tender documents for this mega project being executed under WAPDA's Vision 2025 Program.

NESPAK has been providing design review, monitoring and construction supervision services for projects/programmes initiated by the Punjab Irrigation Department under the Annual Development Programme (ADP), Public Sector Development Programme (PSDP) and Deposit Development Works of various provincial departments since 2009. NESPAK services cover various important ADP/PSDP projects spread throughout the Punjab Province with a total outlay of Rs. 100 billion. Currently, NESPAK is handling more than 400 ongoing irrigation contracts/projects. Out of these, 50 jobs were completed under NESPAK supervision during the year.

Construction activities for the Balochistan Water Resources Development Sector Project stepped forward at a satisfactory pace under the supervision of a NESPAK-led Joint Venture. The joint venture comprises RHC (Pvt.) Ltd. and EGC (Pvt.) Ltd. with the Asian Advisory Services (Pvt.) Ltd. (AAS) as sub-consultant. The Rs. 48 billion project lies in the Zhob and Mula River Basins. During the year, work on Siri Toi Dam, Killi Sardar Akhtar, Karkh Kharzan & Hatachi and Quetta Water Resource Building subprojects made headway. The Ahmedzai subproject has seen the light of the day while pre-construction joint survey is in progress at two perennial irrigation subprojects in the Mula River area.

Rehabilitation and Upgradation of Balloki Barrage and Lower Bari Doab Project is undergoing the Defects Liability Period as construction works have been completed for the project. The NESPAK-led Joint Venture of the ACE (Pvt.) Ltd., Mott MacDonald Pakistan (Pvt.) Ltd, (MMP) and MM International Consultants (Pvt.) Ltd. has been involved in the design review, detailed design, tender documentation and construction supervision for this Rs. 30 billion venture.

Construction works for the Trimmu and Panjnad Barrages Improvement Project (TPBIP) is fast nearing completion under the supervision of the NESPAK-led Joint Venture of TPBIP Consultants. The TPBIP Consultants comprises SMEC International (Pvt.) Ltd. and EGC (Pvt.) Ltd. The cost of this ADB-funded project stands at Rs. 18 billion.

Considerable progress was achieved on works for the Remodelling of Warsak Canal System under the supervision of a NESPAK-led Joint Venture of Integrated Consulting Services (ICS) and Electra Consultants during

the year. NESPAK is also rendering detailed design and tender documentation services for this Rs. 17 billion project located at Peshawar and Nowshera Districts of the KPK Province.

Construction activities for Cement-Concrete Lining of Odero Lal Branch Canal progressed at a fast speed under the supervision of a NESPAK-led Joint Venture with A. A. Associates (Pvt.) Ltd. The Rs. 4 billion project has been awarded by the Sindh Irrigation Department.

The Promotion of High-Value Agriculture through Solarisation of Drip and Sprinkler Irrigation System has entered the final phase of completion under the supervision of a NESPAK-led Joint Venture. NESPAK has also reviewed the design of this Rs. 4 billion project awarded by the Punjab Agriculture Department.

During the year, the Punjab Irrigation Department revised the NESPAK-led Joint Venture scope of consultancy services for the project, Harnessing of Hill Torrents in Dera Ghazi Khan and Rajanpur Districts. The revised scope for this ADB-funded assignment includes feasibility studies for a total of 16 hill torrents (originally 13). The outcome of the assignment would be updated feasibility studies, detailed design, tender & construction drawings, cost estimates, social safeguard documents, PC-Is and tender documents. The new cost of the project implementation has been put at Rs. 425 billion.

Work on the Project Readiness Financing for Punjab Water Resources Management (PWRM)—Detailed Design for the Irrigation Canal and Link Canal Projects has speeded up. The project is jointly funded by the ADB and Punjab Irrigation Department. NESPAK services include review of feasibility studies, detailed design and procurement documents & PC-I for this project to be implemented at a cost of Rs. 255 billion.

NESPAK submitted Inception report, project planning report, PC-I, design report and bidding documents for six (6) contract packages for the Chashma Right Bank Canal (Lift-cum-Gravity) Project during the year. The Rs. 190 billion project is being executed by WAPDA.

In Nigeria, a NESPAK-led Joint Venture with a Nigerian firm is providing services during the Defects Liability Period for Kano River and Hadejia Valley Irrigation Schemes, Dams Safety & River Training In Hadejia Jama'are River Basins. Major construction works have been completed for this US\$ 132 million job funded by the World Bank.

Among the projects wrapped up during the year, a NESPAK-led Joint Venture completed feasibility study, detailed design, and tender documents for the Remodelling of Bambanwala-Ravi-Bedian-Depalpur (BRBD) Link Canal and Construction of New Syphon on River Ravi for the Punjab Irrigation Department. The joint venture comprised Barqaab (Pvt.) Ltd. and MMP (Pvt.) Ltd. for this 12 billion project.

NESPAK has completed feasibility study for a Comprehensive Flood Management Plan for the KPK. The project was awarded to NESPAK under the provincial ADP (2016-17). Major objectives of the project were to develop comprehensive flood management plan for 31 major rivers by introducing various structural and non-structural measures. The project will be implemented at a cost of Rs. 17 billion.

NESPAK acted as third-party consultants for the Disaster and Climate Resilience Improvement Project- (DCRIP) launched by the Punjab Irrigation Department in 2015 to restore flood protection infrastructures and strengthen government capacity to manage disaster and climate variability by the World Bank funding. Apart from infrastructures' reconstruction to resilient standards, the civil works have also been taken up in Dera Ghazi Khan, Sargodha, Bahawalpur, Multan and Faisalabad irrigation zones through this Rs. 7 billion project.



NESPAK handled the business in Dam Engineering Sector satisfactorily during the fiscal year. The Company continued its high-tech services for 10 ongoing ventures including the Diamer-Basha Dam and Mohmand Dam Hydropower Projects mentioned earlier in the Energy Sector.

Among the fresh projects during the year, the Water and Power Development Authority (WAPDA) tasked NESPAK Joint Venture of Neelum-Jhelum Consultants with providing services for the Tailrace Tunnel Restoration Works of Neelum-Jhelum Hydroelectric Project (NJHEP). The Tailrace Tunnel of the 960MW NJHEP was collapsed causing the power suspension. The NESPAK Joint Venture carried out design and construction supervision for this Rs. 5 billion project which was completed during the reporting period.



Dam Engineering Sector

A NESPAK Joint Venture has been engaged by the Pakhtunkhwa Energy Development Organisation (PEDO) to render services for the Construction of Mujahideen Hydropower Project at Barando River, District Torghar formerly known as Kala Dhaka in the Hazara Division. The NESPAK Joint Venture Includes Associated Consulting Engineers ((ACE)-and -BAK-AGES. The scope of services includes feasibility review report, basic design report, EPC bidding documents, evaluation & award of contract, contract management and assisting PEDO. The project aims to generate 7 megawatts of electricity with the objective of adding cheap and environment-friendly hydropower into the system.

Among the ongoing projects, NESPAK as a lead partner with the ACE has submitted mid-term report, feasibility study, project planning report, PC-I, environment report, draft detailed design report, pre-qualification documents (Package-I) for the Murunj Dam to WAPDA. Currently, the NESPAK Joint Venture is in the process of preparing tender documents (Package-I). The Murunj Dam Project is planned to store flows of Kaha Nullah by the construction of a dam. It will be a zoned earth-filled dam with 310 ft height. Two D-shape diversion tunnels having design discharge of

116,000 cusecs will be developed. The Kaha Hill Torrent is one of the major hill torrents of Dera Ghazi Khan Division. The construction of this Rs. 172 billion dam will improve flood control while the stored water will be released to meet the irrigation water requirements of the downstream cultivable area. The project will irrigate an area of about 35960 hectares of land and generate power of 6 megawatts.

Smooth progress was registered on the feasibility study and proposing solutions for Problematic Small Dams under the supervision of a NESPAK-led joint Venture with the ACE (Pvt.) Ltd. during the year. NESPAK team ascertained potential causes of seepages in the Lehri Dam and conducted an underwater examination of Lehri reservoir and conduit pipe. This pioneering underwater inspection activity marked the inaugural occasion of its own kind in the history of the Potohar Zone. The Consultants are presently endeavouring to identify viable remedial measures for the issues facing the above-mentioned dam

reservoir. The scope of the project includes identification of problematic areas of dams, review of design and drawings, finalisation of the solutions of all problematic dams, feasibility reports, engineering design, command area assessments, impact assessment reports, resettlement action plans and cost estimates for this project awarded by the Punjab Irrigation Department.

In the Sultanate of Oman, construction of lateral dam for the Flood Protection Dam in Al-Jufainah at Amerat has been substantially completed under the supervision of NESPAK.

Minor works relating to dam crest, downstream draining and instrumentation are going well. Work on the main dam embankment and core wall is continuing at full speed. The saddle dams 2 & 3 have been completed and saddle dam 1 and 5 are nearing completion. The intake tower structure at main dam has been completed except installation hydro-mechanical equipment (penstock gates, trash screens). The excavation work for tailrace channel is moving at a fast pace. NESPAK has also reviewed the design of this dam project which will now be completed at a revised schedule. The \$ 130 million project was awarded by Oman's Ministry of Agriculture and Fisheries.

Among the projects wrapped up during the year, NESPAK completed construction supervision of Dam Projects in the Southern Region in the Kingdom of Saudi Arabia. The scope of work also included the construction of gabion structures on upstream of already built dams to restrict sedimentation, installation of flood warning system downstream of large dam projects and installation of additional instrumentation and security/vigilance cameras at selected dam sites. The US\$ 45 million contract was awarded to NESPAK by the Saudi Arabian Ministry of Environment, Water and Agriculture.

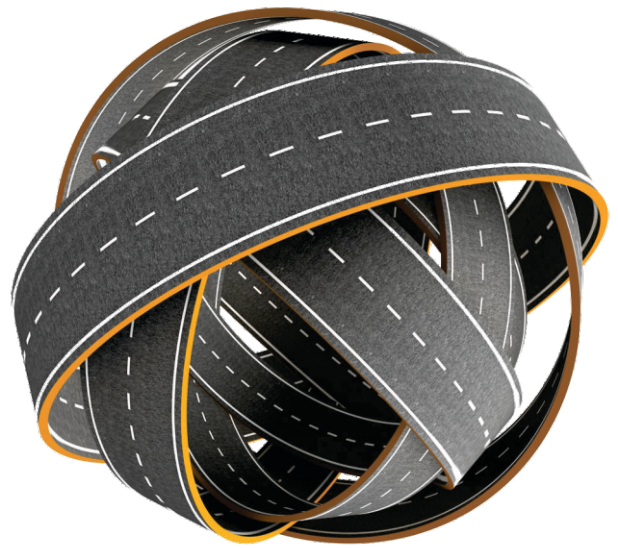


1. Murunj Dam site view

2 & 3.
Site views of Flood Protection
Dam in Al-Jufainah at
Amerat, Sultanate of Oman



NEPAK emerged as a superb performer in the Communication Sector as it secured 58 new projects worth Rs. 528 billion during the year. The Company continued to render its wide-ranging services for 83 projects worth Rs. 2,443 billion and completed 11 ventures worth Rs. 250 billion during the fiscal year.



