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saidghabayen@yahoo.com

KEY QUALIFICATION:

I have a Bachelor, a Master and a PhD in civil and environmental engineering. I have worked several years for local as well as international consultancy firms and gained a wide experience in the fields of water and wastewater infrastructural planning and design, environmental assessment, hydrology, water resources economics, water quality management, and water resources management.

EDUCATION:

Ph.D., Civil and Environmental Engineering, Water and Environmental Resources Management, Utah State University, Logan, Utah, April 2004.

Emphasis: water resources system analysis, water resources economics, hydrology, hydrochemistry, uncertainty analysis, Bayesian networks modeling, GIS applications.

M.S., Water and Environmental Resources Management, Institute for Infrastructure, Hydraulics, and Environmental Engineering, Delft, The Netherlands, April 1998.

Emphasis: municipal and agricultural water demand management, water systems analysis, water resources economics, Environmental assessment, groundwater hydrogeology, water quality and chemistry, hydrologic modeling and optimization.

B. S., Civil Engineering, Indian Institute of Technology, New Delhi, India,

May 1993.

Emphasis: structural analysis and design.

AWARDS:

USDS Fulbright PhD scholarship (Aug 2000 - July 2002)

Utah Water Research Laboratory 2 year assistantship (Aug 2003 - June 2004)

Government of the Netherlands MSc. Fellowship (Oct 1996 - April 1998) Fall 2000, Spring 2001, Fall 2001, Spring 2002 Utah State Deans Honor list

TRAINING / SHORT COURSES / TEACHING

Lecturer: Environmental Engineering, Water Resources Planning and

Management, Engineering Geology, Probability and Statistics

for Engineers, Structural analysis

Islamic University of Gaza and University of Palestine

Trainer: Storm Water, Wastewater, and Solid Waste Management,

Environmental Impact assessment, GIS applications

Department of Continuous Education - Islamic University of

Gaza

ROFESSIONAL EXPERIENCE:

Environmental Compliance and Monitoring Coordinator, Projects Management Unit, Palestinian Water Authority, Gaza, Palestine (*Jan 2007 to Present*. Duties are:

- Monitor the implementation of the **environmental management plan** for North Gaza Emergency Sewage Treatment (NGEST) project (Financed by the WB).
- Design and prepare bidding documents for projects related to NGEST monitoring program implementation (water quality monitoring wells, water quality survey, etc.) as per the WB procurement guidelines.
- Maintain full coordination between the PMU and the relevant local governmental entities and NGOs to ensure the awareness and involvement of all stakeholders of the environmental issues of the project..
- Conduct public awareness program and organize a series of workshops to enhance the NGEST public awareness and acceptance.
- Organize and supervise training session for PWA, PMU, CMWU representatives on the operation and quality control of the NGEST components.

Senior Design Engineer, Environmental Division, Khatib and Alami, Consolidated Engineering Company, Sharjah, UAE. *July 2006 to Jan 2007*.

- Infrastructure utility master plan and detail design for BAWADI project (area 2200 ha). Utilities include water supply, wastewater collection and treatment, and storm water collection and disposal.
- Infrastructure utility master plan and detail design for Dubailand project (area 28000 ha). Utilities include water supply, wastewater collection and treatment, and storm water collection and disposal.

Engineering and Planning Manager, Infra-Man Gaza: Working on behalf of the Coastal Municipalities Water Utility, Gaza, Palestine. *June 2005 to June 2006*.

- Develop an extended period hydraulic model for the entire Gaza water supply and distribution network to be used for service improvement and operation.
- Develop a GIS system for the Coastal Municipalities Water Utility to be used for mapping, planning, water and wastewater network operation, and customer services.
- Develop plans and prepare detail design, technical specification and bidding documents for projects related to water and wastewater service improvement. These projects included CMWU stores and regional offices, water supply networks, and wastewater collection networks.

Environmental Specialist, Engineering and Management Consulting Center, private consultant, Gaza, Palestine. **Part time and Occasionally Full time:** August 1998 to Present.

