

NESPAK IN

Islamic Republic of Iran

NESPAK has operated in the Islamic Republic of Iran for the last 24 years through its Regional Office in Tehran, which was established in 1989. NESPAK Tehran office got its first project Technical Assistance to Mahab Ghodss Consulting Engineers in 1990. In its 24 years of business operations in Iran, NESPAK acquired a total of 15 projects worth US\$ 1,031 million. NESPAK mainly provided services for the dam projects in the Islamic Republic of Iran where water resources engineering remained NESPAK's forte.

In the year 2003, activities in the Regional Office were curtailed due to the economic and political situation in Iran. NESPAK Regional Office was reactivated in 2006 and the Company continued its business operations in the Islamic Republic of Iran up to 2013.

Portfolios of major projects undertaken by NESPAK in the Islamic Republic of Iran are given in the following pages.



Siestan River Flood Works Rehabilitation Project

Project Status: Completed in 1994

Scope of Services: Feasibility Study, Project Planning, Detailed Design, Tender Documents, Construction Supervision

Project Cost: US\$ 498 million

Client: Siestan Balochistan Regional Water Board, Iran



Funded by the World Bank, the Siestan River Flood Work Rehabilitation Project was meant to provide flood protection to the areas along both banks of the Siestan River. The project involved design and construction of dykes, channelisation of the meandering river and a flood bypass to deliver excessive flood discharges from downstream of Kohak Barrage to the Hamun-e-Hirmand Lake. Banks of the lake were protected by the construction of dykes as well.

Irrigation Improvement Project

Project Status: Completed in 2001

Scope of Services: Project Planning, Detailed Design

Project Cost: US\$ 311 million

Client: Ministry of Energy, Iran

This World Bank-funded project envisaged improvement and upgrading of irrigation and drainage systems in the Islamic Republic of Iran. The sub-project areas were Zarrineh Roud in West Azerbaijan, Moghan in East Azerbaijan and Tajan in Mazandaran province. The objectives of the project were to increase agricultural production by providing more reliable water supply and strengthening capabilities of the relevant Regional Water Authority by improved Operation and Maintenance programme.

NESPAK services included assistance in overall project management, coordination of activities, monitoring & evaluation, preparation of surface/groundwater monitoring programme for the three subproject areas, review/evaluation of O&M studies and assistance to Ministry of Energy Liaison Office for training of staff.

Alborz Integrated Land & Water Management Project

Project Status: Completed in 2013

Scope of Services: Feasibility Study, Project Planning, Detailed Design, Tender Documents, Construction Supervision

Project Cost: US\$ 120 million

Client: Mazandaran Golestan Regional Water Company, Iran

NESPAK achieved a major breakthrough in its overseas business in 2006 by winning this important project in competition with five of the world's leading consulting firms. The project was part of the overall Alborz Integrated Land and Water Management Project funded by the World Bank.



The project was aimed at introducing the concept of integrated land and water management in Iran starting with a pilot project in the Alborz Basin in the Mazandaran Province in northern Iran on the eastern Caspian Coast. The integrated water resources management consists of water balance analyses, simulation and optimisation studies of reservoir operation, Geographic Information System (GIS) database development for water & environment and new volumetric water pricing system. A Basin Water and Soil Council and a Basin Water Fund was established for the integration of water resources development and monitoring of World Bank safeguards.

Dez-Qom Roud Water Transmission Tunnel Project

Project Status: Completed in 2008

Scope of Services: Design Review, Construction Supervision

Project Cost: US\$ 59 million

Client: Nehad Ab Consulting Engineers, Iran

The Dez-Qom Roud Water Transmission Tunnel Project was a landmark project secured by the NESPAK Regional Office in Iran in the wake of strict government restrictions on the working of foreign consultants and the absence of the World Bank funding. Located in Qom, this 35700-metre tunnel project was divided into three sections and awarded to different companies on turnkey





and lump sum basis. For this important project, the New Austrian Tunnelling Method was adopted, which is a standard construction technique for rock tunnelling.



The project involved the construction of main tunnel and two access tunnels by carrying out excavation, geological mapping, drilling & blasting, laying of shotcrete & concrete, concrete lining and contact & consolidation grouting.

Ahwaz Water Sector Implementation Project

Project Status: Completed in 2011

Scope of Services: Construction supervision

Project Cost: US\$ 20 million

Client: Ministry of Energy, Water and Wastewater Company, Ahwaz, Iran



NESPAK in a joint venture with Anjam Tarh Tadbir Engineering Company of Iran provided consultancy services for 15 packages of water distribution networks, transmission mains, water reservoirs and rehabilitation of water treatment plants in the Ahwaz City and surrounding areas under the Ahwaz Water Sector Implementation Project.

Six NESPAK professionals were engaged as part of a supervisory team of 22 experts formed for this World Bank-sponsored project. Major works for this project included laying of 72 km long pipelines of polyethylene ductile iron and steel pipes for water transmission mains & distribution networks, connecting transmission mains, installation of cathodic protection system, butterfly valves, washout & fire hydrants and the construction of a 50,000 cu. m ground reservoir.

Karun Dam-III Project

Project Status: Completed in 1997

Scope of Services: Construction Supervision

Client: Water Works Construction Company, Iran

The Karun-III Dam is a hydroelectric dam on the Karun River in the province of Khuzestan, Iran. The Karun River

has the highest discharge of Iran's rivers. The dam is a concrete double arch type, 205m high from the foundation and 185m high from the river bed, having foundation width of 5 metres. The arch dam design is an ideal one for a dam built in a narrow, rocky gorge to hold backwater reservoir.



The objectives of the construction of Karun-III Dam & Hydroelectric Power Plant were flood control and electricity supply. The dam has the capacity to generate 2000MW and an average electric power generation of 4137 GWh/y.

Indonesian Ambassador's Villas Project

Project Status: Completed in 1997

Scope of Services: Construction Supervision

Client: Embassy of Indonesia

The consultancy services of NESPAK were hired for the construction of residences for the Indonesian Embassy's diplomatic staff in the capital of Islamic Republic of Iran. The Ambassadors' Villas Project was a two-storey building having all the modern facilities.



Transmission Line to Import Power from Iran to Pakistan

Project Status: Completed in 2013

Scope of Services: Feasibility Study

Client: National Transmission & Despatch Company-Pakistan, TAVANIR, Iran

This study for HVDC/HVAC transmission line envisaging interconnection between the power systems of Iran and Pakistan for the import of 1000 MW electricity from Iran was initiated by the NESPAK-Moshanir-Iran Joint Venture. The inception report, route survey, investigation report, environmental impact assessment report, draft design memorandum and draft feasibility report had been submitted to the National Transmission & Despatch Company, Pakistan and Iran's power generation & distribution company, TAVANIR. The SNC Lavalin, Canada and Power Planners International, Pakistan were NESPAK's sub-consultants for this study.