Communication Sector

Roadways

Among the fresh projects during the year, the National Highway Authority (NHA) hired NESPAK services for the Dualisation/Improvement of Dera Ismail Khan-Zhob Project under the China Pakistan Economic Corridor (CPEC). The project comprises the construction of a 4-Lane highway starting from Yarik to Zhob via Sagu including Zhob Bypass. NESPAK services include design review and construction supervision for this 210 km long project. This project is being funded by the Public Sector Development Programme (PSDP) with an initial construction cost of Rs. 80 billion.

NESPAK secured various road projects under the Annual Development Programme (ADP) Schemes for the Year 2022-23 within Rawalpindi Highway Circle-1 (District Rawalpindi, Attock & Murree) and Highway Circle-2 pertaining to the Rawalpindi Highway Division-Chakwal and Talagang. Awarded by the Punjab Works and Communication Department, NESPAK will supervise the construction of these projects at the cumulative cost of Rs. 43 billion.



1. A road project in Rawalpindi under the Annual Development Programme (ADP)
2. Road Rehabilitation Programme for Highway Circle Sahiwal
3. Pile Load Test In progress for Yarik-Sagu-Zhob Road Project, Balochistan



1. Akbar Chowk Flyover, Lahore
2. Location Plan of 2-Lane Flyover at Rawat T-Chowk from Gujjar Khan side to Islamabad Highway
3. Compaction of earthwork at the Dera Ismail Khan Road in progress

NESPAK has been appointed Consultants by the Punjab Communication and Works Department for the construction supervision for Rehabilitation Programme of ADP (2022-23) in Highway Circle Sahiwal. NESPAK services include design and construction supervision of Royal Hotel Flyover, Dualisation of G.T. Road Tehsil Chichawatni, District Sahiwal and Repair/Rehabilitation/Construction of road from the Main Kasur-Hujra Road to Main Mandi Basirpur in Okara District.

The Capital Development Authority (CDA) has engaged NESPAK to provide services for detailed design and construction supervision of a 2-Lane Flyover at Rawat T-Chowk from Gujjar Khan side to Islamabad Highway. The project will be constructed at a cost of Rs. 2 billion.

NESPAK will review the design and supervise construction of New Hub River Bridge. Under this Rs.1 billion project awarded by NHA, roads falling in the West-Zone of Balochistan will also be constructed. The project has been necessitated by the massive damage caused by the 2022 floods in Balochistan and Sindh Provinces.

The NHA has tasked NESPAK with feasibility study and detailed design for the Dera Ismail Khan Road Development Packages. The packages include 15 roads with two roads in District Lakki Marwat and Bannu, two roads in District Bhakkar and remaining in Dera Ismail Khan. The road project will be constructed with an estimated cost of Rs.100 billion.

The Lahore Development Authority (LDA) has awarded five (5) new projects to NESPAK during the Year 2022-23. The LDA projects include 7km Access Controlled Corridor Facility from Niazi Interchange to Babu-Sabu Interchange,

Akbar Chowk Flyover, Signal-free Corridor from Gulberg Centerpoint to Defence Morr, Bedian Road Underpass at Roundabout near Lahore Ring Road and Saggian Bypass-Begum Kot Road. NESPAK will prepare feasibility study and detailed design for these projects which will be constructed at a cumulative cost of Rs. 22 billion.

NESAK signed an agreement with the Sindh Local Government Department to prepare design, tender documentation and construction supervision of a bridge at Korangi Causeway in Karachi. The bridge will be constructed at an estimated cost of Rs. 7 billion.

Among the ongoing projects, work started with good progress on the road development projects in the North and South Punjab under the PSDP. NESPAK is involved in design and construction supervision of 13 fast-track projects worth Rs. 81 billion awarded by the Punjab Communication and Works Department under two separate contracts. The seven (7) project roads in North Punjab include Salam-Sargodha Dual Carriageway, Lower Topa-Chowk Pindori Tourism Highway, Dualisation of Lilla Interchange (M 2), Dualisation of Mandi Bahaiddin-Sarai Alamgir Road, Dualisation of Sargodha-Khushab-Mianwali Road, Dualisation of Gujranwala Road to M-2 Interchange at Kot Sarwar and Upgradation of Kalabagh-Shakardara Road. The six (6) project roads in South Punjab include approaches on the Sheikh Khalifa Bridge over River Indus, Bahawalpur-Jhangra Sharqi Interchange, Dualisation of Mian Channu-Abdul Hakeem Interchange (M-4), Dualisation of Karam Dad Qureshi-Qasba Gujrat Road, District Muzaffargarh, Widening/Improvement/Rehabilitation of Chowkiwala Road in Tehsil Taunsa to Chappar in Balochistan and Widening/Improvement of Haroonabad-Fort Abbas Road.

NESPAK successfully carried out the design phase for the BRT Yellow Corridor under the Karachi Mobility Project in association with Dar Al-Handasah and the work has been awarded to the contractor. NESPAK has been also providing construction supervision services for Sindh this marquee project worth Rs. 70 billion.

Work gathered pace for the Rehabilitation and Upgradation of 135 km Awaran-Jhaljao-Bela Road in Balochistan under NESPAK supervision during the year. The project has been awarded by the NHA under two separate contracts. The road starts from Awaran and terminates at Bela, passing near the famous Shirin-Farhad Shrine. NESPAK scope of work also comprises engineering design and design review for the two road sections being

constructed at a cumulative cost of Rs. 24 billion.

Construction activities were initiated with a good start on the Dualisation of Rawalpindi-Kahuta Road Including 4-Lane Bridge Over Sihala Railway Pass, Sihala Bypass and Kahuta Bypass. NESPAK is involved in the design review and construction supervision of this Rs. 23 billion project. The Dualisation/Improvement of the Pindigheb-Jand-Kohat Road is fast nearing completion under the supervision of NESPAK. NESPAK has also reviewed the design of this Rs. 20 billion 4-lane road facility assigned by the NHA.

Excellent performance has been recorded on the Old Bannu Road Project under the supervision of NESPAK. NESPAK is also providing design review services for this



project awarded by the NHA. Under this Rs. 18 billion project, the Gandhi Chowk-Sarai Naurang Section has been constructed while the remaining two sections from Domail to Krapa to Khurram are under construction.

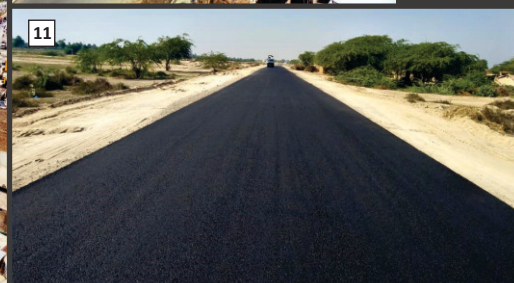
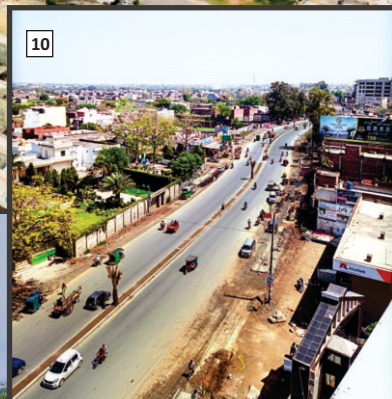
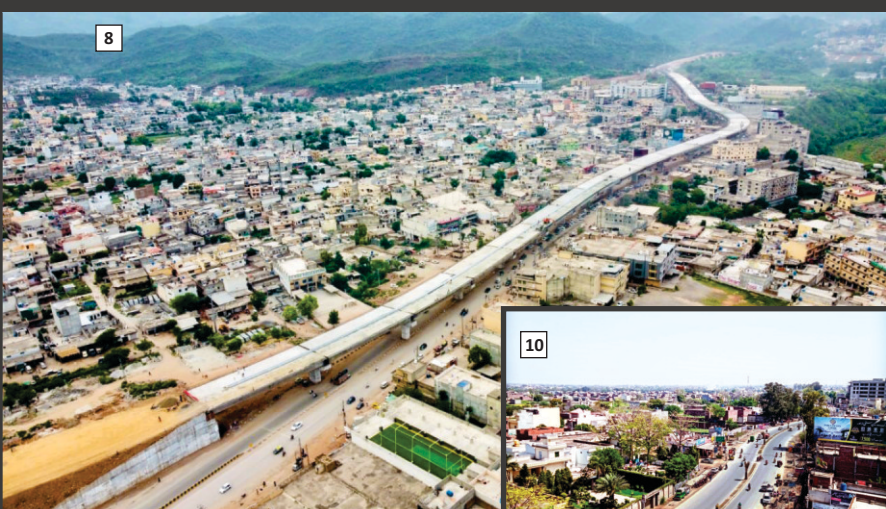
Construction work got under way on the Chitral-Booni-Mastuj-Shandoor Road at a satisfactory pace during the year. NESPAK has been tasked with rendering design review and construction supervision services for this project. The Rs. 11 billion project has been awarded by the NHA.

Moderate progress was achieved on the Circular Bypass Road in Bannu, within the Dera Ismail Khan District during the year. NESPAK was engaged by the Pakhtunkhwa

Highways Authority to review the design and oversee the construction of this 70 km project. The project is estimated to be completed at the total cost of Rs. 8 billion.

Work continued at a good speed on various roads in Faisalabad Division under the supervision of NESPAK. Funded by the three-year ADP, a total of 17 roads and a flyover are being constructed in Faisalabad, Toba Tek Singh and Jhang Districts under the control of Provincial Highway Circle 1 and 2 at a cumulative cost of Rs. 225 billion.

NESPAK is also supervising construction of rehabilitation works of 19 roads in Lahore under the ADP 2022-24 with a total cost of Rs. 37 billion. The rehabilitation projects are located in District Lahore, Sheikhupura, Nankana Sahib and Kasur.



1. Work under way on fast-track road projects in South Punjab under Public Sector Development Programme
2. Circular Bypass Road Project, Bannu
3. Dualisation of Rawalpindi-Kahuta Road under way
4. Sub-grade preparation work in progress at Jhaljao-Bela Road site
5. Dualisation of Sultan Said bin Taimur Road in Duqm, Sultanate of Oman
6. Pindigheb-Jand-Kohat Road site
7. View of a road under the Lahore Development Authority's (LDA's) Road Projects
8. Bharakahu Bypass Project, Islamabad
9. Rehabilitation/Widening of I.J.P. Road Faizabad to N-5 Islamabad
10. Saggian Bypass-Begum Kot Road under LDA Projects
11. View of a road under ADP-funded project in Faisalabad
12. Roads and Intersections in Freetown, Sierra Leone Project
13. 3D view of BRT Yellow Corridor and Station

Among the projects wrapped up during the year, NESPAK successfully completed the construction supervision of the Bhara Kahu Bypass, Islamabad. The project costing Rs. 6 billion was awarded by the CDA and financed by the Punjab Government.

NESPAK successfully completed construction supervision for the Rehabilitation/Widening of I.J.P. Road Faizabad to N-5 Islamabad. The project costing Rs. 5 billion has been funded by the CDA.

