

WATER RESOURCES AND SANITARY ENGINEERING



The scarceness of the resource water requires a comprehensive approach, involving the prospecting of new sources, the efficient utilisation, the appropriate design, implementation, and operation of service facilities, and the effective management of corresponding resources. Sensitization and participation of beneficiaries in all stages of a project cycle are essential to achieve a responsible attitude towards water as an economic commodity.

In the field of water resources development GITEC conducts hydrological, hydrogeological and water quality investigations and analysis, utilizing geophysical measurements and satellite imagery for modelling and GIS applications. In urban areas emphasis is placed on EDP-based inventory and inspection of the system infrastructure and EDP-supported design for rehabilitation and extension measures.



Services on irrigation and drainage projects are concentrating on efficient utilization of water resources including the reuse of treated wastewater. GITEC is one of the leading companies in providing technical assistance services for the Operation and Maintenance (O&M) of irrigation systems and has developed its own software facilitating the required information for an efficient O&M management.



GITEC's expertise gained in almost 300 water projects worldwide provides classical engineering solutions developed under intensive participation of all beneficiaries and stakeholders involved.



Water Resources Management

- Hydrology and Hydrogeology
- Water Quality
- Water Resources Development
- Hydraulic Engineering



Water Supply

- Water Development Infrastructure
- Treatment Plants
- Transmission and Distribution
- Rural Water Supply Systems



Sanitation

- Waste Water Treatment Plants
- Sewage and Stormwater Collection Systems
- Disposal of Treated Waste Water
- Recycling and Reuse Facilities
- Rural Sanitation
- Solid Waste Collection and Disposal



Irrigation and Drainage

- Water Development Infrastructure
- Irrigation Transmission and Distribution
- Drainage Infrastructure
- Reuse of Treated Waste Water



Systems Management

- EDP-based Operation and Maintenance Plans
- Infrastructure Management
- Concession Schemes

1 2 Malawi: Rural Water Supply Mangochi, Drilling of Boreholes and Completed Water Point

3 Uzbekistan: Pumping Station at new Water Works Khorezm

4 Egypt: Construction of Sewers in Kafr El Sheikh Governorate

5 Nepal: Irrigation Development in Mid-Western Region

6 Yemen: Sewage Treatment Plant Yarim