- **Team Leader** and water quality expert for the preparation of the **Environmental Assessment** for the Northern Gaza Emergency Sewage Treatment project according to the World Bank Operational Policy 4.01 (Client: World Bank).
- Performed groundwater flow and transport modeling to **study the impact of effluent infiltration** of Beit Lahia WWTP effluent on the Gaza groundwater aquifer (Client: World Bank).
- Conducted Environmental Review for more than 10 USAID micro projects according to USAID CFR 216 Regulations. These projects included road development, wastewater collection networks, water supply wells, and community health centers (Client: USAID).
- Conducted **Environmental assessment** for additional emergency effluent infiltration basin north of Biet Lahia WWTP (Client: USAID).
- Conducted **environmental assessment** according to local Palestinian Environmental Assessment Policy for the construction of the proposed Turkish Cement Factory east of Gaza.
- Participated in the preparation of the **environmental assessment** for the construction of Rafah Industrial State east of Rafah.
- Deir El Balah Governorate water facilities' master planning using WaterCAD modeling software (Finnish Fund)
- Northern Gaza Governorate water facilities' master planning using WaterCAD modeling software (Finnish Fund)

Water Resource Specialist, Palestinian Water Authority, Gaza, Palestine (March 1999 to August 2000)

- **Deputy Project Manager** (PWA Team) for Coastal Aquifer Management Program (Funded by US Agency for International Development (USAID).
 - o Participate in the preparation of Integrated Aquifer Management Plan
 - o Participate in planning and design of Gaza Regional Water Supply System

- o Conduct hydrologic assessment for storm water infiltration facilities
- Participate in hydrologic model building and application, geophysical survey, and water quality survey for the entire Gaza Strip
- Participate in the preparation of design and bidding documents, feasibility studies and environmental assessments for pilot projects related to water supply, water treatment, wastewater treatment and effluent reuse.

Planning Specialist, Palestinian Water Authority, Gaza, Palestine (August 1998 to March 1999)

- Supported PWA team for Water Sector Strategic Planning Study (Funded by World Bank).
 - o Estimation of water demand and assessment of water resources including storm water and treated wastewater.
 - o Find ways for demand management in both domestic and agricultural sectors.
 - o Study wastewater reuse options
 - o Cost estimate for the proposed alternatives.

Water Resources Engineer, Center for Engineering and Planning (CEP), Gaza, Palestine (*February 1994 to August 1998*)

- A team member for the assessment, planning, modeling, design, and supervision of numerous water supply and wastewater projects/studies.
- A team member for the physical planning and assessment of infrastructures for a study entitled "integrated rural development planning in the coastal region" (Client UNDP).
- A team member for Master planning, modeling, and design of Khan Younis (Population 200,000) water supply and distribution system.
- A team member for the Gaza Strip water storage facilities refurbishment project (Client LEKA).

SELECTED PUBLICATIONS:

- Environmental assessment for the north gaza emergency sewage treatment project, February 2006.
 - O http://www-wds.worldbank.org/external/default/main?pagePK=64193027&piPK=64187937&the SitePK=523679&menuPK=64187510&searchMenuPK=64187511&siteName=WDS &entityID=000160016_20060425173250
- A Conceptual Framework for Managing Nitrate Contamination of the Gaza Coastal Aquifer, Palestine (2005). World Water and Environmental Resources Congress. Environmental and Water Research Institute - ASCE, 15-19 May, Anchorage, Alaska, USA.
- Assessment of Groundwater Vulnerability to Nitrate Contamination in Gaza Strip, Palestine (2005). World Water and Environmental Resources Congress. Environmental and Water Research Institute - ASCE, 15-19 May, Anchorage, Alaska, USA.

- Ionic Molar Ratios, and Isotopes for Identification of Salinity Origin and Monitoring Requirements in the Gaza Coastal Aquifer. *Journal of Hydrology*, 318 (2006): pp 360-373
- Characterization of Uncertainty in Different Proposed Tariff Formula for the Gaza Integrated Water Resources System (2005). Water Research, 3584, Submitted February 2005.
- Characterization of uncertainties in the operation and economics of the proposed seawater desalination plant in the Gaza Strip. *Journal of Desalination* 161(2004): pp. 191-202.
- A Bayesian Belief Network model for multi-objective optimization of the Gaza water resources system. AWRA Annual Conference, San Diego, California, Nov. 2003.

COMPUTER SKILLS:

Water quality modeling (Arc View GIS, QUAL2E, HSPF, PLOAD) Groundwater modeling (MODFLOW, MODBATH, MT3D) Hydraulic modeling (WATERCAD, WATNET) System dynamics modeling (STELLA) System uncertainty (Netica BBNs, MSBNs) Others (MS project, Word, Excel, Power Point, AutoCAD)

LANGUAGE PROFESSENCY:

	speaking	writing	reading	
Arabic	excellent	excellent	excellent	
English	excellent	excellent	excellent	