NESPAK carried out design and construction supervision of the Rehabilitation & Improvement of Saggian Road Project and Gulab Devi Hospital Underpass, Lahore. The projects were completed at cumulative cost of Rs. 9 billion for the LDA.

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

Overseas, NESPAK carried out construction supervision for Dualisation of Sultan Said bin Taimur Road in Duqm, Sultanate of Oman. NESPAK also prepared design of this US\$ 63 million project awarded by Oman's Ministry of Transport, Communications and Information Technology. The project has been funded by the Kingdom of Saudi Arabia and various delegations visited many times and appreciated the quality of work.

Airports

Among the fresh projects during the year, NESPAK won Upgradation and Expansion of Begum Nusrat Bhutto Sukkur Airport Project through a competitive bidding. NESPAK is involved in detailed surveys, detailed engineering design and construction supervision for this project awarded by the Pakistan Civil Aviation Authority (PCAA).

The scope of works includes a new passenger terminal building, air traffic control tower, fire crash & rescue building, apron for wide body aircraft (Code E), car parking & allied infrastructure facilities, runway expansion and upgradation along with new airfield lighting system. NESPAK has prepared conceptual plans of passenger terminal building, preliminary master plan and PC-I for this Rs. 40 billion Project which is scheduled for completion in three years.

Among the ongoing projects, NESPAK provided design and bid documents preparation services for the Expansion of Passenger Terminal Building and Allied Facilities at the Allama Iqbal International Airport (AllAP), Lahore. The Terminal Building will be extended to the southern side by constructing a new domestic terminal facility equipped with 03 dedicated passenger boarding bridges. The present Terminal Building will be converted into an International terminal with requisite changes in the existing layout

providing 7 passenger boarding bridges, increased number of check-in counters, larger immigration areas and expanded baggage claim facilities. Expansion of the apron will be provided for increased gates and remote parking bays for Code E planes. The project will enhance traffic handling capacity of the airport and vastly improve the level of service to its users. Final design, draft bidding document and bid evaluation processes have been completed and award of works is in progress by the PCAA.

During the year, NESPAK also provided consultancy services for design and field design support services of various components of the New Gwadar International Airport (NGIA) Project. The PC-I document, final design and bidding documents for several components of the NGIA such as CAA Residential Complex, Airport Security Force Camp, external utilities and infrastructure works, external telecommunication works and site security & perimeter intrusion detection system were finalised by NESPAK and submitted to the facilities are estimated to cost Rs. 10 billion.

NESPAK is also providing project management consultancy services for the New Gwadar International Airport project, which is being constructed jointly by the Chinese and Pakistani Governments and is an important component of the China-Pakistan Economic Corridor (CPEC) program.

Ports & Harbours

Among the ongoing projects, NESPAK has been supervising the construction of the New Container Terminal Project at South Wharf, Karachi Port awarded by the Korangi Fisheries Harbour Authority (KoFHA). The terminal comprises 10 berths at 18m dredged depth, with 5 km of quay wall and railway yard making it Pakistan's largest container terminal. The development of container terminal is to be implemented in phases. Out of four phases, two phases have been put into active commercial operations since Dec 2016. The other two phases are in progress for which NESPAK along with its sub-consultant Lex Firma (Legal associate) was awarded the work by Karachi Port Trust (KPT) in June 2020 for managing and administering the Concession Agreements, with technical and legal perspectives for its successful implementation in accordance with the terms of agreement. NESPAK has also been involved in the topographic survey, geotechnical investigations, updated feasibility study reports and firm-up cost estimates detailed design and tender documentation of this Rs. 12 billion project.

Another amendment to the extension to the contract for refurbishment of Dry Docks at Karachi Shipyard was introduced during the year. NESPAK has been providing construction supervision for refurbishment of these dry docks. The refurbishment work mainly comprises two areas i.e., concrete rehabilitation of the dry docks and installation of additional ground anchors under this Rs. 4 billion project. Karachi Shipyard is the only shipyard in Pakistan having two dry docks for repair of ships and



1. A conceptual view of Begum Nusrat Bhutto International Airport, Sukkur
2. Another view of Begum Nusrat Bhutto International Airport, Sukkur
3. New Container Terminal Project at South Wharf, Karachi Port
4. Connectivity Bridge between East and West Wharf, Karachi Port
5. East Bay Expressway Project– the subproject of the Port Connectivity Project, Karachi
6. Work under way for refurbishment of Dry Docks at Karachi Shipyard

submarines up to 26000 Dead Weight Tonnes (DWT). These dry docks are over 60 years old and now required a major rehabilitation and upgrade.

NESPAK has been rendering consultancy services for the East Bay Expressway Project as the subproject of the Port Connectivity Project at the Karachi Port. The East Bay Expressway Project consists of 9 kilometres of coastal road including bridges at seven locations. The coastal road is protected on sea side with shore protection works. The two-segment project also includes street lightings, safety appurtenances, truck parking and traffic signage. A

boundary wall along truck parking is also part of the project. The project is planned to be constructed along Chinna Creek at the Eastern backwaters. NESPAK scope of work is to prepare the conceptual design of the project, work out the quantities and prepare the budgetary cost estimate for the preparation of the PC-I document. The Port Connectivity Project has been executed under the Public-Private Partnership (PPP) arrangement by the KPT. Earlier, NESPAK carried out final design and tendering for the Connectivity Bridge between East & West Wharf at the KPT during the year 2021-22.

NESPAK took the lead in Architecture and Planning Sector by securing maximum number of projects during the fiscal year. The Company obtained 69 new jobs worth Rs. 120 billion in the domains of housing, health, education, and institutional buildings. The Company continued to provide its up-to-the-minute services for 128 projects worth Rs. 763 billion. NESPAK wrapped up services for 24 projects worth Rs. 30 billion during the reporting period.

Among the fresh projects during the year, NESPAK and Pakistan Civil Aviation Authority (PCAA) signed a contract for feasibility study, design and construction supervision of a Multi-Storey (40-storey) Office Building at Commercial Plot in Blue Area, Islamabad. The Rs. 14 billion project is the highest tower building in Islamabad. The tower will house various directorates and branches of PCAA as well as airline corporate offices, booking centre, business centre, seminar conference halls, media centres, financial institutes banks, recreational facilities including aviation science museum, art gallery, health centre, indoor sports facilities, baby daycare centres and food courts. The goal is to produce a green building that is sustainable, water-and-energy-efficient with an environment-friendly design.



Architecture & Planning Sector

The Khyber Pakhtunkhwa (KPK) information Technology Board hired NESPAK for providing consultancy services for the 20-storey Gandhara Digital City, Peshawar and 15-storey Gandhara Digital City in Swat and Infrastructure Development of Special Technology Zone, Mardan. NESPAK scope of work includes topographic survey, soil investigation, master planning, detailed architectural & engineering design and tender documentation for these projects. The Gandhara Digital City buildings in Peshawar and Swat will be constructed at a cumulative cost of Rs. 15 billion.

The Sindh Counter-Terrorism Department (CTD) awarded NESPAK master planning, detailed design of CTD Complexes/ Headquarters in Hyderabad, Mirpurkhas,

Sukkur, Larkana and Shaheed Benazirabad Divisions. The project shall be constructed at an overall cost of Rs. 3 billion.

The Pakistan Defence Officers Housing Authority, Karachi has hired NESPAK for detailed design of Infrastructure of 1,000-acre (Shuhda Land) at the DHA City Karachi. The estimated cost of the project is Rs. 2 billion.

Pakistan Navy and NESPAK signed an agreement to provide services for the Pakistan Navy Farms Scheme, Sector D, Main Simli Dam Road, Bharakahu, Islamabad. NESPAK scope of works includes design/review and construction supervision for this Rs. 775 million project to be spread over 1000 kanals.



1. A conceptual view of Accident and Emergency Center at Pakistan Institute of Medical Sciences, Islamabad
2. An artistic view of 40-storey PCAA office tower—the highest building in Islamabad
3. Design of Nawabshah Counter-Terrorism Department Complex/Headquarters in Shaheed Benazirabad Division, Sindh
4. A conceptual view of Bilquis Edhi Hospital, Karachi
5. Proposed Medical Tower at the Jinnah Post-graduate Medical Centre, Karachi

NESPAK has been engaged by the World Food Programme (WFP) for Renovation/Revamping of WFP Country Office in Diplomatic Enclave, Islamabad. NESPAK services include design, tender documentation and construction supervision for this Rs. 500 million project.

The Edhi Welfare Trust awarded NESPAK a contract for planning, designing and construction supervision of the Bilquis Edhi Hospital at North Karachi. The project will be completed at an estimated cost of Rs. 10 billion.

The Patients' Aid Foundation engaged NESPAK for design and tender documentation for Grey Structure of Medical Tower at the Jinnah Post-graduate Medical Centre (JPMC), Karachi. The project shall be constructed at an estimated cost of Rs. 5 billion.

NESPAK entered into a contract with the Infrastructure Development Authority of Punjab for the Establishment of a 200-Bed Accident and Emergency Center at the Pakistan Institute of Medical Sciences, Islamabad. NESPAK will supervise the construction for this unique health project costing Rs. 2 billion.

NESPAK has been appointed Consultants by the Punjab Government for the Khan Bahadur Chaudhry Mushtaq Ahmed College of Veterinary and Animal Sciences, Narowal. NESPAK services include master planning, design,

tender documentation and construction supervision for this Rs. 3 billion project.

NESPAK has been awarded detailed design and construction supervision of Academic Block-V at the campus of COMSATS University, Park Road, TarlaiKalan, Islamabad. The proposed building shall have three departments i.e., Architecture, Ceramics & Sculpting and Information Technology. It would feature all facilities required for a contemporary modern teaching unit. The project is planned to be constructed at an estimated cost of Rs. 700 million. NESPAK and COMSATS University Islamabad have signed another contract for the construction of a girls' hostel at its Sahiwal Campus.

NESPAK has been engaged for the Establishment of University of Gwadar (Phase-I) worth Rs. 2 billion. NESPAK services include master planning and detailed design of this project.

NESPAK has been hired by the Punjab Auqaf and Religious Affairs Department for design, tender documentation and construction supervision for the Extension of Ghulam Gardish at the Shrine of Syed Ali Hajveri (Data Ganj Bakhsh), Lahore. NESPAK has also been selected for carrying out feasibility Study and design for integrated development, planning & revamping of Data Darbar Complex through a separate contract.

NESPAK signed an agreement with the KPK Directorate General Sports for the feasibility study, master planning, detailed design and construction supervision of the Sports Complex in Swat. The Rs. 1 billion project comprises the sports facilities like cricket, football & hockey stadiums, gymnasium & indoor games, swimming pool etc.

The KPK Planning and Development Department hired NESPAK for the preparation of Western Greater Peshawar Spatial Master Plan. The Rs. 15 billion project is planned to be funded by the World Bank.

Among the ongoing projects, final touches are being given to the mega venture, Reconstruction and Rehabilitation of Earthquake Affected Areas as the project is fast nearing completion under NESPAK supervision. NESPAK is also involved in project planning, designing and tender documentation for various reconstruction projects launched in the wake of the October 2005 earthquake which devastated large parts of Pakistan. The projects were initiated in the earthquake-hit areas of Azad Jammu and Kashmir (AJK) and KPK. The Rs. 200 billion project was awarded by the Earthquake Reconstruction and Rehabilitation Authority (ERRA) in the fields of health, education, governance and roads. Kuwait-Funded Colleges in the Earthquake-affected Areas of the KPK and AJK is another big subproject under the ERRA Project.

Construction activities moved forward at a fast pace on the nine-storey Nilore Heights Project (Phase-1) at Alipur Farash Town, Islamabad. The project entails the development of 4276 low-cost apartments on 84 acres of land. NESPAK services include design review and construction supervision for this two-phase project. The project will be completed at a cumulative cost of Rs. 32 billion.

Construction work for the first phase of development of the Supreme Court Employees Cooperative Housing Society, Islamabad took a good start under the supervision of NESPAK. The Rs. 7 billion project is scheduled for completion in three years.

Good performance was demonstrated on the Infrastructure Development of Gwadar Cantt., Balochistan during the year. NESPAK is rendering design review and construction supervision services for this Rs. 5 billion project. Located in Gwadar City, the project site is accessible through the Makran Coastal Highway.

Excellent progress was registered on the National Aerospace Science and Technology Park (NASTP) at Kamra. NESPAK is involved in feasibility study, planning, designing and construction supervision for the Rs. 7 billion NASTP which is being developed as Pakistan's first Aerospace Cluster and Smart City around PAC Kamra and PAF Base Minhas. NESPAK is providing services to the Aviation City Pakistan (Pvt.) Limited for the establishment of NASTP Building No. 1 having a covered area of around 4 50000 sq. ft.

Work is progressing fast for the Construction of Parking

Plaza at Walton Central Business District, Lahore (Package-2). NESPAK is involved in the design and construction supervision of this Rs. 3 billion project.

Construction works for the Establishment of Sindh Forensic Science Laboratory, Karachi are continuing at a moderate pace under the supervision of NESPAK. Work on this project is regularly monitored by the Monitoring Judge of the Supreme Court of Pakistan and the Sindh Government. NESPAK is also involved in the feasibility study, planning, design and tender documentation for this Rs. 5 billion project.

Construction for the Balochistan High Court Complex at Turbat is in progress under NESPAK supervision. The 4-acre High Court Complex has been designed by NESPAK ensuring the optimum economical use of the space. The revised PC-I of the complex was approved at the construction cost of Rs. 400 million.

Construction activities at two Residential Buildings of State Bank of Pakistan at Lalazar, Karachi are in progress under NESPAK supervision. The buildings are scheduled to be completed at an estimated cost of Rs. 600 million.

Design work and PC-I have been completed for the Tribal Areas Electric Supply Company Headoffice Building at Hayatabad, Peshawar by NESPAK. The Rs. 500 million project will be constructed under the supervision of NESPAK.

Construction activities for the Agriculture University, Swat continued with full gear under NESPAK supervision during the year. Brilliant progress has been achieved in Phase-I which is expected to be completed in a year and tendering is in process for the Phase-II of this Rs. 8 billion academic facility. NESPAK has also prepared design of this project awarded by the KPK Communication and Works Department.

Construction works for the Reconstruction/Rehabilitation of Fully Damaged School in Bara, District Khyber are going well under the supervision of NESPAK. The Rs. 3 billion project was awarded by the KPK Communication and Works Department. The reconstruction project is being executed under the Chinese assistance.

During the year, NESPAK completed design phase for the Standardisation of 200 Higher Secondary Schools in the KPK. The project has entered the construction stage under the supervision of NESPAK. The Rs. 2 billion education project has been awarded by the KPK Elementary and Secondary Education Department on a single-source basis.

Work was inaugurated for the Upgradation of Bannu University of Science and Technology Lakki Marwat Campus. NESPAK services include planning, detailed design, tender documentation and construction supervision for this Rs. 1 billion project.

Construction started at a moderate pace for the Fatima Jinnah Institute of Dental Sciences at Jubilee Town, Lahore

under the supervision of NESPAK during the year. The Punjab Health Department has been executing this Rs. 600 million project.

In the continuation of its earlier agreement, NESPAK has signed another three-year consultancy contract with the Pakistan Cricket Control (PCB) through a competitive bidding. NESPAK services include feasibility study, master planning, design, third-party validation, marketing and construction supervision of seven upcoming engineering projects and stadiums, hotel, shops e.t.c., along with related structures and allied infrastructure. NESPAK completed services for Rehabilitation/Renovation of Players' Dressing Lounges at Gaddafi Stadium, Lahore for this Rs. 2.6 umbrella project.

Among the projects wrapped up during the year, NESPAK successfully completed construction supervision for the Rs. 700 million Department of Psychiatry and Behavioural Sciences at the JPMC, Karachi.

NESPAK carried out master planning of Qurban Police Lines located between the Jail Road and Mall Road. The master plan envisaged the construction of multi-story residential buildings for the officers and staff of the Punjab Police, allied commercial and community facilities.

NESPAK completed design and construction supervision services for the Establishment of Mega NADRA Registration Center, Lahore. NESPAK was well appreciated by the Client for meeting work standards.



1. Tribal Areas Electric Supply Company Headoffice Building at Hayatabad, Peshawar
2. Construction work for Turbat High Court in progress
- 3 & 4. University of Gwadar master plan
5. A school building under the Standardisation of 200 Higher Secondary Schools Project, Khyber Pakhtunkhwa
6. Proposed apartments' building at Alipur Farash Town, Islamabad
7. Upgradation of Bannu University of Science and Technology, Lakki Marwat Campus
8. Gwadar Cantt. master plan
9. View of completed Mega NADRA Registration Center, Lahore
10. Parking Plaza at Walton Central Business District, Lahore

NESPAK performed moderately well in the Environmental and Public Health Engineering Sector with the acquisition of 15 new projects worth Rs. 44 billion during the year. The Company continued to render its cutting edge services for 29 projects worth Rs. 400 billion and completed four (4) projects worth Rs. 9 billion during the fiscal year.



Environmental & Public Health Engineering Sector

Among the fresh projects during the year, the Punjab Rural Municipal Services Company (PRMSC) engaged NESPAK for two projects in the villages of Central and South Punjab. NESPAK scope of services includes detailed design and construction supervision for these projects of prime importance with regard to the rural health engineering. Under the Punjab Rural Sustainable Water Supply and Sanitation Project (PRSWSSP), Pilot Phase, Cluster South-III, water supply and sanitation works in 40 villages of Dera Ghazi Khan, Rahim Yar Khan and Rajanpur shall be undertaken at the cost of Rs. 10.5 billion. Water supply and sanitation works in 32 villages of Bhakkar, Chiniot and Jhang shall be carried out at the cost of Rs. 5 billion for the Pilot Phase, Cluster Central-I under the PRSWSSP.

NESPAK and the Water and Power Development Authority signed the project for the implementation of Local Area Development Program (LADP) Public Health, Livelihood Development and Downstream Fisheries Plans. NESPAK shall provide detailed design and construction supervision services for this Rs. 12 billion project.

Among the ongoing projects, construction activities for the Punjab Intermediate Cities Improvement Investment Program (PICIIP), Package-2 (Sahiwal and Sialkot) went ahead at a moderate pace under NESPAK supervision during the year. Work on the sewerage contacts in Sahiwal

and Sialkot is moving forward .at a fast speed. Work on the Punjab Local Government Academy building in Lahore is also moving ahead with good progress. NESPAK has been also involved in the master planning and detailed design of this Rs. 28 billion project funded by the Asian development Bank. The PICIIP was assigned to NESPAK by the Punjab Local Government and Community Development Department.

NESPAK is carrying out construction supervision for the Stormwater Drainage Projects at Gujjar Nullah and Orangi Nullah in Karachi. Construction works have been substantially completed at the sites of the Gujjar and Orangi Nullahs. Project works include cross structures, trunk sewer, sub-sewer network, RCC bed & walls e.t.c. The two projects costing Rs. 26 billion were awarded by the National Disaster Management Authority.

NESPAK is rendering consultancy services on Subprojects SOP-I under the Karachi Water and Sewerage Services Improvement Project (KWSSIP) for the Karachi Water and Sewerage Board (KWSB). Construction work on emergency water/sewerage schemes in different districts of Karachi and protection works for major water trunk lines crossing the Malir River are in progress under the supervision of NESPAK. The assignments under the KWSSIP Subprojects SOP-I are scheduled to be completed with an overall cost of Rs. 18 billion. The project is co-financed by the World



1. Work under way for Karachi Water and Sewerage Services Improvement Project-SOP-I
2. Laying of 1200mm dia force main in progress at Chungi No. 9, Multan
3. Laying of a sewerage pipe at Madhali Road, Sahiwal under the Punjab Intermediate Cities Improvement Investment Program, Package-2

Bank, Asian Infrastructure Investment Bank and Sindh Government. Additional services including Bulk Customer Metering, Malir Flood Protection Works, Repair/replacement of Damaged Water Supply Lines and Dhabeji Rising Main have been entrusted to NESPAK through an amendment to the original KWSB agreement for this project.

During the year, NESPAK submitted feasibility study report and preliminary design report to the Special Technology Zones Authority for the Islamabad Technopolis Project. The overall objective of development of Islamabad Technopolis in Islamabad is to act as a catalyst for enhancing Pakistan's IT exports. NESPAK is involved in the master planning, detailed designing, environmental impact assessment and construction supervision of this Rs. 11 billion project.

NESPAK has submitted preliminary design reports for three cities i.e., Hafizabad, Kamonke and Muridke under the Infrastructure Subprojects, Sectoral Planning and Resident Supervision in 16 Cities of Punjab (Package-2). The scope of work includes sectoral planning, detailed design and construction supervision of water supply system, sewerage system, roads and park in Hafizabad, Kamonke and Muridke. NESPAK as a lead firm in a joint venture with Mott McDonald Pakistan (Pvt.) Limited and Associated Consulting Engineers(Pvt.) Limited is providing services for this Rs. 8 billion project awarded by the Punjab Municipal Development Fund Company.

NESPAK has submitted detailed design and bidding documents to the Port Qasim Authority for the Combined Effluent Treatment Plant in the North-West Industrial



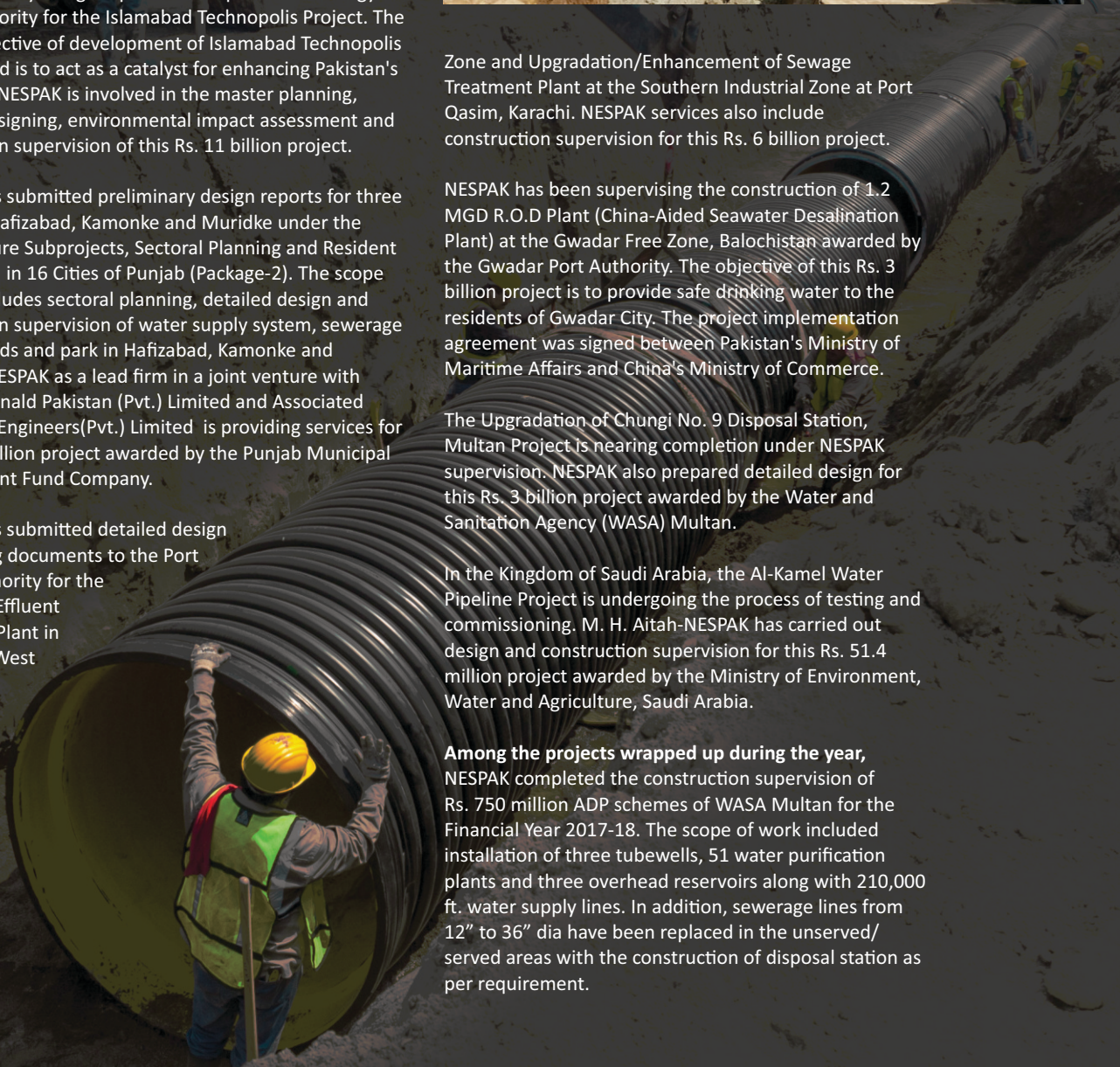
Zone and Upgradation/Enhancement of Sewage Treatment Plant at the Southern Industrial Zone at Port Qasim, Karachi. NESPAK services also include construction supervision for this Rs. 6 billion project.

NESPAK has been supervising the construction of 1.2 MGD R.O.D Plant (China-Aided Seawater Desalination Plant) at the Gwadar Free Zone, Balochistan awarded by the Gwadar Port Authority. The objective of this Rs. 3 billion project is to provide safe drinking water to the residents of Gwadar City. The project implementation agreement was signed between Pakistan's Ministry of Maritime Affairs and China's Ministry of Commerce.

The Upgradation of Chungi No. 9 Disposal Station, Multan Project is nearing completion under NESPAK supervision. NESPAK also prepared detailed design for this Rs. 3 billion project awarded by the Water and Sanitation Agency (WASA) Multan.

In the Kingdom of Saudi Arabia, the Al-Kamel Water Pipeline Project is undergoing the process of testing and commissioning. M. H. Aitah-NESPAK has carried out design and construction supervision for this Rs. 51.4 million project awarded by the Ministry of Environment, Water and Agriculture, Saudi Arabia.

Among the projects wrapped up during the year, NESPAK completed the construction supervision of Rs. 750 million ADP schemes of WASA Multan for the Financial Year 2017-18. The scope of work included installation of three tubewells, 51 water purification plants and three overhead reservoirs along with 210,000 ft. water supply lines. In addition, sewerage lines from 12" to 36" dia have been replaced in the unserved/served areas with the construction of disposal station as per requirement.





Oil, Gas & Industrial Engineering Sector

NESPAK demonstrated good performance in the Oil, Gas and Industrial Engineering Sector by attaining 12 projects during the Year 2022-23. The Company continued its state-of-the-art services for 13 ongoing projects and completed four (4) jobs during the financial year.

Among the fresh projects during the year, the Punjab Industrial Estate Development and Management Company (PIEDMC) tasked NESPAK with rendering consultancy services for the Establishment of Sialkot Industrial Estate Project. NESPAK will carry out feasibility study and detailed design for this Rs. 55 billion project.

The Ravi Urban Development Authority has engaged NESPAK for the Upgradation/Rehabilitation of Infrastructure at Industrial Zone (Phase-I, Part-A) of the Ravi Urban Development Project. The scope of services includes material testing, monitoring and master planning for this Rs. 26 billion project.

The Sui Southern Gas Company Ltd. appointed NESPAK as Consultants for the Biogas/Biomethane Supply Project during the year. NESPAK services include survey, bid evaluation, design and construction supervision for this project.

The Karachi Development Authority has selected NESPAK for Maintenance & Operation of Pipe Manufacturing Facility in Karachi. NESPAK will carry out geotechnical

investigations, survey and transaction advisory services for this venture.

Among the ongoing projects, construction work on infrastructure development of Quaid-e-Azam Business Park (QABP), Sheikhpura continued at a satisfactory pace during the year under NESPAK supervision. This landmark project worth Rs. 16 billion has been launched by the Punjab Government. The scope of work includes construction of 31km rigid pavement roads network, 56 km HDPE water supply pipe network, 65 km wastewater network along with two disposal stations, eight overhead water tanks, five tubewells and underground MV/LV network.

NESPAK has been providing services for the infrastructure development of the Karachi Export Processing Zone (KEPZ) Phase-III. The project has been planned in the continuation of KEPZ-I and the KEPZ-II. NESPAK-KPMG-Lex Firma Joint Venture has been selected by the Export Processing Zones Authority (EPZA) for carrying out master planning, commercial feasibility study detailed designing and construction supervision for the KEPZ, Phase-III.



1. Infrastructure development works in progress for the Quaid-e-Azam Business Park, Sheikhupura



2. Work continuing for the extension of the main industrial plant structures of the Fatima Fertilizer Company (Pvt.) Limited

Design work for the extension of the main industrial plant structures of the Fatima Fertilizer Company Limited (FFCL), Rahim Yar Khan is progressing fast. The structural design project encapsulates the evaluation and capacity enhancement of the existing industrial plant buildings. The scope of work includes structural design modifications in various buildings i.e., CAN plant, Nitro Phosphate plant, substations, prilling towers, blast-proof DCS building and township buildings. These multi-storey buildings house a number of heavy vessels, machines, motors, grinders, electrical cabinets and various heavy industry equipment. The project design is currently under way and the detailed structural design and evaluation have been performed on the new and existing civil structures. The new capacity enhancement design and drawings are being prepared under this project.

NESPAK is rendering design and analysis services for two new high-rise emergency exit (Egress) steel staircases of the Oil and Gas Development Company Ltd. (OGDCL) Headoffice, Islamabad. The OGDCL Headoffice is a 16-storey building with three basement levels and has an

iconic presence on the main boulevard of Islamabad near the Presidential Zone. The building was constructed with design codes at the prevailing time, lacking the provision of emergency exit staircases which are mandatory in case of a fire or seismic event. M/s OGDCL hired the services of NESPAK through an open bidding to undertake the task of localised building assessment structurally and architecturally for the appropriate designing of a new steel Egress staircase with the existing RC structure. The constraints and challenges are that the design should fulfill the current codal provisions of Building Code of Pakistan with minimum modification in the RC structure.

Among the projects wrapped up during the year, NESPAK completed services for a model wheat storage facility at Sakhakot, Malakand in the Khyber Pakhtunkhwa (KPK) Province. The facility having capacity of 3000 metric tons has been funded by the World Food Program to help strengthen wheat management in the province. NESPAK services included detailed design and construction supervision for this project awarded by the KPK Food Department.





Information Technology & GIS Sector

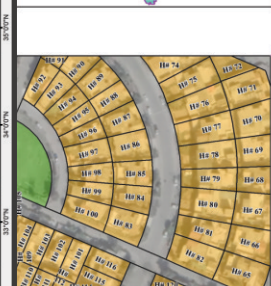
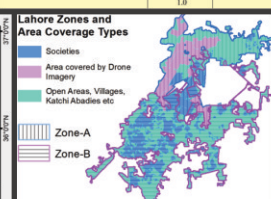
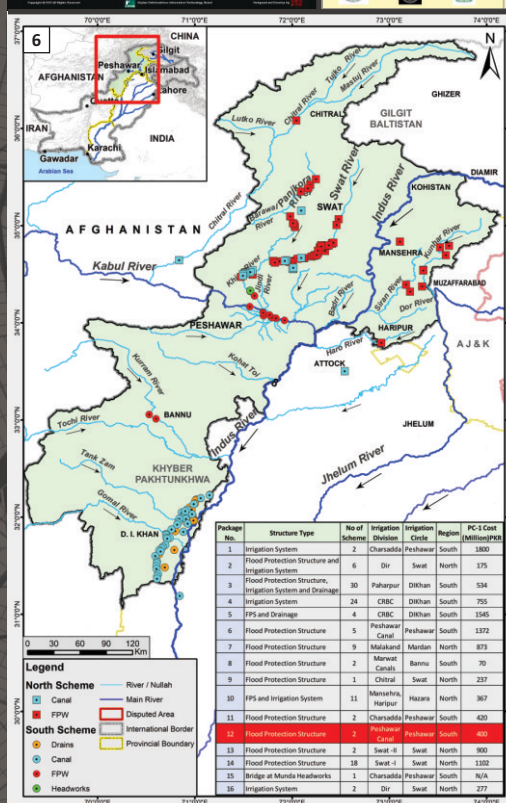
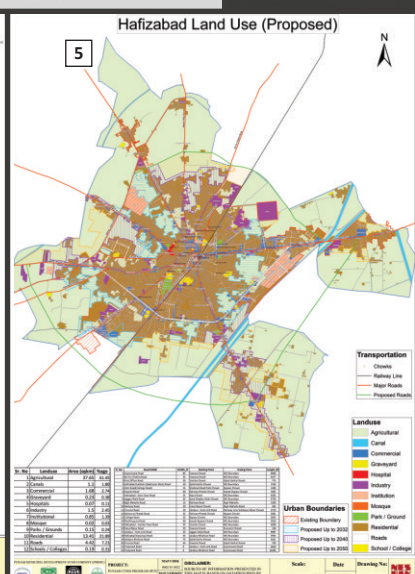
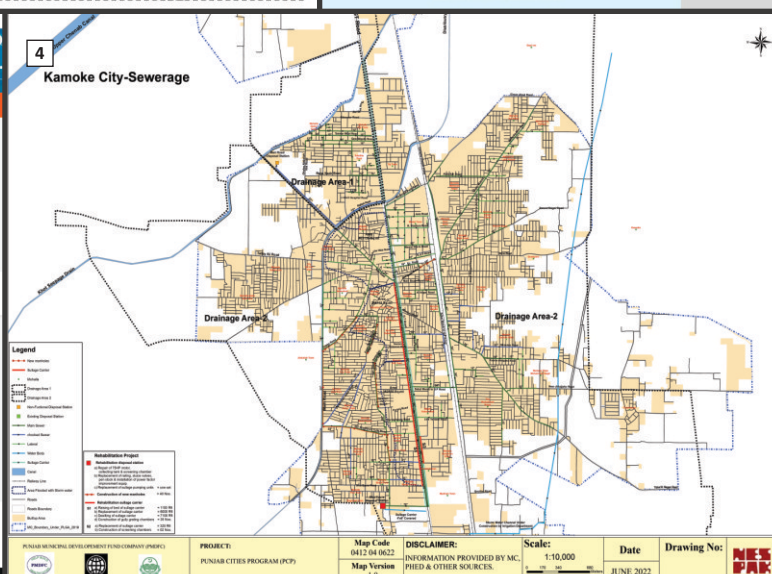
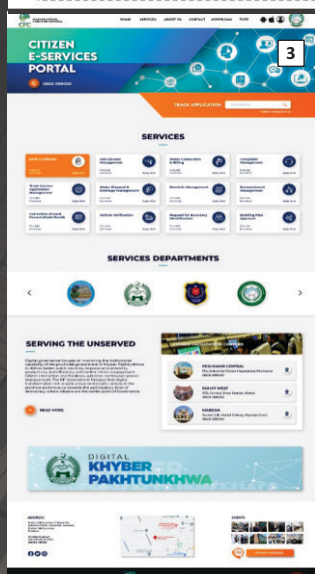
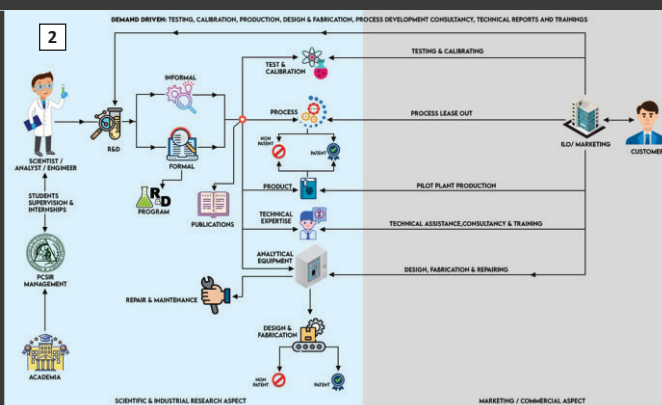
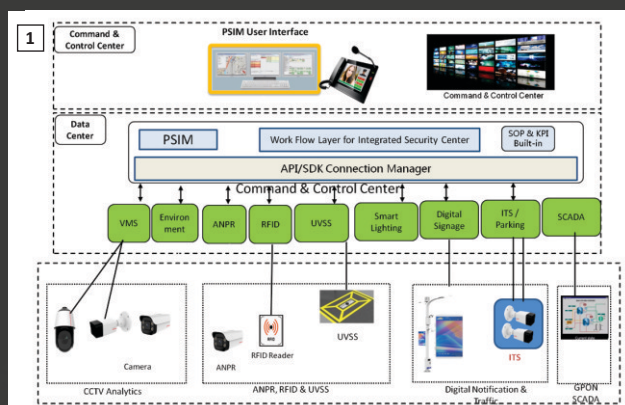
NESPAK showed solid performance in the Information Technology (IT) and Geographical Information System (GIS) Sector as it secured seven (7) new projects during the Financial Year 2022-23. The Company continued to render its innovative services for 10 ongoing projects and completed two (2) jobs during the fiscal year.

Information Technology

Among the fresh projects during the year, the CGD Contracting Services (Pvt.) Limited engaged NESPAK for feasibility study and designing of IT Infrastructure of Education City Project based on the smart-and-safe city concept. The Education City covering 8921 acres of land is planned to be constructed in District Malir, Karachi. The major systems of the project include seamless Wi-Fi connectivity, intelligent access control for the Command and Control Center building, video surveillance, under vehicle surveillance, automated number plate and face recognition, smart parking, smart waste bins, traffic management, variable message, public address, solar, electrical vehicle (EV) charging stations, visitors' management, GPON Service, BMS/PSIM, air quality monitoring, temperature monitoring, humidity monitoring,

access control for paid parking, baggage scanning, Tier-II/Tier-III level Command & Control Centre and SCADA System. The project is likely to be completed in a year.

Among the ongoing projects, work on software development consultancy services for the establishment of the Pilot Citizen Facilitation Centre, Peshawar is under way. The Phase-I of the project relating to the citizens' interface for access to selected 19 services from five Khyber Pakhtunkhwa Departments is completed. The departmental interfaces for the integrated software solution are being developed. The assignment comprised business requirement gathering (BRG), business process reengineering (BPR), software requirement specification/function Requirement Specification (SRS/FRS), design, development and implementation of the centralised and integrated software application for Citizen



1. IT Infrastructure of Education City Project, Karachi
2. High-level diagram of the scientific information management system of the Pakistan Council of Scientific and Industrial Research Project
3. Web-based citizen interface for Pilot Citizen Facilitation Centre, Peshawar
- 4 & 5. Proposed sewerage and land-use maps of Kamoke and Hafizabad Cities for the Municipal Services Infrastructure Development Project
6. Overview map of proposed flood protection plan works
7. Cadastral Mapping Project, Lahore

Facilitation Centres (CFCs) services. The CFCs are one-stop service centres to be established for the facilitation of citizens to access public services. The focus is to provide consolidated access to various services such as the provision of domicile certificates, arms licences, death certificates, birth certificates, divorce/marriage certificates, provision of fard, mutation, vehicle verifications, delivery of registration books and number plates, grant of water connections & billing, building plan approvals, trade licence, etc.

Works for the Digital Transformation, Strengthening and Automation (DTSA) of the Pakistan Council of Scientific and Industrial Research (PCSIR) Project is progressing fast under the supervision of NESPAK. NESPAK has made significant a headway in finalising the business process document for all PCSIR units including headoffice, PCSIR Laboratories and training institutes spread across Pakistan. Additionally, NESPAK has introduced software solution along with a high-level design, aligning all the business requirements to match the business processes endorsed by the Client. NESPAK has duly submitted the business requirements document in accordance with the Client's requirements. NESPAK has submitted an initial Request for Proposal (RFP) for the selection of a suitable software contractor to drive PCSIR's digitalisation/software development endeavour.

Among the projects wrapped up during the year, NESPAK successfully completed tender documentation and design review for the Quetta Safe City Project (QSCP) in Balochistan. The project was awarded by the Balochistan Science and Information Technology Department. The project is aimed at provisioning of citywide video surveillance, GIS-enabled integrated support & services, identity management via biometric identification technologies, tracking of the government-owned vehicles and extending infrastructure to every government and semi-government premises to implement e-Government systems. Major systems of the QSCP include IP addressable fixed & PTZ colour digital CCTV cameras, optical fibre cable network, microwave link, LTE/4G system as communication medium, video wall comprising 100 LEDs of 48 inches, state-of-the-art data centre at C4I building, ECC Room with video wall having 60 LEDs, ITS/GIS software & satellite imagery, biometric devices, RFID readers/tags, X-Ray scanner, mobile C4I vehicle and bollards/under-vehicle surveillance.

Geographical Information System

Among the fresh projects during the year, NESPAK prepared the Emergency Flood Assistance Project (EFAP) awarded by the Government of Pakistan. The Asian Development Bank (ADB) funded the EFAP which will contribute to the economic recovery of flood-ravaged provinces of Balochistan, Khyber Pakhtunkhwa and Sindh by building long-term resilience. The GIS and remote

sensing services included mapping of all the proposed subprojects, estimation of basin areas of the infrastructure, estimated time of concentration of various basins of the subprojects and assistance to hydrologist and hydraulic experts using remotely sensed soil and land-use data.

NESPAK and the Punjab Municipal Development Fund Company (PMDFC) signed an agreement for detailed design and construction supervision of municipal services infrastructure development on the need-and-priority basis in the Punjab province. The purpose of the project is to develop municipal infrastructure at a pace and level where satisfactory service delivery is attained for the continuously growing population of the cities and the gap between the supply and demand is bridged in respective municipal corporations in the next 30 years.

The Faisalabad Electric Supply Company (FESCO) hired NESPAK for providing services for the Implementation of Web-based GIS along with Mobile Application and Mapping of the HT/LT Distribution Network. NESPAK in association with NDS Technology Pakistan will establish the GIS Lab, database design, Web-GIS development, integration with other databases, survey of 40000 km long HT/LT network equipment details, and calculations of line losses. This project is aimed at using state-of-the-art GIS technology for the measurement and capturing of the parameters for line loss calculations and analysis on each feeder of the power grid, which will bring automation to the system, improve efficiency, and manage the load.

Among the projects wrapped up during the year, NESPAK completed services on the Balochistan Water Resources Development Sector Project - Improvement of Water Resources Information System. NESPAK has provided services for collection and reports from the Client & free public domain, stakeholder consultation & requirement gathering, procurement of data centre, IT equipment & establishment of data centre in Quetta, designing & development of Web-GIS Application and development of Google Earth Engine customised application to process satellite data using cloud computing.

NESPAK carried out services for the Lahore Cadastral Mapping of Zone-A and B awarded by the Survey of Pakistan. Under this project, a geospatial database of the Lahore City has been developed in three categories i.e., areas with approved layout plans, densely populated slum areas and areas having only revenue records of mauzas and khasra with ownership/mutation as mapping information. Areas of the approved layout plan were mapped as per the given dimensions and the collected ownership data. Dimensions and ownership were verified through a field survey. In densely populated areas, high resolution image of 5cm was captured using drone technology for the mapping of parcels. The areas with only revenue records were mapped from satellite images with corresponding digitised mauzas' boundaries overlaid and khasra numbers along with ownership records. A database of all three categories was completed for this project during the reporting period.

Major New, Ongoing & Completed Projects

- | | | |
|---------------------------------------|--|------------------------------|
| a) Feasibility Study | h) Functional Specifications Document | o) Digital Terrain Model |
| b) Project Planning | i) System Study Design | p) Global Positioning System |
| c) Detailed Design | j) Software Development | q) GIS Database & Model |
| d) Tender Documents | k) Testing, Debugging & Implementation | r) Map Analyses |
| e) Construction Supervision | l) Documentation & Training | s) Cadastral Mapping |
| f) Design Review | m) Satellite Imagery | |
| g) Software Requirement Specification | n) Map Digitisation | |

PROJECT	LOCATION	CLIENT	SCOPE OF WORK	COST Rs. Million US\$ Million
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Energy Sector

New

Extension & Augmentation Works at 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
220kV D/C Twin Bundle Transmission Line from 550/220kV Faisalabad West Grid Station to 220kV Lalian Grid station (55km)	Pakistan	National Transmission & Despatch Company	e	4,000 18
220kV D/C Twin Bundle Overhead Transmission Line from Sheikhpura Grid Station to Bund Road Grid Station (28km)	Pakistan	National Transmission & Despatch Company	e	2,000 9
Solarisation of Public Sector Buildings in Pakistan	Pakistan	Various Entities under Government of Pakistan	c	2,000 8
Selection of Engineering, Procurement and Construction Contractor for 229MW Asrit Kedam Hydropower Project	Pakistan	KOAK Power (Pvt.) Limited	Independent Engineer Services	178,200 814
Independent Water and Power Combined Cycle Project, Al-Dur-II	Bahrain	NOMAC Al-Dur Power & Water Services W.L.L.	Testing	N.A N.A

Ongoing

4500MW Diamer-Basha Dam	Pakistan	Diamer-Basha Development Company (Pvt.) Limited, Pakistan	b d e f	1,862,0 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.)	a d e f	95,000 904
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 s	100,000 746
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
900MW Bin Qasim Power Station (BQPS-III) Combined Cycle & Associated Transmission Projects	Pakistan	K-Electric Limited	e f	100,219 638
500/132kV Grid Station Allama Iqbal Industrial City, Faisalabad	Pakistan	National Transmission & Despatch Company	d e f	14,400 81
220kV Double Circuit Transmission Line from D.I. Khan to Zhob (220km)	Pakistan	National Transmission & Despatch Company	e	7,000 45
Energy Resource Centre, Johar Town, Lahore	Pakistan	Energy Department, Government of the Punjab	d e f	5,000 28
220kV Transmission Lines included in Tranche 3 of ADB Second Power Transmission Enhancement Investment Program	Pakistan	National Transmission & Despatch Company	e	4,000 25

PROJECT	LOCATION	CLIENT	SCOPE OF WORK	COST Rs. Million US\$ Million
110kV Thuwal Substation/Transmission Line Project, Jeddah	Saudi Arabia	Saudi Electricity Company - Central Operating Area	e	N.A N.A
24MW Rabat Hydropower Project, Kashkadarya Region	Uzbekistan	Joint Stock Company Uzbekhydroenergo	e f	12,750 75

Completed

500kV Double Circuit Quad Bundle Transmission Lines from SECL Power Plant in Thar Block-I to Matiari Converter Station (200km)	Pakistan	National Transmission & Despatch Company	e	20,000 114
500kV Faisalabad West Grid Station, Extension and Associated 500kV Transmission Lines Project (Phase-II)	Pakistan	National Transmission & Despatch Company	d e f	8,000 60

Water & Agricultural Development and Dam Engineering Sector

New

Emergency Flood Assistance Project Khyber Pakhtunkhwa	Pakistan	Khyber Pakhtunkhwa Irrigation Department	c e	15,254 54
Project Readiness Support for Khyber Pakhtunkhwa Water Resources Development Project	Pakistan	Khyber Pakhtunkhwa Irrigation Department	c f	29,640 103
Indus Basin Irrigation System Automation of 07 Key Sites for Discharge Monitoring, Punjab	Pakistan	Water & Power Development Authority	c d e f	2,400 8
Cement Concrete Lining of Nasrat Canal, Sindh	Pakistan	Sindh Irrigation & Power Department	c d e	3,841 17
Rehabilitation/Restoration of Karo Gungro Outfall Drain System and its Allied Structures	Pakistan	Sindh Irrigation Department	c e	2,000 7
Tailrace Tunnel Restoration Works of Neelum-Jhelum Hydroelectric Project	Pakistan	Water & Power Development Authority	c e	5,000 19

Ongoing

Trimmu and Panjnad Barrages Improvement Project	Pakistan	Punjab Irrigation Department	b c d e f	18,316 178
Rehabilitation and Upgradation of Balloki Barrage and Lower Bari Doab Canal System	Pakistan	Punjab Irrigation & Power Department	c d e	30,000 381
Remodelling of Warsak Canal System in Peshawar and Nowshera Districts	Pakistan	Khyber Pakhtunkhwa Irrigation Department	c d e	16,695 186
Projects under Annual Development Program	Pakistan	Punjab Irrigation & Power Department	e f	100,000 1,203
National Program for Improvement of Watercourses in Pakistan, Phase-II	Pakistan	Federal Water Management Cell, Ministry of National Food Security & Research	c e f	154,000 933
Kachhi Canal Project	Pakistan	Water & Power Development Authority	c d e	152,000 2,649
Balochistan Water Resources Development Sector Project	Pakistan	Balochistan Irrigation Department	a c d e	47,837 344
Project Readiness Financing for Punjab Water Resources Management—Detailed Design for Irrigation Canal and Link Canal Projects	Pakistan	Punjab Irrigation Department	a c d	254,535 1,399
Harnessing of Hill Torrents in Dera Ghazi Khan and Rajanpur	Pakistan	Punjab Irrigation Department	a c d	425,000 2,656
26MW Tank Zam Multipurpose Dam, Tank	Pakistan	Khyber Pakhtunkhwa Irrigation Department	a c d	N.A N.A
Promotion of High-Value Agriculture Through Solarisation of Drip & Sprinkler Irrigation System, Punjab	Pakistan	Punjab Agriculture Department	e f	4,000 26



PROJECT	LOCATION	CLIENT	SCOPE OF WORK	COST Rs. Million US\$ Million
Solution of Problematic Small Dams in Development Zone, Punjab	Pakistan	Punjab Agriculture Department	a c d	224 1
Chashma Right Bank Canal (Lift Cum Gravity) Project, Punjab	Pakistan	Water & Power Development Authority	a b c d	179,600 1,137
Murunj Dam Project	Pakistan	Water & Power Development Authority	a c d	172,964 1,048
Cement Concrete Lining of Odero Lal Branch, Sindh	Pakistan	Irrigation Department, Government of Sindh	c d e f	3,932 22
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 Training	36,983 285
Flood Protection Dam (B6) in Al-Jufainah, Muscat Governorate	Oman	Ministry of Agriculture & Fisheries	e f	13,393 130

Completed

Preparation of Comprehensive Flood Management Plan for Khyber Pakhtunkhwa	Pakistan	Khyber Pakhtunkhwa Irrigation Department	a b m n p q	17,000 149
Raising of Wala Dam	Jordan	Jordan Valley Authority, Ministry of Water & Irrigation	e f	3,690 35
Dams in Southern Region	Saudi Arabia	Ministry of Environment, Water & Agriculture	e f	6,000 48

Communication Sector

New

Dualisation & Improvement of Existing N-50 from Yarik-Sagu-Zhob including Zhob Bypass (210km)	Pakistan	National Highway Authority	e	80,000 277
Dera Ismail Khan Development Packages (542km)	Pakistan	National Highway Authority	a c	100,000 380
Multi-Level Grade Separation at Shahdara Morr, Lahore	Pakistan	Lahore Development Authority	c e	6,515 29
Bridge at Korangi Causeway, Karachi	Pakistan	Sindh Local Government Department	c e	6,600 24
New Hub Bridge (N-25), Balochistan	Pakistan	National Highway Authority	e f	1,242 5
Remodelling of Main Boulevard from Liberty Chowk to Kalma Chowk-CBD Square, Lahore	Pakistan	Punjab Central Business District Development Authority	e	4,228 19
Road Projects under ADP Schemes (2022-23) Rawalpindi	Pakistan	Punjab Communication & Works Department	e	43,000 165
Akbar Chowk Flyover and 4 other LDA Projects	Pakistan	Lahore Development Authority	e	22,000 96
Dualisation of Existing Road from Al-Kamil and Al-Wafi-Jalan Bani Bu Hassan-Jalan Bani Bu Ali, Governorate of South Al-Sharqiyah	Oman	Ministry of Transport, Communications & Information Technology	c d	N.A N.A
5 Bridges of PIC R-T 7552, T8 Extension and Bypass Interchange	Saudi Arabia	SAUDCONSULT	c	N.A N.A

Ongoing

Permanent Reconstruction Works in Federally Administered Tribal Areas	Pakistan	Temporarily Dislocated Persons Support & Management	c e	12,352 119
Strengthening of East-West Connectivity of Merged Areas (FATA) with Settled Districts and Improvement Links	Pakistan	Khyber Pakhtunkhwa Communication & Works Department	a c d e f	22,239 135

PROJECT	LOCATION	CLIENT	SCOPE OF WORK	COST Rs. Million US\$ Million
Bus Rapid Transit (BRT) Yellow Corridor under Karachi Mobility Project	Pakistan	Sindh Transport & Mass Transit Department	c d e	70,000 407
Khyber Pakhtunkhwa Integrated Tourism Development Project	Pakistan	Khyber Pakhtunkhwa Communication & Works Department	a c e	20,000 120
Dualisation and Improvement of Old Bannu Road Project N-55 Gandhi Chowk-Sarai Naurang Domail-Khurram & Khurram-Krapa Sections	Pakistan	National Highway Authority	e f	18,000 158
Circular Bypass Road, (65km) Bannu	Pakistan	Pakhtunkhwa Highway Authority	e f	8,000 58
Dualisation & Improvement of Pindigheb-Kohat Road N-80 (80km)	Pakistan	National Highway Authority	e f	20,000 144
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
Chitral-Booni-Mastuj-Shandur Road (153km)	Pakistan	National Highway Authority	e f	16,745 99
Dualisation 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 and Upgradation of Awaran-Jhaljao-Bela Road (135km), Balochistan	Pakistan	National Highway Authority	e f	24,000 104
PSDP Road Projects in North and South Punjab	Pakistan	Punjab Communication & Works Department	c e	81,000 352
Various Road Projects under ADP Schemes in Faisalabad and Lahore Division	Pakistan	National Highway Authority	e	262,000 1,008
Road Connecting Thumaid Interchange with Al-Mubaila Interchange, Muscat Expressway	Oman	Ministry of Transport, Communications & Information Technology	c d	51,840 324
Flyovers on Mingora-Kanju Road and Kanju Chowk Bypass Road from Aligrama to Bara Bandai	Pakistan	Pkhtunkhwa Highway Authority	e	1,200 7

Completed

Rehabilitation and Widening of I.J.P. Road, Islamabad	Pakistan	Capital Development Authority	e	4,953 22
Bhara Kahu Bypass, Islamabad	Pakistan	Capital Development Authority	c e	6,000 27
Dualisation of Sultan Said Bin Taimur Road (13km) in Duqm	Oman	Ministry of Transport, Communications & Information	c e	9,891 63
Seirra Leone Integrated Resilient Urban Mobility Project	Sierra Leone	Integrated Transport Planning Limited, Sindh	c	N.A N.A

Airports

New

Expansion and Renovation of Begum Nusrat Bhutto Sukkur Airport	Pakistan	Civil Aviation Authority	a b c d e	40,000 179
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Ongoing

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



PROJECT	LOCATION	CLIENT	SCOPE OF WORK	COST Rs. Million US\$ Million
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Ports & Harbours

Ongoing

Refurbishment of Dry Docks	Pakistan	Karachi Shipyard & Engineering Works	e	4,000 23
Port Connectivity Project under Public Private Partnership	Pakistan	Karachi Port Trust	a b c d	N.A N.A
Development of the Container Terminal at Pakistan Deep Water Container Port Project	Pakistan	Karachi Port Trust	f	2,812 455

Completed

Rehabilitation & Renovation of Karachi Fish Harbour	Pakistan	Karachi Fisheries Harbour Authority	e f	600 6
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Architecture & Planning Sector

New

Multi-Storey (40-Storey) Office Building at Commercial Plot in Blue Area, Islamabad	Pakistan	Civil Aviation Authority	a c d e	13,000 59
Bilquis Edhi Hospital at North Karachi	Pakistan	Edhi Foundation, Karachi	c d e	10,000 35
Establishment of University of Gwadar, Balochistan	Pakistan	University of Gwadar	e	2,000 7
Revamping of Existing WFP Country Office Building in Diplomatic Enclave Compound in Islamabad	Pakistan	World Food Programme, Pakistan	c d e	500 2
Academic Block-V at COMSATS University Islamabad, Park Road Tarlai Kalan, Islamabad	Pakistan	COMSATS University Islamabad	c d e	700 2
Office Building of Tribal Area Electric Supply Company on 08 kanal Plot at Hayatabad, Peshawar	Pakistan	Tribal Areas Electricity Supply Company	c e	500 2
Divisional CTD Complexes/Headquarters at 05 Division of Sindh (Hyderabad, Mirpurkhas, Sukkur Larkana & Shaheed Benazirabad)	Pakistan	Sindh Counter-Terrorism Department	c e	974 4
Hostel, Cardiology and Gynae Units at Saidu Hospital	Pakistan	Khyber Pakhtunkhwa Communication & Works Deptt.	e	920 3
Strengthening/Upgradation of Jinnah Sindh Medical University, Karachi	Pakistan	Jinnah Sindh Medical University, Karachi	c e	N.A N.A
Pakistan Navy Farms Scheme Sector D, Main Simli Road	Pakistan	Pakistan Navy	c d e	775 3
Extension of Ghulam Gardish at Shrine of Syed Ali Hajveri (Data Ganj Bakhsh), Lahore	Pakistan	Madinah Foundation, Sargodha Road, Faisalabad	c d e	156 1
Gandhara Digital City Peshawar, Swat and Special Technology Zone, Mardan	Pakistan	Khyber Pakhtunkhwa Information Technology Board	c d Master planning	19,500 75
Modification & Upgrades of the Firefighting & Stormwater System at Barwa Al-Baraha Warehouse & Workshop	Qatar	Barwa, Qatar	c e	N.A N.A

Ongoing

Reconstruction and Rehabilitation of Earthquake Affected Areas	Pakistan	Earthquake Reconstruction & Rehabilitation Authority	b c d e f	200,000 3,324
Pakistan Kidney & Liver Institute and Research Center (Package-C1)	Pakistan	Infrastructure Development Authority Punjab	c d e	3,240 32
Establishment of Infrastructure in LDA City (Phase-I) Lahore	Pakistan	Lahore Development Authority	e f	15,000 108

PROJECT	LOCATION	CLIENT	SCOPE OF WORK	COST Rs. Million US\$ Million
Construction of New SBP Office Building, Karachi	Pakistan	State Bank of Pakistan	c d e	5,000 28
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	2,600 12
Low-Cost Housing Scheme at Alipur Farash Town, Islamabad	Pakistan	Capital Development Authority	e f	32,000 182
National Aerospace Science & Technology Park Aviation City, Kamra	Pakistan	Aviation City, Pakistan (Pvt.) Limited	a b c d e	4,318 35
Establishment of Agriculture University at Swat	Pakistan	Khyber Pakhtunkhwa Communication & Works Deptt.	c e	5,563 35
Sindh Forensic Science Laboratory, Karachi	Pakistan	Sindh Home Department	a b c d e	8,300 53
Infrastructure Development of Gwadar Cantonment, Gwadar City	Pakistan	Engineer-in-Chief (E-in-C) Branch, Pakistan Army	e f	4,006 24
Urban Regeneration of Walton Center Business District, Phase-I (Civil Works), Punjab	Pakistan	Punjab Central Business District Development Authority	e	3,000 17
Existing and New Campus Facilities of COMSAT University Wah Campus	Pakistan	COMSATS University, Islamabad	c d e	700 4
AJK Legislative Assembly Complex Project, Muzaffarabad	Pakistan	Ministry of Kashmir Affairs & Gilgit Baltistan, Pakistan	e f	2,499 16
Sardar Fateh Muhammad Khan Buzdar Institute of Cardiology, Dera Ghazi Khan	Pakistan	Infrastructure Development Authority Punjab	e	1,916 11
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	1,348 8
Establishment of Sports Complex in Swat	Pakistan	Director General of Sports, Khyber Pakhtunkhwa	c d e	955 5
Standardisation of 200 Higher Secondary Schools in Khyber Pakhtunkhwa	Pakistan	Communication & Works Deptt. Govt. of Khyber Pakhtunkhwa	e	1,602 8
Supreme Court Employees Cooperative Housing Scheme, Islamabad	Pakistan	Supreme Court Employees Cooperative Housing Society	d e	7,000 34
Uplifting of Academic & Infrastructure Facilities at Hazara University, Mansehra	Pakistan	Hazara University, Mansehra	c d e Master Planning	1,096 7
High Court Complex Turbat, Balochistan	Pakistan	Government of Balochistan	b c d e	517 5
Upgradation of Bannu University of Sciences & Technology Lakki Marwat Campus to Full-Fledged University	Pakistan	University of Lakki Marwat Khyber Pakhtunkhwa	c e	1,578 10
Rehabilitation/Renovation and Construction Works for Establishment of Government College University, Hyderabad	Pakistan	Government College University, Hyderabad	c e Master Planning	472 3
Purpose-Built-Consular-Services Building at the Pakistan Mission in Kabul	Afghanistan	Ministry of Foreign Affairs, Government of Pakistan	c e	500 3
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				
Standardisation of Higher Secondary Schools in Khyber Pakhtunkhwa Province (DFID-Assisted)	Pakistan	Elementary and Secondary Education Department Peshawar	e f	4,469 28



PROJECT	LOCATION	CLIENT	SCOPE OF WORK	COST Us\$ Million
Neurology and Psychiatry Project at Jinnah Post Graduate Medical Centre, Karachi	Pakistan	Jinnah Post Graduate Medical Centre, Karachi	b c d e	735 6

Environmental & Public Health Engineering Sector

New

Implementation of Local Area Development Program-Public Health, Livelihood Development and Downstream Fisheries Plans	Pakistan	Water & Power Development Authority	a c d e	12,000 54
1.2 MGD ROD Plant (China-aided Sea Water Desalination Plant) at Gwadar Free Zone	Pakistan	Gwadar Port Authority	e	3,000 13
Punjab Rural Sustainable Water Supply & Sanitation Project, Pilot Phase in Central and South Punjab	Pakistan	Punjab Rural Municipal Services Company	e	15,500 60
DS 303 Hatta Sewerage and Stormwater System - Hydrological & Hydraulic Modelling along with Special Studies Related to Dam	UAE	Dubai Municipality, UAE	c d	N.A N.A

Ongoing

Punjab Intermediate Cities Improvement Investment Program	Pakistan	1. Punjab Intermediate Cities Improvement Investment Program 2. Punjab Local Govt. & 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
Subproject SOP-I, Karachi Water and Sewerage Services Improvement Project	Pakistan	Karachi Water & Sewerage Board	a b c d e	18,000 69
Infrastructure Subproject, Sectoral Planning & Resident Supervision in 16 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
Wastewater Treatment Plants for Mehmood Booti Shadbagh, Shahdara and Babu Sabu, Lahore	Pakistan	Water & Sanitation Agency, Lahore	c d	40,000 288
Upgradation & Environmental Improvement of Chungi No. 09 Disposal Station, Multan	Pakistan	1. Multan Development Authority 2. Water & Sanitation Agency, Multan	c e EIA Study	3,157 20

Completed

Annual Development Schemes, WASA Multan	Pakistan	1. Multan Development Authority 2. Water & Sanitation Agency, Multan	e	1,000 9
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Oil, Gas & Industrial Engineering Sector

New

Biogas/Biomethane Supply, Sindh	Pakistan	Sui Southern Gas Pipelines Limited	d e	N.A N.A
Structural Design of Gas Pipe Hanging Arrangement with Jinnah Barrage & Jinnah Hydroplant	Pakistan	Sui Northern Gas Pipelines Limited	c Structural Stability	N.A N.A
Establishment of Sialkot Industrial Estate	Pakistan	Punjab Industrial Estates Development & Management Co.	a c d	55,000 230
Rehabilitation, Operation and Maintenance of Pipe Manufacturing Facility in Karachi	Pakistan	Karachi Development Authority	a EIA Study Geotech Investigations	N.A N.A

PROJECT	LOCATION	CLIENT	SCOPE OF WORK	COST Rs. Million US\$ Million
Upgradation/Rehabilitation of Infrastructure in Industrial Zone (Phase-I Part-A) of Ravi Riverfront Urban Development Project	Pakistan	Ravi Urban Development Authority	a c d e	26,000 100

Ongoing

Quaid-e-Azam Business Park on Motorway M-2, Sheikhpura	Pakistan	Punjab Industrial Estates Development & Management Co.	c e	16,000 96
Infrastructure Development Works of Karachi Export Processing Zone Phase-III	Pakistan	Export Processing Zones Authority	a b c e	N.A N.A
Construction of Two Highrise Emergency Exit Steel Staircases at OGDCL House, Islamabad	Pakistan Limited	Oil & Gas Development Company	Structural Stability	30 0
Extension of the Main Industrial Plant Structures of Fatima Fertilizer Company	Pakistan	Fatima Fertilizer Company (Pvt.) Limited, Rahim Yar Khan	c Structural Stability	N.A N.A

Completed

New Packages Plant near Kasur	Pakistan	Packages Limited, Lahore	b c	N.A N.A
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Information Technology & Geographical Information System Sector

New

IT Infrastructure of Education City Project Based on Smart & Safe City Concept, Sindh	Pakistan	CGD Consulting Services (Pvt.) Limited	a c d	N.A N.A
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Ongoing

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

Completed

Quetta Safe City Project	Pakistan	Balochistan Science & Information Technology Department	d f	1,500 14
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Geographical Information System

New

Implementation of Web-based GIS along with Mobile Application and Mapping of HT/LT Distribution	Pakistan	Faisalabad Development Authority	j q	N.A N.A
Western Greater Peshawar Spatial Master Plan	Pakistan	Khyber Pakhtunkhwa Planning & Development Department	a c m n p q r	16,346 75
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 N.A

Ongoing

Digitised 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 N.A
Hazard Microzonation and Associated Scientific Assessment/Evaluation of Hazards and Risks in Five Valleys of Gilgit-Baltistan & Chitral	Pakistan	Agha Khan Planning & Building Services	a c m n o q	N.A N.A

Completed

Improvement of Water Resources Information System in Balochistan	Pakistan	Asian Development Bank	m q	N.A N.A
Lahore Cadastral Mapping of Zone-A and B	Pakistan	Government of Pakistan	m q s	600 4

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